



Brussels, 10.12.2020
COM(2020) 798 final

2020/0353 (COD)

Proposal for a

REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL
concerning batteries and waste batteries, repealing Directive 2006/66/EC and amending
Regulation (EU) No 2019/1020

(Text with EEA relevance)

{SEC(2020) 420 final} - {SWD(2020) 334 final} - {SWD(2020) 335 final}

EXPLANATORY MEMORANDUM

1. CONTEXT OF THE PROPOSAL

- **Reasons for and objectives of the proposal**

Battery development and production are strategic imperatives for Europe in the context of the clean energy transition. It is also a key component of Europe's automotive sector. In the EU, transport is responsible for roughly a quarter of greenhouse-gas (GHG) emissions and is the main cause of air pollution in cities.

More widespread uptake of electric vehicles will reduce GHG emissions and noxious emissions from road transport. In the EU, a strong increase in the electrification of passenger cars, vans, buses – and, to a lesser extent, trucks – is expected to take place between 2020 and 2030. This is mainly being driven by EU legislation setting CO₂ emission standards for vehicle manufacturers, but also by EU legislation setting Member State minimum targets for public procurement of clean vehicles¹. The electrification of some residential services, like energy storage or heating, will follow on from this and help to further reduce emissions.

According to estimates from the World Economic Forum, **there is a need to scale up global battery production by a factor of 19** to accelerate the transition to a low-carbon economy².

This initiative aims to modernise the EU's legislative framework for batteries. It is an integral part of the **EU's Green Deal**³, the EU's new growth strategy, which aims to transform the EU into a modern, resource-efficient and competitive economy where: (i) there are no net emissions of GHGs by 2050; (ii) economic growth is decoupled from resource use; and (iii) no person and no place is left behind. It builds on commitments and reports adopted by the European Commission, including the **strategic action plan on batteries**⁴, the new **circular economy action plan**⁵, the **new industrial strategy for Europe**⁶ and the **sustainable and smart mobility strategy**⁷, which aims at delivering a 90% reduction in transport-related GHG emissions by 2050.

In addition to the Commission's work, both **the Council and the Parliament** have called for action to support the transition to electro-mobility, carbon-neutral energy storage, and a sustainable battery value chain. The European Investment Bank also announced that it expects to increase its backing of battery-related projects to more than **EUR 1 billion of financing in 2020**⁸.

This initiative addresses **three groups of highly interlinked problems** related to batteries.

- **The first group** relates to **the lack of framework conditions providing incentives to invest** in production capacity for sustainable batteries. These

¹ Directive 2009/33/EC of the European Parliament and of the Council of 23 April 2009 on the promotion of clean and energy-efficient road transport vehicles (OJ L 120, 15.5.2009, p. 5)

² World Economic Forum and Global Batteries Alliance, A vision for a sustainable battery value chain in 2030: Unlocking the potential to power sustainable development and climate change mitigation, 2019.

³ Communication from the Commission to the European Parliament, the European Council, the Council, the European Economic and Social Committee and the Committee of the Regions, The European Green Deal (COM (2019) 640 final).

⁴ Annex to COM(2018)293 final.

⁵ COM(2020)98 final.

⁶ COM(2020)102 final.

⁷ COM(2020)789

⁸ <https://www.eib.org/en/press/all/2020-121-eib-reaffirms-commitment-to-a-european-battery-industry-to-boost-green-recovery>

problems are linked to the inefficient functioning of the **single market** and to the lack of a **sufficiently level playing field**⁹ due to diverging regulatory frameworks within the **internal market**. The underlying causes of this include uneven implementation of the Batteries Directive and the lack of reliable and comparable information across the EU.

- The **second group of problems** relates to **sub-optimal functioning of recycling markets and insufficiently closed material loops**, which limit the EU's potential to mitigate the supply risk for raw materials. There are a number of shortcomings in the current regulatory framework. These shortcomings include a lack of clear and sufficiently harmonised rules, and provisions in the Batteries Directive that don't take into account recent technological and market developments. They reduce the profitability of recycling activities and hold back investment in new technologies and in additional capacity to recycle the batteries of the future.
- The **third group of problems** relates to **social and environmental risks** that are currently not covered by EU environmental law. These problems include: (i) a lack of transparency on sourcing raw materials; (ii) hazardous substances; and (iii) the untapped potential for offsetting the environmental impacts of battery life cycles.

At the root of these issues are market failures and information failures. Both of these failures are related to the functioning of the single market. In addition, they are exacerbated by a third driver, the complexity of battery value chains.

The proposal's **objectives** are threefold: 1) strengthening the functioning of the internal market (including products, processes, waste batteries and recyclates), by ensuring a level playing field through a common set of rules; 2) promoting a circular economy; and 3) reducing environmental and social impacts throughout all stages of the battery life cycle. These three objectives are strongly interlinked.

- **Consistency with existing policy provisions in the policy area**

The current regulatory framework covers only the end-of-life stage of batteries through the **Batteries Directive**. There are currently no legal provisions in the EU that cover other aspects of the production and use phases of batteries, such as electrochemical performance and durability, GHG emissions, or responsible sourcing.

In line with the 'one-in-one-out' principle¹⁰, the proposed Regulation should **replace the current Batteries Directive**.

The proposal is fully in line with **the EU's existing environmental and waste legislation**. It complements this legislation, including: Directive 2000/53/EC of the European Parliament and of the Council of 18 September 2000 on end-of life vehicles¹¹; Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste¹²; Directive 2012/19/EU of the European Parliament and of the Council of 4 July 2012 on waste electrical

⁹ A "level playing field" is a term for a set of common rules and standards that prevent businesses in one country gaining a competitive advantage over those operating in other countries.

¹⁰ Every legislative proposal creating new burdens should relieve people and business of an existing equivalent burden at EU-level in the same policy area. Communication from the President to the Commission: The Working Methods of the European Commission (P(2019) 2).

¹¹ OJ L 269, 21.10.2000, p. 34.

¹² OJ L 312, 22.11.2008, p. 3.

and electronic equipment (WEEE)¹³; Directive 2011/65/EU on the restriction of the use of hazardous substances in electrical and electronic equipment¹⁴; Directive 2010/75/EU of the European Parliament and of the Council of 24 November 2010 on industrial emissions (integrated pollution prevention and control)¹⁵; and Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)¹⁶.

This proposal introduces progressive requirements to minimise the carbon footprint over the life cycle of batteries. In this context, efforts to decrease the carbon footprint in the manufacturing process will indirectly lead to the promotion of renewable energy generation.

- **Consistency with other EU policies**

The initiative is consistent with the EU's international obligations in the area of **trade policy**, in particular because it ensures non-discrimination between products produced in the EU and imported products.

The initiative fully subscribes to the **innovation principle**, and the related enabling actions under the EU's research and innovation funding under Horizon 2020.

The proposal also aims to ensure simple and streamlined monitoring and reporting obligations, thus limiting the administrative burden on Member States, in line with the EU's **better-regulation approach**¹⁷ and the fitness check on reporting and monitoring¹⁸.

2. LEGAL BASIS, SUBSIDIARITY AND PROPORTIONALITY

- **Legal basis**

The proposal is based on **Article 114 of the Treaty on the Functioning of the European Union** (TFEU), which must be used for measures that aim to establish or ensure the functioning of the **single market**. This is a switch from the current legal basis as the Batteries Directive 2006/66/EC was based on Article 175 TEC (now Article 191 TFEU) and on Article 95 TEC (now Article 114 TFEU) for the identified product-related provisions.

The proposal tackles **a number of key problems related to the single market**. These include: (i) an uneven playing field for batteries placed on the market since applicable rules are subject to interpretation; (ii) barriers to the functioning of recycling markets; (iii) uneven implementation of the Batteries Directive; (iv) the pressing need for large-scale investment to respond to the changing market; (v) the need for economies of scale; and (vi) the need for a stable and fully harmonised regulatory framework.

At the same time, there are also a number of **environmental problems** related to the production, use, and end-of-life management of batteries. The environmental problems that are not directly covered by the EU's environmental *acquis*, and which thus require a regulatory intervention, **can all be linked to the functioning of the single market**. One such problem is the **adverse impacts on the environment of hazardous substances** contained in batteries when they are not properly disposed of, a problem that can be solved by the proper collection and recycling of portable batteries. One of the reasons why collection levels of

¹³ OJ L 197, 24.7.2012, p. 38.

¹⁴ OJ L 174, 1.7.2011, p. 88–110

¹⁵ OJ L 334, 17.12.2010, p. 17.

¹⁶ OJ L 396, 30.12.2006, p. 1.

¹⁷ SWD(2015)111 final.

¹⁸ COM(2017)312 final.

portable batteries are low is that setting up collection systems has a cost, and the single market does not implement the polluter-pays principle in an adequate and harmonised manner. Sub-optimal levels of collection are also **problematic** from a business-profitability point of view. This is because recycling technologies are **capital intensive** and thus require significant **economies of scale**, in some cases beyond EU national markets. Another problem is the failure **to lower the total environmental impact of batteries** by increasing the circularity of the battery value chain. Here, the main cause of the problem is once again a market failure. There is no alignment of incentives (and information) between different actors across the value chain. And in the market for second-life electric-vehicle batteries, there is no legal certainty on the waste status of used batteries and also inadequate information to predict battery behaviour.

The proposal's **objective** is thus to ensure the implementation of common rules for economic actors in the single market and to avoid the distortion of competition. The measures will lead to further harmonisation of: (i) **product requirements** for batteries placed on the Union market; and (ii) the level of waste management services provided by businesses. The proposal will also set requirements for ensuring **a well-functioning market for secondary raw materials** while preventing and reducing the **environmental impacts** from the production and use of batteries (as well as their treatment – including recycling – at the battery's end of life). This will promote a circular battery industry across Europe, and **avoid fragmentation** from possibly diverging national approaches.

The manufacture and use of batteries, the underlying value chain, and the handling of end-of-life batteries are **cross-cutting issues** that affect many policy areas. Therefore, in addition to pursuing internal market objectives, **the proposal will also contribute to objectives related to the environment, transport, climate action, energy and international trade**. The impact analysis of the proposed measures demonstrates that **in most cases the internal market objectives are predominant** and that the environmental benefits are complementary. Therefore, it is appropriate to use Article 114 TFEU as a sole legal basis.

- **Subsidiarity (for non-exclusive competence)**

There is clear added value in setting common requirements at EU level that cover the full lifecycle of batteries. It is essential to ensure that manufacturers, importers and economic operators more broadly are subject to harmonised requirements that must be met when (i) placing a battery on the Union market and (ii) supplying information to customers across the single market. Recyclers must also be able to operate with uniform requirements that apply to all recycling businesses in the same way across the EU. In the absence of an intervention at EU level setting harmonised rules, intervention at national level would lead to a divergence in the requirements for economic operators.

The development of a sustainable battery value chain is capital intensive and requires economies of scale that go beyond what national economies can provide. Achieving this requires a harmonised and well-functioning single market across all Member States where all economic operators of the battery value chain are subject to the same rules.

In addition, common rules are required for the **transition to a circular economy**, which will contribute to fostering innovative and sustainable European business models, products and materials. These objectives cannot be set by the Member States acting in isolation: the **scale** of the action required means that this is better achieved at Union level. **Uniform EU action is therefore justified and necessary**.

- **Proportionality**

The proposed measures do not go beyond what is necessary for providing the regulatory certainty required to **incentivise large-scale investment** in the circular economy while ensuring a high level of protection of human health and the environment.

Overall, the proposed policy option is **a gradual change** compared to the **existing regulatory and institutional framework** (i.e. the current Batteries Directive). For the **earlier stages** in the value chain for which there is currently no EU legislation, the proposed changes are mostly at the level of **information and basic requirements** for batteries to be placed on the EU market.

For some of the proposed policy options, the impact assessment found that a **step-wise approach** would best uphold the principle of proportionality. The proposal therefore includes **a gradual increase** in ambition and requirements in a number of areas. For example, this is the case for the provision on performance and durability requirements for rechargeable industrial batteries. This provision includes information obligations as a first step; it will not require the setting of relevant minimum values until more information becomes available.

- **Choice of instrument**

The evaluation of the Batteries Directive and the analysis preceding the impact assessment showed that the **harmonisation is better achieved by means of a Regulation**, as opposed to a Directive under the previously more limited approach. **Diverging national measures** on waste collection and waste recovery have led to an **incoherent regulatory framework** for economic operators and producers. These existing barriers in the form of diverging national regulatory frameworks can only be removed by more detailed, harmonised rules on the organisation of collection and recovery processes and related responsibilities. These detailed and harmonised rules should include requirements that apply directly to businesses.

A Regulation will **set direct requirements for all operators**, thus providing the necessary legal certainty and enforcement possibility of a fully integrated market across the EU. A Regulation also **ensures that the obligations are implemented at the same time and in the same way in all 27 Member States**.

The instrument will also set out a number of **mandates for the Commission to develop implementing measures**. These implementing measures will allow the Commission to elaborate further on the regulation if necessary, allowing for more timely setting of common rules. The Regulation will also **reduce uncertainties over timelines** during the transposition process typically associated with a Directive in an area where time and legal certainty are critically important due to forecasted increases in market size and changes in market dynamics more generally.

3. RESULTS OF EX-POST EVALUATIONS, STAKEHOLDER CONSULTATIONS AND IMPACT ASSESSMENTS

- **Ex-post evaluations/fitness checks of existing legislation**

In April 2019, the Commission published an evaluation of the Batteries Directive¹⁹, in line with the Commission's better-regulation guidelines and taking into account the

¹⁹ Report from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions of 9 April 2019 on the implementation and the impact on the environment and the functioning of the internal market of Directive 2006/66/EC of the European Parliament and of the Council of 6 September 2006 on batteries and accumulators and waste

specifications of Article 23 of the Batteries Directive. The key findings of the evaluation are summarised in Annex 6 of the impact assessment, and fed into the analysis (in particular the section on the problem definition).

This policy proposal includes **measures that address areas identified in the evaluation of the Batteries Directive where the lack of harmonisation or insufficiently detailed provisions** lead to fragmented outcomes in the single market. These are distorting the level playing field as they do not provide clarity and cost-efficiency (e.g. producer-responsibility organisations). The proposal also includes a number of **measures that ensure the regulatory environment is up to date and fit for purpose to deal with technological novelties** such as batteries for electric-vehicles, e-bikes and e-scooters, or the possibility for a ‘second life’ of industrial batteries.

- **Stakeholder consultations**

In line with the better regulation guidelines, several consultation activities took place. A brief description of these consultation activities is set out in the bullet points below.

- As part of the preparation of a regulatory initiative on **sustainability requirements for batteries**, a first consultation round was organised by DG GROW between June and November **2019**. It consisted of an open public consultation for which 180 contributions were received, and three public stakeholder meetings on the findings of two feasibility studies.
- Following a political decision that a **single legal instrument** would replace the Batteries Directive and incorporate the sustainability requirements for rechargeable batteries on which DG GROW had been working since mid-2018, a second round of consultation activities was undertaken between February and May **2020**. This second round included:
 - targeted interviews with representatives of the battery value chain, consumers, and environmental associations;
 - a survey of businesses (manufacturers, waste managers and recyclers);
 - a survey of representatives of research and innovation projects (funded under the Horizon 2020 and LIFE programmes);
 - sectoral meetings with stakeholders;
 - a meeting with the Member States Expert Group.
- The **inception impact assessment** on the proposed regulation was published on 28 May 2020, and the period to provide feedback ended on 9 July 2020. In total, 103 responses were received, largely supporting positions set out by stakeholders earlier in the process (for example during the targeted stakeholder consultations).

Overall, the consultation activities showed that there is a **general acknowledgement** among the public that there is a need for a regulatory initiative that covers the entire battery value chain in an integrated manner. Stakeholders who participated in the public consultations generally acknowledged that **technological, economic and social changes** justify the creation

batteries and accumulators and repealing Directive 91/157/EEC (COM(2019) 166 final) and Commission Staff Working Document on the evaluation of the Directive 2006/66/EC on batteries and accumulators and waste batteries and accumulators and repealing Directive 91/157/EEC (SWD(2019)1300).

of a new regulatory framework for batteries. Stakeholders also agreed that there should be **better harmonisation** of existing rules and an EU framework covering the **entire battery life cycle**. They said that this framework should comprise common and more stringent sustainability rules for batteries, components, waste batteries and recyclates, in order to establish clear and common rules to guarantee the functioning of the EU single market.

The main needs expressed by representatives from **industry** were for: (i) a stable regulatory framework that ensures investment certainty; (ii) a level playing field that enables the sustainable production of batteries; and (iii) the efficient functioning of recycling markets to increase the availability of quality secondary raw materials. The main concerns expressed by representatives from **civil society** were on the need for sustainable sourcing and for applying the principles of the circular economy to the battery value chain.

The detailed conclusions from the stakeholder consultations are included in **Annex 2** and **Annex 9** of the impact assessment.

- **Collection and use of expertise**

To support the analysis of the different options, the Commission awarded several **support contracts** to external experts, including for:

- a study assessing the feasibility of measures addressing shortcomings in the current EU batteries framework;
- a study addressing specific topics (second life, restrictions, deposit and refund schemes, etc.);
- a preparatory study on the ecodesign and energy labelling of rechargeable electrochemical batteries with internal storage;
- a follow-up feasibility study on sustainable batteries;
- an impact assessment on the ecodesign and energy labelling of rechargeable electrochemical batteries with internal storage.

These experts worked in close cooperation with the Commission throughout the different phases of the study.

As well as these support studies, additional expertise was identified through literature research and through the stakeholder consultation responses.

- **Impact assessment**

The proposal is based on an impact assessment. After addressing the Regulatory Scrutiny Board's comments issued in its negative opinion of 24 June 2020, the impact assessment received a positive opinion with reservations on 18 September 2020. In its final opinion, the Board asked for further details mainly on the baseline and on the composition of the policy options.

The impact assessment includes **13 measures to address the problems** related to: (i) the lack of framework conditions to provide incentives for investments in production capacity for sustainable batteries; (ii) the sub-optimal functioning of recycling markets; and (iii) the social and environmental risks that are currently not covered by the EU's environmental *acquis*. These 13 measures **are based on:** (i) the analysis from the evaluation of the Batteries Directive; (ii) the public consultations for this initiative; (iii) the various support studies; and (iv) political commitments such as the Green Deal. They reflect the fact that **responses are needed along a complex value chain.**

Within each of the 13 broad policy measures, several sub-measures were considered. These sub-measures are in many cases **alternative** to each other (e.g. for Measure 3, collection-rate targets for portable batteries can be either 65% or 75%, but not both). In other cases, the sub-measures are designed so that they can be **cumulative and/or complementary** (e.g. for Measure 13, a battery ‘passport’ for industrial batteries works in addition to information obligations). All of these sub-measures are analysed in proportionate detail in **Annex 9** of the impact assessment, with a consideration of their impacts compared to the business-as-usual scenario.

To facilitate the analysis, the sub-measures are grouped into **four main policy options**, which are compared against a business-as-usual scenario. These four options are set out below.

- **Option 1, business-as-usual**, is an option that keeps the Batteries Directive, which mostly covers the end-of-life stage of batteries, **unchanged**. For the **earlier stages** in the value chain, there is currently **no EU legislation** in place and so this will remain unchanged. Further details on this option are given in **Section 5** on the baseline and in **Annex 9**.
- **Option 2, the medium level of ambition option**, is an option which builds on the Batteries Directive, but gradually strengthens and increases the level of ambition. For the **earlier stages** in the value chain for which there is currently no EU legislation, the proposed change is to bring in **information and basic requirements** as a condition for batteries to be placed on the EU market.
- **Option 3, the high level of ambition option**, is an approach that is a bit more **disruptive**, but still within the limits of what is technically feasible. It entails for example setting limit values and thresholds to be complied with within a set deadline.
- **Option 4, the very high level of ambition option**, includes measures that would go significantly beyond the current regulatory framework and current business practices.

Table 1 presents an overview of the different sub-measures included in the policy options, with the preferred option based on the impact assessment highlighted in green.

The Commission’s preferred option is a combination of Option 2 and Option 3. The combination chosen provides a balanced approach in terms of effectiveness (achievement of the objectives) and efficiency (cost-effectiveness). The preferred option will facilitate the EU’s response to the fast-changing market conditions and ambitiously support a switch towards a more low-carbon economy, without risking excessive costs or disruption.

Table 1: Preferred option

Measures	Option 2 - medium level of ambition	Option 3 - high level of ambition	Option 4 – very high level of ambition
1. Classification and definition	New category for EV batteries Weight limit of 5 kg to differentiate portable from industrial batteries	New calculation methodology for collection rates of portable batteries based on batteries available for collection	/

Measures	Option 2 - medium level of ambition	Option 3 - high level of ambition	Option 4 – very high level of ambition
2. Second-life of industrial batteries	At the end of the first life, used batteries are considered waste (except for reuse). Repurposing is considered a waste treatment operation. Repurposed (second life) batteries are considered as new products which have to comply with the product requirements when they are placed on the market	At the end of the first life, used batteries are not waste. Repurposed (second life) batteries are considered as new products which have to comply with the product requirements when they are placed on the market.	<i>Mandatory second life readiness</i>
3. Collection rate for portable batteries	65% collection target in 2025	70% collection target in 2030	75% collection target in 2025
4. Collection rate for automotive and industrial batteries	New reporting system for automotive, EV and industrial batteries	Collection target for batteries powering light transport vehicles.	Explicit collection target for industrial, EV and automotive batteries
5. Recycling efficiencies and recovery of materials	<p><u>Lithium-ion batteries and Co, Ni, Li, Cu:</u> Recycling efficiency lithium-ion batteries: 65% by 2025 Material recovery rates for Co, Ni, Li, Cu: resp. 90%, 90%, 35% and 90% in 2025</p> <p><u>Lead-acid batteries and lead:</u> Recycling efficiency lead-acid batteries: 75% by 2025 Material recovery for lead: 90% in 2025</p>	<p><u>Lithium-ion batteries and Co, Ni, Li, Cu:</u> Recycling efficiency lithium-ion batteries: 70% by 2030 Material recovery rates for Co, Ni, Li, Cu: resp. 95%, 95%, 70% and 95% in 2030</p> <p><u>Lead-acid batteries and lead:</u> Recycling efficiency lead-acid batteries: 80% by 2030 Material recovery for lead: 95% by 2030</p>	/
6. Carbon footprint for industrial and EV batteries	Mandatory carbon footprint declaration	Carbon footprint performance classes and maximum carbon thresholds for batteries as a condition for placement on the market	/
7. Performance and durability of rechargeable industrial and EV batteries	Information requirements on performance and durability	Minimum performance and durability requirements for industrial batteries as a condition for placement on the market	/
8. Non-rechargeable portable batteries	Technical parameters for performance and durability of portable primary batteries	Phase out of portable primary batteries of general use	Total phase out of primary batteries
9. Recycled content in industrial, EV and automotive batteries	Mandatory declaration of levels of recycled content, in 2025	Mandatory levels of recycled content, in 2030 and 2035	/

Measures	Option 2 - medium level of ambition	Option 3 - high level of ambition	Option 4 – very high level of ambition
10. Extended producer responsibility	Clear specifications for extended producer responsibility obligations for industrial batteries Minimum standards for PROs	/	/
11. Design requirements for portable batteries	Strengthened obligation on removability	New obligation on replaceability	Requirement on interoperability
12. Provision of information	Provision of basic information (as labels, technical documentation or online) Provision of more specific information to end-users and economic operators (with selective access)	Setting up an electronic information exchange system for batteries and a passport scheme (for industrial and electric vehicle batteries only)	/
13. Supply-chain due diligence for raw materials in industrial and EV batteries	Voluntary supply-chain due diligence	Mandatory supply chain due diligence	/

Legend: green = preferred option; light green = preferred option pending a revision clause.

The objective of **Measure 1** on classification and definition is to clarify the current provisions on battery categories and to update them in line with the latest technological developments (Option 2). The administrative changes to some provisions in the current Batteries Directive would improve the effectiveness of several other provisions, without generating any significant economic costs or administrative burden. Stakeholders have said that they fully accept this measure. The possibility to set a new methodology for the collection rates based on "available for collection" (Option 3) is proposed to be re-assessed through a review clause.

For **Measure 2** on second-life industrial and electric vehicle batteries, the estimated **economic and environmental benefits** for Options 2 and 3 would be **equivalent** (assuming equal levels of market penetration), recognising that there are trade-offs between promoting the development of second-life batteries on the one hand, and recycling on the other. The **administrative costs of Option 3** – under which used batteries would not necessarily be considered as waste at the end of their first life (and would only be considered waste when the battery holder decides to discard the battery) – are **significantly lower** than those for Option 2. Option 3 was considered the preferred option in the impact assessment on the grounds that it would best encourage the development of a market for second-life batteries and was supported by stakeholders. Option 2 – under which batteries become waste – would give rise to extra costs for permits needed to deal with hazardous waste, which was an issue of particular concern to stakeholders. This option could therefore limit the development of the second-life market for batteries as the costs are higher. The Commission concluded that a combination of Option 2 and Option 3, whereby specific end of waste criteria including a state of health check are set that batteries have to fulfil in order to be sent to repurposing or remanufacturing, will provide the most appropriate way forward. This approach, supported by extended producer responsibility requirements, is aimed to encourage the repurposing and remanufacturing of batteries while ensuring that waste batteries undergo proper treatment in line with EU waste legislation and international agreements.

For **Measure 3** on a collection rate target for portable batteries, the preferred option is **Option 2** a 65% collection target in 2025 and **Option 3**, a 70% target in 2030. These options are estimated to cost around EUR 1.09 and EUR 1.43 per capita per year respectively, to be financed through the mechanism of Extended Producer Responsibility. The reason for increasing the collection targets significantly compared to the baseline is twofold. First because the **environmental benefits increase in a non-linear way** due to the increased collection of lithium-ion batteries. Second because evidence shows that there are **economies of scale and efficiency gains** to be made. As a generally accepted principle, **stakeholders accept higher collection targets** as long as they are realistic and they have enough time to meet the targets. This is considered not to be the case for Option 4, a collection target of 75% by 2025.

The preferred option for **Measure 4** is **Option 2**, a new reporting system for automotive and industrial batteries. This measure is not expected to give rise to any significant economic costs or administrative burden but they would result in increased collection rates. **Option 3**, a specific **collection target for batteries used in means of light transport**, is expected to lead to significant increase in collection rates. However, due to the need to first develop the "available for collection" methodology, this Option is proposed to be re-assessed through a review clause.

The preferred option for **Measure 5** on recycling efficiencies and material recovery is **Option 2**, increasing the targets for lead-acid batteries and **Option 3**, bringing in new targets for lithium-ion batteries, cobalt, nickel, lithium and copper. Option 2 sets targets for 2025 based on what is currently technically feasible, while Option 3 sets targets for 2030 based on what will be technically feasible in the future. Due to the **high degree of uncertainty** on a number of variables, quantifying the economic and environmental impact of these options has proven difficult. Modelling estimates indicate that, **even under the most conservative assumptions, it would have a positive impact.**

For **Measure 6** on the carbon footprint of EV batteries, the preferred option is **Option 2**, a mandatory declaration, complemented, over time, with Option 3, setting carbon footprint performance classes and maximum threshold values as a condition for the placement of batteries on the EU market. The upfront introduction of **Option 3** would be more effective than Option 2, but more time is needed to complete the information and methodological framework needed. However, Option 2 will enable the gradual introduction of the measures foreseen in Option 3. Such measures aim to contribute to the Union's objective of reaching climate neutrality by 2050 and fight against climate change, as stated in the new Circular Economy Action Plan, for a cleaner and more competitive Europe²⁰. The delegated act establishing the values of the carbon thresholds will be supported by a dedicated impact assessment.

For **Measure 7** on the performance and durability of rechargeable industrial and electric-vehicle batteries, the preferred option is **Option 2**, bringing in information requirements in the short term. This would help harmonise the calculation and availability of performance and durability characteristics of batteries and hence enable consumers and businesses to take informed decisions. Once the necessary information is available and the standardisation work has been completed, it will be possible to introduce **minimum performance requirements** (Option 3) at a later stage. The Commission concluded this option is more effective in the

²⁰ COM(2020)98 final, https://eur-lex.europa.eu/resource.html?uri=cellar:9903b325-6388-11ea-b735-01aa75ed71a1.0017.02/DOC_1&format=PDF

long term to **help the market switch to better-performing batteries**, and so trigger a shift to a lower environmental impact.

For **Measure 8** on **non-rechargeable portable batteries**, the preferred option is **Option 2**, setting electrochemical performance and durability parameters to minimise the inefficient use of resources and energy. These parameters will also be taken up by the labelling requirements that are covered by Measure 12 to inform consumers' batteries' performance. With regards to **Options 3 and 4** the conclusion is that there is currently not sufficient evidence available to demonstrate the effectiveness and feasibility of a partial or complete phase out of non-rechargeable batteries. Producers and recyclers of non-rechargeable batteries are opposed to these two more ambitious options.

The preferred option for **Measure 9** is both **Option 2**, bringing in a mandatory declaration of recycled content, in the short term, and **Option 3**, setting mandatory targets for recycled content for lithium, cobalt, nickel and lead in 2030 and 2035. The two options are complementary and would contribute to providing a **predictable legal framework that would encourage market players to invest** in recycling technologies that would otherwise not be developed because they are not cost-competitive with the production of primary raw materials.

For **Measure 10** on **extended producer responsibility and producer responsibility organisations**, no high ambition option was proposed since it mostly involves fine-tuning existing provisions under the Batteries Directive. The proposed measure would **level the playing field** for EPR schemes for EV and industrial batteries that are currently classified as industrial batteries and for PROs for portable batteries. The **economic costs** of this measure are expected to be **negligible** and **largely offset by the environmental benefits** of increased collection rates.

For **Measure 11** on design requirements for portable batteries the preferred option is a strengthened obligation of battery removability (Option 2) and a new obligation of battery replaceability (Option 3). The economic costs of these options are negligible, while they will generate **environmental benefits and resource savings**. It does this by facilitating the reuse, repair and recycling of batteries and the appliances in which they are integrated.

For **Measure 12** on the provision of reliable information, a combination of both Option 2 and Option 3 is preferred. **Option 2**, bringing in a printed and an online labelling system providing basic and more tailored information is preferred because it would help provide better information to consumers and end users and stimulate a **market shift towards more environmentally sound batteries**. The principle of **Option 3**, an electronic exchange system and battery passport, as proposed by the Global Batteries Alliance, is accepted by several global organisations. The **electronic exchange system** will have a one-off administrative cost for setting it up, but will lead to administrative simplification and lower implementation costs in the long term. The **battery passport** should furthermore enable second life operators to take informed business decisions and allow recyclers to better plan their operations and improve their recycling efficiencies.

For **Measure 13** on due diligence for raw materials, the preferred option is **Option 3**, a mandatory approach. There is a **fair degree of consensus** among stakeholders that this option would be **more effective** in addressing the social and environmental risks related to raw material extraction, processing and trading of certain raw materials for battery manufacturing purposes. This option should be considered in the light of the ongoing work on a proposal for cross-sectorial legislation on sustainable corporate governance which the Commission plans to present in 2021.

Annex 3 of the Impact Assessment provides a summary overview of the costs and benefits, and in particular their quantification.

- **Regulatory fitness and simplification**

The proposed measures have a negligible impact in terms of administrative burden.

This policy proposal makes maximum use of the potential of **digitalisation** to reduce administrative costs. For example, Measure 12 proposes to set up **an electronic information exchange for batteries** that will hold information about every portable and industrial battery model placed on the market. Under Measure 12, a battery passport would also be produced for each individual industrial and electric-vehicle battery placed on the market. The development of both the information exchange and passport system will entail considerable costs to both the Commission and businesses. However, it will provide Member State authorities and the Commission with **a powerful tool for enforcing the obligations** in the proposed regulation, as well as a market-intelligence tool for revising and refining obligations in the future.

- **Fundamental rights**

The proposal does not have consequences for the protection of fundamental rights.

4. BUDGETARY IMPLICATIONS

The proposal implies the use of staff and money to purchase data and services. Some of the staff requirements are expected to be met under the existing allocations for the Commission, the Joint Research Centre (JRC) and the European Chemicals Agency (ECHA). Commission staff resources required will be met by staff from the DG who are already assigned to management of the action and/or have been redeployed within the DG. These employees will be joined by an additional allocation of staff to be granted to the managing DG under the annual allocation procedure and in the light of budgetary constraints.

The proposal includes several articles detailing further workstreams that will need to be carried out to complement the Regulation and that would need to be adopted through implementing/delegated acts in a time horizon of 3-8 years. These will cover: verification of compliance with sustainability requirements; the conformity checking system; and waste-management; information; and labelling. A detailed list of these planned actions is provided below:

- follow standardisation work in CEN/CENELEC;
- develop common specifications on: (i) performance and durability for non-rechargeable portable batteries; (ii) performance and durability for rechargeable industrial batteries; and (iii) for safety for stationary battery energy storage systems.
- support the development of harmonised calculation rules for: (i) the carbon footprint declaration (including the revision of the product environmental footprint category rules (PEFCR) for electric vehicle batteries and rechargeable industrial batteries); and (ii) the calculation of carbon footprint performance classes for electric vehicle batteries and rechargeable industrial batteries;
- support the development of harmonised calculation rules for: (i) recycled content in electric vehicle batteries and rechargeable industrial batteries; (ii) recycling efficiencies, (iii) recovered materials, and (iv) waste classification;
- draw up guidance on the removability and replaceability of portable batteries;

- set up an electronic information exchange system for submitting information related to electric vehicle batteries and rechargeable industrial batteries;
- develop green public procurement criteria on batteries;
- amend the list of waste in Commission Decision 2000/532/EC²¹;
- conduct a risk assessment on – and manage the risk of – substances used in batteries;
- amend reporting obligations.

The JRC will play a key role in supporting the Commission with some of the technical work required. Around EUR 6.2 million will finance the necessary studies and an administrative agreement with the JRC to support the Commission in a number of workstreams set out in the bullet points below.

- Developing common specifications on: (i) performance and durability for general use portable batteries; (ii) performance and durability for rechargeable industrial and electric-vehicle batteries and (iii) for safety for stationary battery energy storage systems.
- Drawing up harmonised rules for: (i) separate collection of portable batteries; (ii) declaring carbon footprints; (iii) calculating the carbon footprint, recycled content and recycling efficiencies and (iv) the calculation of carbon footprint performance classes of electric vehicle batteries and rechargeable industrial batteries.
- Analysing green public procurement criteria (including consultation of public procurement stakeholders and legal checks on the proposed public procurement rules).
- Supporting the guidance on removability and replaceability of portable batteries;
- Supporting the development of targeted amendments of the European List of Waste entries relevant to batteries;
- Supporting the phase out of non-rechargeable portable batteries of general use;
- Supporting the requirements on labelling;
- Developing the GPP criteria.

The ECHA will also support the Commission in managing battery substances and their regulatory restriction as part of the existing REACH activities. This requires a total of two, new full-time-equivalent (FTE) temporary-agent staff (AD 5-7) at the ECHA (average cost EUR 144 000/year over 7 years and beyond). In addition, one FTE contract agent (CA FG III, average cost EUR 69 000/year over 3 years) will be necessary to increase the knowledge base, and facilitate an informed priority setting and work plan. This work plan should be based on a study to build the ECHA's current knowledge on how the battery industry manages its hazardous chemicals to identify relevant substances for regulatory risk management in the

²¹ 2000/532/EC: Commission Decision of 3 May 2000 replacing Decision 94/3/EC establishing a list of wastes pursuant to Article 1(a) of Council Directive 75/442/EEC on waste and Council Decision 94/904/EC establishing a list of hazardous waste pursuant to Article 1(4) of Council Directive 91/689/EEC on hazardous waste, OJ L 226 6.9.2000, p. 3

future. It is estimated that the study will cost EUR 400 000 (over 3 years) to outsource part of the research needs.

DG GROW has estimated that the development of the proposed electronic information exchange system for battery information will cost around 10 million €. A feasibility study, to be launched in 2021, will also assess what is the best architecture for the proposed electronic information exchange system and what services it should deliver.

The European Commission will be responsible for negotiating the Regulation, its general implementation, and the adoption of all the implementing/delegated acts envisaged by the Regulation. This will require following: (i) the work carried out in the JRC and the ECHA; and (ii) the normal decision-making processes including stakeholder consultation and comitology procedures. The current financial simulations are based on 2 FTE AD posts only to carry out the managerial tasks, i.e. (i) the negotiation and general implementation of the Regulation; and (ii) the different preparatory work and drafting of secondary legislation according to the deadlines proposed in the Batteries Regulation. The technical tasks can be performed by 1 FTE seconded national expert (given the expected timeline) and contractual agents. Of the 2 AD posts, 1 has been redeployed within DG ENV. The staff costs in the Commission amount to a total cost of EUR 3 075 000 based on the latest update of the cost of COM staff as reported on the DG BUDG website:

https://myintracomm.ec.europa.eu/budgweb/en/pre/legalbasis/Pages/pre-040-020_preparation.aspx.

It should be noted that the information provided in the legislative financial statement is compatible with the post-2020 MFF proposal.

Some additional resources will be needed in the period 2021-2029 to progress with work to: (i) develop standards and common specifications on the performance and durability of batteries; (ii) develop harmonised calculation rules for the separate collection of portable batteries, the declaration of carbon footprint, the calculation of carbon footprint performance classes, and the calculation of recycled content and recycling efficiencies; (iii) draft guidance on the removability and replaceability of portable batteries; (iv) decide on the formats and develop the systems to receive the submissions linked with the electronic information exchange; and (v) develop green public procurement criteria. Resources for studies and administrative arrangements in this context will be covered by the LIFE programme for a total amount of around 4.7 million euro as well as 10.7 million under the Operation and development of the internal market of goods and services.

The budget of the proposal is presented in current prices except for the ECHA component of the budget which indexed the salaries at 2% growth per year. Additional resources will be required for the ECHA to increase the subsidy it receives.

The legislative financial statement attached to this proposal sets out the implications for budgetary, human and administrative resources.

5. OTHER ELEMENTS

• Implementation plans and monitoring, evaluation and reporting arrangements

The aim of the proposed change to the **classification of batteries** is to update the existing rules to ensure they cover all batteries, including possible new battery types. Monitoring arrangements would need to ensure that the new measures are implemented and enforced as intended.

Setting a **new collection rate target for portable batteries** requires monitoring the collection rate in Member States. This was set up for the current target of 45% and involved Eurostat collecting information from Member States on a yearly basis. Setting a new target would therefore not entail additional reporting obligations.

Creating a **reporting system for automotive and industrial batteries** requires collecting information that is already generated at national level. Moreover, for automotive and electric-vehicle batteries, the reporting system could be built on top of the system set up by the End-of-life Vehicles Directive.

The **recycling efficiency** target for lithium batteries is set at 65% starting in 2025. Eurostat has collected data on recycling efficiencies for lead, cadmium and other batteries on a yearly basis since 2014. It would therefore be a minor addition to include the recycling efficiency of lithium to the established data collection procedure.

The obligation to report the **carbon footprint** associated with the overall life cycle (excluding the use phase) of batteries placed on the market requires developing an IT tool that allows manufacturers to enter the information directly. The Commission intends to offer a web-based tool and free access to the libraries of secondary datasets to facilitate the process of calculating carbon footprint, based on the adopted rules. The data submitted could be used to set benchmarks of GHG emissions, to assess whether bringing in classes of GHG intensity performance would be useful to improve the carbon footprint and environmental performance of batteries and to assess the need for additional incentives and/or market conditionality measures.

Similarly, the obligation to provide information on **performance and durability** should form part of the technical documentation. Depending on the type of battery, this information should also be made available online in a battery database and/or in the battery passport.

The obligation for producers to provide information on the amount of **recycled content** would follow a harmonised methodology.

For **removability**, the current obligations should be strengthened, and new provisions are proposed for **replaceability**.

Provisions on the carbon footprint and recycled content declarations, and on the due diligence policy for the responsible sourcing of raw materials would require **third-party verification**, in principle, via notified bodies.

National market authorities would be responsible for checking the validity of the information provided to fulfil all the obligations in the Regulation.

- **Explanatory documents (for directives)**

As the legal instrument is a Regulation which is directly applicable in the Member States, there is no need for an explanatory document.

- **Detailed explanation of the specific provisions of the proposal**

Chapter I of the Regulation contains General provisions.

Article 1 lays down that the Regulation establishes requirements on sustainability, safety and labelling to allow the placing on the market and putting into service of batteries, as well as requirements for the collection, treatment and recycling of waste batteries. The Regulation shall apply to all types of batteries and lists the four categories of batteries, namely portable batteries, automotive batteries, electric vehicle batteries and industrial batteries.

Article 2 contains definitions.

Article 3 lays down the principle of free movement on the single market for batteries which comply with the requirements of the Regulation.

Article 4 summarises which provisions lay down and contain precisions on the sustainability, safety and labelling requirements and accordingly refers Chapters II and III. For the remainder, batteries shall not present a risk to human health, to safety, to property or to the environment.

Article 5 concerns the requirement for the Member States to designate one or more competent authorities to deal with the end-of-life phase of batteries.

Chapter II of the Regulation lays down sustainability and safety requirements.

Article 6, together with **Annex I**, lays down restrictions on the use of hazardous substances in batteries, in particular mercury and cadmium.

Article 7, together with **Annex II**, lays down rules on the carbon footprint of electric vehicle batteries and rechargeable industrial batteries. The requirements are staged in such a manner that there first is an information requirement in the form of a carbon footprint declaration. Thereafter, the batteries shall be subject to classification into carbon footprint performance classes. Ultimately, and informed by the results of a dedicated impact assessment, the batteries will need to comply with maximum life cycle carbon footprint thresholds. The timeline for the three requirements is 1 July 2024 for the carbon footprint declaration, 1 January 2026 for the performance classes and 1 July 2027 for the maximum life cycle carbon footprint thresholds.

Article 8 requires that, as of 1 January 2027, the technical documentation for industrial and electric-vehicle batteries with internal storage that contain cobalt, lead, lithium or nickel in active materials shall contain information about the amount of the above materials that have been recovered are present in each battery model and batch per manufacturing plant. As of 1 January 2030, those batteries shall contain the following minimum share of recovered cobalt, lead, lithium or nickel from waste of the cobalt, lead, lithium or nickel present in active materials in those batteries: 12% cobalt; 85% lead, 4% lithium and 4% nickel. As of 1 January 2035, the minimum share of recovered cobalt, lithium or nickel shall increase to 20% cobalt, 10% lithium and 12% nickel. For lead the minimum share shall stay at 85%. Where justified and appropriate due to the availability of cobalt, lead, lithium or nickel recovered from waste, or the lack thereof, the Commission shall be empowered to adopt a delegated act to amend the targets ..

Article 9, together with **Annex III**, requires that, as of 1 January 2026, portable batteries of general use can only be placed on the market if the electrochemical performance and durability parameters are fulfilled. The Commission shall be empowered to adopt delegated acts to lay down the minimum requirements for those parameters and to amend them in view of technical and scientific progress. By 31 December 2030, the Commission shall assess the feasibility of measures to phase out the use of non-rechargeable portable batteries of general use and, to that end, submit a report to the European Parliament and to the Council and consider taking the appropriate measures, including the adoption of legislative proposals.

Article 10, together with **Annex IV**, lays down an information requirement on the electrochemical performance and durability parameters for rechargeable industrial batteries and electric vehicle batteries with internal storage. From 1 January 2026, rechargeable industrial batteries shall meet the minimum values which the Commission shall be empowered to adopt by delegated act.

Article 11 requires that manufacturers shall design appliances, in which portable batteries are incorporated, in such a way that waste batteries can be readily removed and replaced by the end-user or by independent operators.

Article 12, together with **Annex V**, requires that stationary battery energy storage systems are safe during their normal operation and use, including evidence that they have been successfully tested for the safety parameters laid down in Annex V, for which state-of-the-art testing methodologies should be used. The Commission shall be empowered to amend, by delegated act, the safety requirements to be taken into account to test battery safety which are set out in Annex V.

Chapter III of the Regulation lays down labelling and information requirements.

Article 13 and **Annex VI** require that, as of 1 January 2027, batteries shall be labelled, in a visible, legible and indelible manner, to provide information necessary for the identification of batteries and of their main characteristics. Various labels on the battery or the battery packaging shall also inform about lifetime, charging capacity, requirement on separate collection, presence of hazardous substances and safety risks. The QR code to be printed or engraved on the battery shall, depending on the type of battery, give access to the information that is relevant for the battery in question. The Commission shall be empowered to, by implementing act, establish harmonised specifications for certain labelling requirements.

Article 14 requires that rechargeable industrial batteries and electric vehicle batteries shall contain a battery management system that stores the information and data needed to determine the state of health and expected lifetime of batteries in accordance with the parameters laid down in **Annex VII**. Access to the data on those parameters in the battery management system shall be provided to the legal or natural person who has legally purchased the battery or any third party acting on their behalf at any time for evaluating the residual value of the battery, facilitating the reuse, repurposing or remanufacturing of the battery and for making the battery available to independent aggregators operating virtual power plants in electricity grids.

Chapter IV contains rules on the conformity assessment of batteries and is mostly made up of standard provisions. It is useful to mention Article 17 and Article 18.

Article 17 concerns the conformity assessment procedures and lays down two different assessment procedures depending on the product requirement to be assessed. **Annex VIII** describes in detail the applicable procedures. The Commission may, on the basis of a delegated act, amend the conformity assessment procedures to both add verifications steps to the procedure and to change assessment module, on the basis of developments on the battery market or in the battery value chain.

Article 18 concerns the EU declaration of conformity which states that conformity with the sustainability, safety and labelling requirements of the Regulation have been demonstrated. **Annex IX** to the Regulation sets out in detail the model structure for the EU declaration of conformity.

Chapter V concerns notification of conformity assessment bodies and is mostly made of standard provisions. Some of the provisions are modified in order to strengthen the notified bodies' independence. For this purpose it is useful to mention Article 23, Article 25, Article 27, Article 28 and Article 33.

Article 23 lays down requirements relating to notifying authorities. Notifying authorities shall be objective and impartial in their activity and shall safeguard the confidentiality of the information they obtain. They should nonetheless be able to exchange information on

notified bodies with national authorities, the notifying authorities of other Member States and the Commission to ensure such consistency in the conformity assessment.

Article 25 contains requirements related to notified bodies. It should be possible for the notified body and the staff it employs, to maintain independence from economic operators in the battery value chain and from other companies, in particular from battery manufacturers, the battery manufacturers' trade partners, shareholding investors on the battery manufacturers' plants and from other notified bodies and the notified bodies' business associations and parent companies and subsidiaries.

Article 27 deals with subsidiaries of and subcontracting by notified bodies. While it is accepted that notified bodies subcontract parts of their activities linked to the assessment of conformity or have recourse to a subsidiary, it should be ascertained that certain activities and decision-making processes are exclusively carried out by the individual notified body which carries out the conformity assessment.

Article 28 concerns the application for notification. In accordance with Article 25, the notified body should be able to document its independence and provide it to the notifying authority.

Article 33 relates to the operational obligations of notified bodies. In case of a negative certification decision, the economic operator should be allowed to complement the documentation on the battery prior to the conformity assessment body's second and final decision on the certification.

Chapter VI lays down the obligations of economic operators. The provisions are standard but it is worth mentioning Article 39.

Article 39, together with **Annex X**, requires that due diligence policies shall be established for rechargeable industrial batteries and electric vehicles batteries placed on the single market. The Commission is empowered to review the list of substances and risk categories concerned by this obligation.

Chapter VII contains obligations relating to the end-of-life management of batteries. It appears relevant to refer specifically to the provisions on registration, extended producer responsibility, collection, treatment and recycling including recycling efficiencies, end of life information, repurposing of batteries and reporting. The rules contained in this Chapter replace the corresponding rules in Directive 2006/66/EC which is repealed with effect from 1 July 2023.

Article 46 requires the Member States establish a Register which shall serve to monitor compliance of producers with the requirements on end-of-life management of batteries. The Register shall be managed by the competent authority in a Member State. Producers are obliged to register and the registration shall be granted upon application which shall contain all the information listed in the Article.

Article 47 establishes extended producer responsibility for batteries that are supplied in a Member State for the first time. It entails a requirement for producers of batteries to ensure the attainment of the waste management obligations. For meeting their obligations, producers may also organise collectively, in a producer responsibility organisation. This responsibility includes notably the obligations to finance and to organise the separate collection and treatment of waste batteries, report to the competent authority, promote the separate collection of batteries and provide information including end-of-life aspects of batteries.

Article 48 lays down that producers, individually or through a producer responsibility organisation shall ensure the collection of all waste portable batteries, regardless of their nature, brand or origin. For that purpose they shall establish, free of charge for the end-user, a network of collection points in cooperation with other operators involved, including distributors, waste electrical equipment and end-of-life vehicle facilities, public authorities and voluntary collection points. Producers are furthermore obliged to provide for the necessary practical arrangements for collection and transport of waste batteries from those collection point to ensure that the waste portable batteries are subsequently subject to treatment and recycling. Producers of waste portable batteries are obliged to reach the collection targets laid down in the Article. The collection arrangements are subject to authorisation by the competent authority who has to verify that producers comply with the obligations regarding the collection of waste portable batteries, including ensuring that the targets are met.

Article 49 requires producers of automotive batteries, industrial batteries and electric vehicle batteries, individually or through a producer responsibility organisation to organise the collection of all waste automotive batteries, industrial batteries and electric vehicle batteries. The collection shall be free of charge and without an obligation on the end-user to buy a new battery. The producer shall take back waste automotive batteries, industrial batteries and electric vehicle batteries from end-users or from accessible collection points in cooperation with distributors of these types of batteries, waste electrical and electronic equipment and end-of-life vehicle treatment and recycling facilities, public authorities and third parties carrying out waste management on their behalf.

Article 55 sets out the collection rates to be obtained by Member States of waste portable batteries, excluding currently waste batteries from light means of transport. The collection rates shall gradually increase so to ensure that by end 2025 65% of waste portable batteries are collected and by end 2030 70% of such batteries are collected.

Article 56, sets forth requirements to be met by treatment facilities for all collected waste batteries to undergo proper treatment and recycling. Where treatment installations and processes are covered by Directive 2010/75/EU on industrial emissions, that Directive will apply. In any case, treatment shall be carried out providing for best available techniques and the requirements further specified in Annex XII part A. In view of the waste hierarchy as established by Article 4 of Directive 2008/98/EC, batteries shall not be landfilled or incinerated.

Article 57 concerns recycling efficiencies and material recovery targets and lays down that all waste batteries collected shall enter a recycling operation. The recycling processes shall achieve minimum recycling efficiencies, laid down in Annex XII, which will increase over time. These requirements are set out with regard to lead-acid batteries, nickel-cadmium batteries, lithium-based batteries and other batteries.

Article 59 contains requirements related to the operations of repurposing and remanufacturing for a second life of industrial and electric-vehicle batteries. It contains requirements to facilitate such operation, including for producers of the respective batteries to provide access to the battery management system to determine the state of health of a battery to repurposing operators. It also sets out obligations for persons carrying out the repurposing or remanufacturing of batteries to ensure that the examination, performance testing, packing and shipment of batteries and their components is carried out following adequate quality control and safety instructions. The persons carrying out repurposing or remanufacturing operations of batteries shall ensure that the repurposed or remanufactured battery complies with this Regulation and other relevant legislation and technical

requirements for its specific purpose of use when placed on the market. However, where it is demonstrated that a battery subject to repurposing or remanufacturing was placed on the market before certain requirements concerning carbon footprint, recycled content, performance and durability as well as supply chain due diligence (included in Articles 7, 8, 10 and 39 of the Regulation), the obligations under those provisions shall not apply to that battery when repurposed or remanufactured. In order to document that a battery is no longer waste the operator carrying out the relevant operation shall demonstrate the following upon request by a competent authority: 1) evidence of state of health evaluation or testing, 2) certainty of further use (by means of an invoice or sale contract), and 3) appropriate protection against damage during transport, loading and unloading. This information shall be made available to end users and third parties acting on their behalf, on equal terms and conditions, as part of the technical documentation accompanying the repurposed battery when placed on the market or put into service.

Article 60 contains requirements for the provision of information regarding waste batteries. This includes obligations to producers, or their producer responsibility organisations, to end users and distributors regarding their contribution to the end of life treatment. The Article also sets up obligations to provide for information relevant to safety during collection and storage of waste batteries to distributors and operators involved in the collection and waste treatment, as well as providing to those operators information to facilitate removal of waste batteries and subsequent treatment.

Article 61 concerns reporting from the respective operators involved in the waste management to the competent authority on the waste management of batteries. This includes notably requirements for producers, or producer responsibility organisations on their behalf, to report the amount of batteries placed on the market, of waste batteries collected and delivered for treatment and recycling, and for recycling operators to report on waste batteries entering recycling, the recycling efficiencies and levels of recovered materials from waste batteries and the amount of batteries that has been treated and recycled.

Article 62 concerns reporting from the Member States to the Commission. Member States shall report to the Commission, for each calendar year per battery type and their chemistry, the amount of batteries supplied for the first time for distribution or use within the territory of a Member State, the amount of waste batteries collected in accordance and the data concerning the levels of recycling achieved and whether the recycling efficiencies and levels of material recovery set out in the Regulation have been met. The Commission shall by implementing acts lay down the format for the reporting.

Chapter VIII concerns the electronic exchange of information.

Article 64 concerns the electronic exchange system which the Commission, by 1 January 2026, shall set up. The system shall contain the information and data on rechargeable industrial and electric vehicle batteries with internal storage, as laid down in Annex XIII. That information and data shall be sortable and searchable, respecting open standards for third party use. The relevant economic operators shall be able to feed the system with information in a machine-readable format. The Commission shall publish through the system certain information mentioned in Article 62 and shall, by implementing act, lay down details concerning the architecture of the system, the format in which the information is to be submitted and the rules for accessing, sharing, managing, exploring, publishing and reusing the information and data in the system.

Article 65 concerns the battery passport and requires that, by 1 January 2026, industrial batteries and electric-vehicle batteries shall have an electronic record for each individual

battery they place on the market. The records shall be unique for each battery, to be identified through a unique identifier. The battery passport shall be linked to the information about the basic characteristics of each battery type and model stored in the data sources of the system established according to Article 64 and shall be accessible online.

Chapter IX sets out the standard provisions on market surveillance.

Article 69 enables market surveillance authorities to require economic operators to take corrective actions on the basis of findings that either the battery is not compliant or the economic operator infringes an obligation which follows from the rules on single market or sustainability, safety, labelling and due diligence.

Chapter X concerns green public procurement, procedure for introducing new and amending existing restrictions on hazardous substances and Commission recognition of supply chain due diligence schemes.

Article 70 concerns green public procurement and requires that contracting authorities and contracting entities, when procuring batteries or products containing batteries, consider the environmental impacts of batteries over their life-cycle with a view to ensure that such impacts are kept to a minimum. To this effect, the contracting authorities and contracting entities are asked to include technical specifications and award criteria based on Articles 7 to 10 to ensure that a product is chosen among products with significantly lower environmental impacts over their lifecycle. The Commission may by delegated acts establish minimum mandatory green public procurement criteria.

Article **71** contains the procedure for amending the restrictions on hazardous substances, further to Article 6 and Annex I.

Article **72** concerns supply chain due diligence schemes and the Commission's recognition thereof. Governments, industry associations and groupings of interested organisations having that have developed and oversee due diligence schemes may apply to the Commission to have their supply chain due diligence schemes that are developed and overseen by them recognised by the Commission. Where the Commission determines that the supply chain due diligence scheme, when effectively implemented by economic operator enables that economic operator to comply with the requirement to set up a due diligence policy, it shall adopt an implementing act granting that scheme a recognition of equivalence with the requirements set out in this Regulation.

Chapter XI sets out delegated powers and committee procedure.

Chapter XII sets out an amendment to Regulation (EU) 2109/1020.

Chapter XIII sets out the final provisions.

Proposal for a

REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL

concerning batteries and waste batteries, repealing Directive 2006/66/EC and amending Regulation (EU) No 2019/1020

(Text with EEA relevance)

THE EUROPEAN PARLIAMENT AND THE COUNCIL OF THE EUROPEAN UNION,

Having regard to the Treaty on the Functioning of the European Union, and in particular Article 114 thereof,

Having regard to the proposal from the European Commission,

After transmission of the draft legislative act to the national parliaments,

Having regard to the opinion of the European Economic and Social Committee¹,

Having regard to the opinion of the Committee of the Regions²,

Acting in accordance with the ordinary legislative procedure,

Whereas:

- (1) The European Green Deal³ is Europe's growth strategy that aims to transform the Union into a fair and prosperous society, with a modern, resource-efficient and competitive economy where there are no net emissions of greenhouse gases in 2050 and where economic growth is decoupled from resource use. A shift from the use of fossil fuels in vehicles to electromobility is one of the prerequisites for reaching the climate neutrality goal in 2050. In order for the Union's product policies to contribute to lowering carbon emissions on a global level, it needs to be ensured that products marketed and sold in the Union are sourced and manufactured in a sustainable manner.
- (2) Batteries are thus an important source of energy and one of the key enablers for sustainable development, green mobility, clean energy and climate neutrality. It is expected that the demand for batteries will grow rapidly in the coming years, notably for electric road transport vehicles using batteries for traction, making this market an increasingly strategic one at the global level. Significant scientific and technical progress in the field of battery technology will continue. In view of the strategic importance of batteries, and to provide legal certainty to all operators involved and to avoid discrimination, barriers to trade and distortions on the market for batteries, it is necessary to set out rules on sustainability parameters, performance, safety, collection, recycling and second life of batteries as well as on information about batteries. It is

¹ OJ C , , p. .

² OJ C , , p. [...]

³ Communication from the Commission to the European Parliament, the European Council, the Council, the European Economic and Social Committee and the Committee of the Regions, The European Green Deal (COM (2019) 640 final).

necessary to create a harmonised regulatory framework for dealing with the entire life cycle of batteries that are placed on the market in the Union.

- (3) Directive 2006/66/EC of the European Parliament and of the Council⁴ has brought about an improvement in the environmental performance of batteries and established some common rules and obligations for economic operators, in particular through harmonised rules for the heavy metal content and labelling of batteries and rules and targets for the management of all waste batteries, based on extended producer responsibility.
- (4) The Commission's reports on the implementation, impact and evaluation of Directive 2006/66/EC⁵ highlighted not only the achievements but also the limitations of that Directive, in particular against a fundamentally changed context characterised by the strategic importance of batteries and their increased use.
- (5) The Commission's Strategic Action Plan on Batteries⁶ sets out measures to support efforts to build a battery value chain in Europe, embracing raw materials extraction, sustainable sourcing and processing, sustainable battery materials, cell manufacturing as well as re-use and recycling of batteries
- (6) In the European Green Deal, the Commission confirmed its commitment to implement the Strategic Action Plan on Batteries and stated that it would propose legislation to ensure a safe, circular and sustainable battery value chain for all batteries, including to supply the growing market of electric vehicles.
- (7) The Council in its conclusions of 4 October 2019 on 'More circularity – Transition to a sustainable society' called, inter alia, for coherent policies supporting the development of technologies that improve the sustainability and circularity of batteries to accompany the transition to electro-mobility. Furthermore, the Council called for an urgent revision of Directive 2006/66/EC, which should include all relevant batteries and materials and which should consider, in particular, specific requirements for lithium and cobalt as well as a mechanism allowing the adaptation of that Directive to future changes in battery technologies.
- (8) The new Circular Economy Action Plan adopted on 11 March 2020⁷ states that the proposal for a new regulatory framework for batteries will consider rules on recycled content and measures to improve the collection and recycling rates of all batteries, in

⁴ Directive 2006/66/EC of the European Parliament and of the Council of 6 September 2006 on batteries and accumulators and waste batteries and accumulators and repealing Directive 91/157/EEC (OJ L 266, 26.9.2006, p. 1)

⁵ Report from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions of 9 April 2019 on the implementation and the impact on the environment and the functioning of the internal market of Directive 2006/66/EC of the European Parliament and of the Council of 6 September 2006 on batteries and accumulators and waste batteries and accumulators and repealing Directive 91/157/EEC (COM(2019) 166 final) and Commission Staff Working Document on the evaluation of the Directive 2006/66/EC on batteries and accumulators and waste batteries and accumulators and repealing Directive 91/157/EEC (SWD(2019) 1300 final).

⁶ Annex 2 to Communication from the Commissions to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions of 17 May 2018, EUROPE ON THE MOVE - Sustainable Mobility for Europe: safe, connected and clean (COM(2018)293 final).

⁷ Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions of 11 March 2020, A new Circular Economy Action Plan – For a cleaner and more competitive Europe (COM(2020)98 final).

order to ensure the recovery of valuable materials and to provide guidance to consumers and will address the possible phasing out of non-rechargeable batteries where alternatives exist. Furthermore, it is stated that sustainability and transparency requirements will be considered, taking into account the carbon footprint of battery manufacturing, the ethical sourcing of raw materials and the security of supply in order to facilitate reuse, repurposing and recycling of batteries.

- (9) Addressing the entire life cycle of all batteries placed on the Union market requires the setting up of harmonised product and marketing requirements, including conformity assessment procedures, as well as requirements to fully address the end-of-life stage of batteries. Requirements concerning the end-of-life stage are necessary to address the environmental implications of the batteries and, in particular, to support the creation of recycling markets for batteries and markets for secondary raw materials from batteries in order to close the materials loops. In order to reach the envisaged objectives to address the whole life cycle of a battery in one legal instrument while avoiding barriers to trade and a distortion of competition and safeguarding the integrity of the internal market, the rules setting out the requirements for batteries should be of uniform application for all operators across the Union, and not give room for divergent implementation by Member States. Directive 2006/66/EC should therefore be replaced by a Regulation.
- (10) This Regulation should apply to all types of batteries and accumulators placed on the market or put into service within the Union, whether on their own or incorporated into appliances or otherwise supplied with electrical and electronic appliances and vehicles. This Regulation should apply regardless of whether a battery is specifically designed for a product or is of general use and regardless of whether it is incorporated into a product or is supplied together with or separately from a product in which it is to be used.
- (11) Products placed on the market as battery packs, which are batteries or groups of cells that are connected and/or encapsulated within an outer casing so as to form a complete unit ready for use that the end-user is not intended to split up or open and which conform to the definition of batteries, should be subject to requirements applicable to batteries. Products placed on the market as battery modules, which conform to the definition of battery pack, should be subject to requirements applicable to battery packs.
- (12) Within the Regulation's wide scope, it is appropriate to distinguish between different categories of batteries in accordance with their design and use, independent of the battery chemistry. The classification into portable batteries, on one hand, and industrial batteries and automotive batteries on the other hand under Directive 2006/66/EC should be further developed to better reflect new developments in the use of batteries. Batteries that are used for traction in electric vehicles and which under Directive 2006/66/EC fall in the category of industrial batteries, constitute a large and growing part of the market due to the quick growth of electric road transport vehicles. It is therefore appropriate to classify those batteries that are used for traction in road vehicles as a new category of electric vehicle batteries. Batteries used for traction in other transport vehicles including rail, waterborne and aviation transport, continue to fall under the category of industrial batteries under this Regulation. The industrial battery type encompasses a broad group of batteries, intended to be used for industrial activities, communication infrastructure, agricultural activities or generation and distribution of electric energy. In addition to this non exhaustive list of examples, any battery that is neither a portable battery nor an automotive battery nor an electric

vehicle battery should be considered an industrial battery. Batteries used for energy storage in private or domestic environments. are considered industrial batteries for the purposes of this Regulation. Furthermore, in order to ensure that all batteries used in light means of transport, such as ebikes and scooters, are classified as portable batteries, it is necessary to clarify the definition of portable batteries and to introduce a weight limit for such batteries.

- (13) Batteries should be designed and manufactured so as to optimise their performance, durability and safety and to minimise their environmental footprint. It is appropriate to lay down specific sustainability requirements for rechargeable industrial batteries and electric vehicle batteries with internal storage with a capacity above 2 kWh as such batteries represent the market segment which is expected to increase most in the coming years.
- (14) In order to ensure that obligations arising from this Regulation are carried out and to monitor and verify compliance of producers and producer responsibility organisations with the requirements of this Regulation, it is necessary that Member States designate one or more competent authorities.
- (15) The use of hazardous substances in batteries should be restricted in order to protect human health and the environment and to reduce the presence of such substances in waste. Thus, in addition to the restrictions set out in Annex XVII of Regulation (EC) No 1907/2006 of the European Parliament and of the Council⁸, it is appropriate to set out restrictions for mercury and cadmium in certain types of batteries. Batteries used in vehicles which benefit from an exemption under Annex II to Directive 2000/53/EC of the European Parliament and of the Council⁹ should be excluded from the prohibition to contain cadmium.
- (16) In order to ensure that hazardous substances that pose an unacceptable risk to human health or to the environment when used in batteries, can be duly addressed, the power to adopt acts in accordance with Article 290 of the Treaty on the Functioning of the European Union should be delegated to the Commission in respect of amending restrictions on hazardous substances in batteries.
- (17) The procedure for adopting new and amending current restrictions on hazardous substances in batteries should be fully streamlined with Regulation (EC) No 1907/2006. To ensure effective decision-making, coordination and management of the related technical, scientific and administrative aspects of this Regulation, the European Chemicals Agency set up under Regulation (EC) No 1907/2006 ('the Agency') should carry out specified tasks with regard to the evaluation of risks from substances in the manufacture and use of batteries, as well as those that may occur after their end-of-life as well as the evaluation of the socio-economic elements and the analysis of alternatives, in accordance with relevant guidance by the Agency. Consequently, the Committees for Risk Assessment and Socio-economic Analysis of the Agency should facilitate the carrying out of certain tasks conferred on the Agency by this Regulation.

⁸ Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC (OJ L 396, 30.12.2006, p. 1)

⁹ Directive 2000/53/EC of the European Parliament and of the Council of 18 September 2000 on end-of life vehicles (OJ L 269, 21.10.2000, p. 34).

- (18) The expected massive deployment of batteries in sectors like mobility and energy storage should reduce carbon emissions, but to maximise this potential it is necessary that their overall life cycle has a low carbon footprint. According to the Product Environmental Footprint Category Rules for High Specific Energy Rechargeable Batteries for Mobile Applications¹⁰, climate change is the second highest related impact category for batteries after the use of minerals and metals. The technical documentation for rechargeable industrial batteries and electric vehicle batteries with internal storage and a capacity above 2 kWh placed on the Union market should therefore be accompanied by a carbon footprint declaration, which should be specific, if necessary, per manufacturing batch. Batteries are manufactured in batches, made in specific amounts within certain timeframes. Harmonising the technical rules for calculating the carbon footprint for all rechargeable industrial batteries and electric vehicle batteries with internal storage with a capacity above 2 kWh placed on the Union market is a prerequisite for introducing a requirement for the technical documentation of the batteries to include a carbon footprint declaration and subsequently establishing carbon footprint performance classes that will allow identifying the batteries with overall lower carbon footprints. Information and clear labelling requirements on batteries' carbon footprint is not expected in itself to lead to the behavioural change necessary to ensure that the Union's objective to decarbonise the mobility and energy storage sectors is achieved, in line with the internationally agreed objectives on climate change¹¹. Therefore, maximum carbon thresholds will be introduced, further to a dedicated impact assessment to determine those values. In proposing the level of the maximum carbon footprint threshold, the Commission will, inter alia, take into account the relative distribution of the carbon footprint values in batteries on the market, the extent of progress in the reduction of carbon footprint of batteries placed on the Union market and the effective and potential contribution of this measure to the Union's objectives on sustainable mobility and climate neutrality by 2050. In order to bring about transparency on the batteries' carbon footprint, and shift the Union market towards lower carbon batteries, regardless of where they are produced, a gradual and cumulative increase in the carbon footprint requirements is justified. As a result of these requirements, the avoided carbon emissions in batteries' life cycle, will contribute to the Union's objective of reaching climate neutrality by 2050. This may also enable other policies at Union and national level, such as incentives or green public procurement criteria, fostering the production of batteries with lower environmental impacts.
- (19) Certain substances contained in batteries, such as cobalt, lead, lithium or nickel, are acquired from scarce resources which are not easily available in the Union, and some are considered critical raw materials by the Commission. This is an area where Europe needs to enhance its strategic autonomy and increase its resilience in preparation for potential disruptions in supply due to health or other crises. Enhancing circularity and resource efficiency with increased recycling and recovery of those raw materials, will contribute to reaching that goal.
- (20) The increased use of recovered materials would support the development of the circular economy and allow a more resource-efficient use of materials, while reducing

¹⁰ Product Environmental Footprint - Category Rules for High Specific Energy Rechargeable Batteries for Mobile Applications https://ec.europa.eu/environment/eussd/smgp/pdf/PEFCR_Batteries.pdf

¹¹ Paris agreement (OJ L 282, 19.10.2016, p. 4) and the United Nations Framework Convention on Climate Change, available at <https://unfccc.int/resource/docs/convkp/conveng.pdf>

Union dependency on materials from third countries. For batteries, this is particularly relevant for cobalt, lead, lithium and nickel. Therefore, it is necessary to promote the recovery of such materials from waste, establishing a requirement on the level of recycled content in batteries using cobalt, lead, lithium and nickel in active materials. This Regulation sets mandatory recycled content targets for cobalt, lead, lithium and nickel and which should be met by 2030. For cobalt, lithium and nickel increased targets are established by 2035. All targets, should take into account the availability of waste, from which such materials can be recovered, the technical feasibility of the involved recovery and manufacture processes as well as the time needed by the economic operators to adapt their supply and manufacturing processes. Therefore, before such mandatory targets become applicable, the requirement related to recycled content should be limited to disclosure of information on recycled content.

- (21) In order to take into account the risk of supply of cobalt, lead, lithium and nickel and to assess their availability, the power to adopt acts in accordance with Article 290 of the Treaty on the Functioning of the European Union should be delegated to the Commission in respect of amending the targets for the minimum share of recycled cobalt, lead, lithium or nickel present in active materials in batteries.
- (22) In order to ensure uniform conditions for the implementation of the rules on calculating and verifying, per battery model and batch per manufacturing plant, the amount of cobalt, lead, lithium or nickel recovered from waste present in active materials in batteries and the information requirements for technical documentation, implementing powers should be conferred on the Commission.
- (23) Batteries placed on the Union market should be durable and highly performant. It is therefore necessary to set out performance and durability parameters for portable batteries of general use as well as for rechargeable industrial batteries and electric vehicle batteries. For electric vehicle batteries, the informal UNECE Working Group on Electric Vehicles and the Environment is developing in-vehicle durability requirements, so this Regulation is refraining from setting additional durability requirements. On the other hand, in the area of batteries for energy storage, existing measurement methods to test battery performance and durability are not considered sufficiently precise and representative to enable introducing minimum requirements. The introduction of minimum requirements related to performance and durability of these batteries should be accompanied by available adequate harmonised standards or common specifications.
- (24) In order to reduce the life cycle environmental impact batteries, the power to adopt acts in accordance with Article 290 of the Treaty on the Functioning of the European Union should be delegated to the Commission in respect of amending the performance and durability parameters and establishing minimum values for those parameters for portable batteries of general use and for rechargeable industrial batteries.
- (25) Some non-rechargeable batteries of general use may imply an inefficient use of resources and energy. Objective requirements regarding the performance and durability of such batteries should be established in order to ensure that fewer low performing non-rechargeable portable batteries of general use are placed on the market, in particular, where, based on a life cycle assessment, the alternative use of rechargeable batteries would result in overall environmental benefits.
- (26) In order to ensure that portable batteries incorporated into appliances are subject to proper separate collection, treatment and high quality recycling once they have become waste, provisions to ensure their removability and replaceability in such

appliances are necessary. Used batteries should also be replaceable so as to prolong the expected lifetime of the appliances they are part of. The general provisions of this Regulation may be complemented with requirements set up for particular products powered by batteries under implementing measures under Directive 2009/125/EC of the European Parliament and of the Council¹². Where other Union legislation lays down more specific requirements, for safety reasons, regarding the removal of batteries from products (e.g. toys), those specific rules should apply.

- (27) Reliable batteries are fundamental for the operation and safety of many products, appliances and services. Therefore, batteries should be designed and manufactured to ensure their safe operation and use. This aspect is particularly relevant for stationary battery energy storage systems, which are currently not covered by other Union legislation. Parameters to be considered in safety tests should therefore be laid down for those energy storage systems.
- (28) In order to provide end users with transparent, reliable and clear information about batteries and their main characteristics, and waste batteries, to enable the end users to make informed decisions when buying and discarding batteries and to enable waste operators to appropriately treat waste batteries, batteries should be labelled. Batteries should be labelled with all the necessary information concerning their main characteristics, including their capacity and content of certain hazardous substances. To ensure the availability of information over time, that information should also be made available by means of QR codes.
- (29) Information about the performance of batteries is essential to ensure that end-users as consumers are well and timely informed and in particular that they have a common basis to compare different batteries before making their purchase. Therefore, portable batteries of general use and automotive batteries should be marked with a label containing the information on their minimum average duration when used in specific applications. Additionally, it is important to guide the end-user to discard waste batteries in an appropriate way.
- (30) Rechargeable industrial batteries and electric-vehicle batteries with internal storage with a capacity above 2 kWh should contain a battery management system that stores data so that the state of health and expected lifetime of batteries may be determined at any time by the end-user or any other third party acting on his behalf. In order to repurpose or remanufacture a battery, access to the battery management system should be provided to the person that has purchased the battery or any third party acting on its behalf at any time for evaluating the residual value of the battery, facilitating the reuse, repurposing or remanufacturing of the battery and for making the battery available to independent aggregators, as defined in Directive (EU) 2019/944 of the European Parliament and of the Council¹³, which operate virtual power plants in electricity grids. This requirement should apply in addition to Union law on type of approval of vehicles, including technical specifications that may originate from the work of the informal UNECE Working Group on Electric Vehicles and the Environment on data access in electric vehicles.

¹² Directive 2009/125/EC of the European Parliament and of the Council of 21 October 2009 establishing a framework for the setting of ecodesign requirements for energy-related products (OJ L 285, 31.10.2009, p. 10).

¹³ Directive (EU) 2019/944 of the European Parliament and of the Council of 5 June 2019 on common rules for the internal market for electricity and amending Directive 2012/27/EU (OJ L 158, 14.6.2019, p. 125)

- (31) A number of product-specific requirements under this Regulation, including on performance, durability, repurposing and safety, should be measured by using reliable, accurate and reproducible methods that take into account the generally recognised state-of-the-art measurements and calculation methodologies. In order to ensure that there are no barriers to trade on the internal market, standards should be harmonised at Union level. Such methods and standards should, to the extent possible, take into account the real-life usage of batteries, reflect the average range of consumer behaviour and be robust in order to deter intentional and unintentional circumvention. Once a reference to such a standard has been adopted in accordance with Regulation (EU) No 1025/2012 of the European Parliament and of the Council¹⁴ and published in the Official Journal of the European Union, presumption of conformity shall be established with those product-specific requirements adopted on the basis of this Regulation, provided that the outcome of such methods demonstrate that the minimum values established for those substantive requirements are attained. In the absence of published standards at the time of the application of product-specific requirements, the Commission should adopt common specifications through implementing acts and the compliance with such specifications should also give rise to the presumption of conformity. In cases where the common specifications are, at a later stage, found to have shortcomings, the Commission should by implementing act amend or repeal the common specifications in question.
- (32) To ensure effective access to information for market surveillance purposes, to adapt to new technologies and to ensure resilience in case of global crises, such as the Covid-19 pandemic, it should be possible to give information regarding conformity with all Union acts applicable to batteries online in the form of a single EU declaration of conformity.
- (33) Regulation (EC) No 765/2008 of the European Parliament and of the Council¹⁵ lays down rules on the accreditation of conformity assessment bodies, provides a framework for the market surveillance of products and for controls on products from third countries, and lays down the general principles of the CE marking. That Regulation should be applicable to batteries covered by this Regulation in order to ensure that products benefiting from the free movement of goods within the Union fulfil requirements providing a high level of protection of public interests such as human health, safety and the environment.
- (34) In order to enable economic operators to demonstrate and the competent authorities to verify that batteries made available on the market comply with the requirements of this Regulation, it is necessary to provide for conformity assessment procedures. Decision No 768/2008/EC of the European Parliament and of the Council¹⁶ establishes modules

¹⁴ Regulation (EU) No 1025/2012 of the European Parliament and of the Council of 25 October 2012 on European standardisation, amending Council Directives 89/686/EEC and 93/15/EEC and Directives 94/9/EC, 94/25/EC, 95/16/EC, 97/23/EC, 98/34/EC, 2004/22/EC, 2007/23/EC, 2009/23/EC and 2009/105/EC of the European Parliament and of the Council and repealing Council Decision 87/95/EEC and Decision No 1673/2006/EC of the European Parliament and of the Council (OJ L 316, 14.11.2012, p. 12)

¹⁵ Regulation (EC) No 765/2008 of the European Parliament and of the Council of 9 July 2008 setting out the requirements for accreditation and market surveillance relating to the marketing of products and repealing Regulation (EEC) No 339/93 (OJ L 218, 13.8.2008, p. 30)

¹⁶ Decision No 768/2008/EC of the European Parliament and of the Council of 9 July 2008 on a common framework for the marketing of products, and repealing Council Decision 93/465/EEC, OJ L 218, 13.8.2008, p. 82

for conformity assessment procedures, ranging from the least stringent to the most stringent depending on the level of risk involved and the level of safety required. According to Article 4 of that Decision, where conformity assessment is required, the procedures to be used for that assessment are to be chosen from among those modules.

- (35) The chosen modules do not however reflect certain specific aspects of batteries and thus, it is necessary to adapt the modules chosen for the conformity assessment procedure. In order to take account of the novelty and complexity of the sustainability, safety and labelling requirements set out in this Regulation and for the purpose of ensuring the conformity of batteries placed on the market with the legal requirements, the power to adopt acts in accordance with Article 290 of the Treaty on the Functioning of the European Union should be delegated to the Commission in respect of amending the conformity assessment procedures by adding verifications steps or changing assessment module, on the basis of developments on the battery market or in the battery value chain.
- (36) The CE marking on a battery indicates the conformity of that battery with this Regulation. General principles governing the CE marking and its relationship to other markings are set out in Regulation (EC) No 765/2008. Those principles should apply to the CE marking on batteries. In order to ensure that the battery is stored, used and discarded in a manner which is safe from the point of view of protecting human health and the environment, specific rules governing the affixing of the CE marking in the case of batteries should be laid down.
- (37) The conformity assessment procedures set out in this Regulation require the intervention of conformity assessment bodies. In order to ensure a uniform implementation of the provisions in this Regulation, those bodies should be notified by the Member State authorities to the Commission.
- (38) Due to the novelty and complexity of the sustainability, safety and labelling requirements for batteries and in order to ensure a consistent level of quality in the performance of conformity assessment of batteries, it is necessary to set requirements for notifying authorities involved in the assessment, notification and monitoring of notified bodies. In particular, it should be ensured that the notifying authority is objective and impartial with regard to its activity. Furthermore, notifying authorities should be required to safeguard the confidentiality of the information it obtains but should nonetheless be able to exchange information on notified bodies with national authorities, the notifying authorities of other Member States and the Commission to ensure consistency in the conformity assessment.
- (39) It is essential that all notified bodies perform their functions to the same level and under conditions of fair competition and autonomy. Therefore, requirements for conformity assessment bodies wishing to be notified in order to provide conformity assessment activities should be set. Those requirements should continue to apply as a prerequisite for the maintenance of the competence of the notified body. To ensure its autonomy, the notified body and the staff it employs should be required to maintain independence from economic operators in the battery value chain and from other companies, including business associations and parent companies and subsidiaries. The notified body should be required to document its independence and provide that documentation to the notifying authority.
- (40) If a conformity assessment body demonstrates conformity with the criteria laid down in harmonised standards it should be presumed to comply with the corresponding requirements set out in this Regulation.

- (41) Conformity assessment bodies frequently subcontract parts of their activities linked to the assessment of conformity or have recourse to a subsidiary. Certain activities and decision-making processes, both regarding the conformity assessment of batteries and other activities internal to the notified body, should however exclusively be carried out by the individual notified body itself, in order to ensure its independence and autonomy. Furthermore, in order to safeguard the level of protection required for batteries to be placed on the Union market, conformity assessment subcontractors and subsidiaries should fulfil the same requirements as notified bodies in relation to the performance of conformity assessment tasks under this Regulation.
- (42) Since the services offered by notified bodies in a Member State might relate to batteries made available on the market throughout the Union, it is appropriate to give the other Member States and the Commission the opportunity to raise objections concerning a notified body. In order to ensure uniform conditions for the implementation of this Regulation, implementing powers should be conferred on the Commission in order to request the notifying authority to take corrective action in case a notified body does not meet or no longer meets the requirements of this Regulation.
- (43) In the interests of facilitating and accelerating the conformity assessment procedure, the certification and ultimately the market access and in view of the novelty and complexity of the sustainability, safety and labelling requirements for batteries, it is crucial that notified bodies have continuous access to all testing equipment and testing facilities needed and that they apply the procedures without creating unnecessary burdens for economic operators. For the same reason, and to ensure equal treatment of economic operators, it is necessary that the notified bodies apply the conformity assessment procedures consistently.
- (44) Prior to taking a final decision on whether the battery can be granted a conformity certificate, the economic operator that wishes to place a battery on the market should be allowed to complement once the documentation on the battery.
- (45) The Commission should enable appropriate coordination and cooperation between notified bodies.
- (46) It is appropriate to lay the obligations linked to the placing on the market or putting into service of a battery on the economic operators, which include the manufacturer, the authorised representative, the importer, the distributor, the fulfilment service providers, or any other legal person who takes on the legal responsibility in relation to the manufacture of batteries, making them available or placing them on the market or putting them into service.
- (47) Economic operators should be responsible for the compliance of batteries with the requirements of this Regulation, in relation to their respective roles in the supply chain, so as to ensure a high level of protection of public interests, such as human health, safety and protection of property and the environment.
- (48) All economic operators intervening in the supply and distribution chain should take appropriate measures to ensure that they only make available on the market batteries which are in conformity with this Regulation. It is necessary to provide for a clear and proportionate distribution of obligations which correspond to the role of each economic operator in the supply and distribution chain.
- (49) The manufacturer, having detailed knowledge of the design and production process, is best placed to carry out the conformity assessment procedure. Conformity assessment should therefore remain solely the obligation of the manufacturer.

- (50) The manufacturer should provide sufficiently detailed information on the intended use of the battery so as to allow its correct and safe placing on the market, putting into service, use and end-of-life management, including possible repurposing.
- (51) In order to facilitate communication between economic operators, market surveillance authorities and consumers, economic operators should, as part of their contact details, indicate a website address in addition to the postal address.
- (52) It is necessary to ensure that batteries from third countries entering the Union market comply with the requirements of this Regulation, whether imported as self-standing batteries or contained in products, and in particular that appropriate conformity assessment procedures have been carried out by manufacturers with regard to those batteries. Provision should therefore be made for importers to make sure that the batteries they place on the market and put into service comply with the requirements of this Regulation and that the CE marking on batteries and documentation drawn up by manufacturers are available for inspection by the national authorities.
- (53) When placing a battery on the market or putting it into service, every importer should indicate on the battery the importer's name, registered trade name or registered trade mark as well as the postal address. Exceptions should be provided for in cases where the size of the battery does not allow it. This includes cases where the importer would have to open the packaging to put the name and address on the battery or where the battery is too small in size to affix this information..
- (54) As the distributor makes a battery available on the market after it has been placed on the market or put into service by the manufacturer or the importer, the distributor should act with due care to ensure that its handling of the battery does not adversely affect its compliance with the requirements of this Regulation.
- (55) Any importer or distributor that either places a battery on the market or puts it into service under the importer's or distributor's own name or trademark or modifies a battery in such a way that compliance with the requirements of this Regulation may be affected or modifies the purpose of a battery that is already place on the market should be considered to be the manufacturer and should assume the obligations of the manufacturer.
- (56) Distributors and importers, being close to the market place, should be involved in market surveillance tasks carried out by the national authorities, and should be prepared to participate actively, providing those authorities with all necessary information relating to the battery concerned.
- (57) Ensuring traceability of a battery throughout the whole supply chain helps to make market surveillance simpler and more efficient. An efficient traceability system facilitates the market surveillance authorities' task of tracing economic operators who placed on the market or made available on the market or put into service non-compliant batteries. The economic operators should therefore be required to keep the information on their transactions of batteries for a certain period of time.
- (58) The extraction, processing and trading of natural mineral resources is fundamental in providing the necessary raw materials for the production of batteries. Battery manufacturers, regardless of their position or leverage over suppliers and of their geographical location, are not insulated from the risk of contributing to adverse impacts in the mineral supply chain. For some raw materials, over half of global production is for use in battery applications. For example, over 50% of the global demand for cobalt and over 60% of the world's lithium is used for battery production.

About 8% of global natural graphite production and 6% of global nickel production goes into battery manufacturing.

- (59) Only few countries supply those materials and, in some cases, low standards of governance may exacerbate environmental and social problems. Both cobalt and nickel mining and refining are related to a large range of social and environmental issues, including environmental hazard potential and human health. While the social and environmental impacts for natural graphite are less severe, its mining has high shares of artisanal and small scale operations, which mostly takes place in informal settings and can lead to serious health and environmental impacts, including no regular mine closure and no rehabilitation, which results in the destruction of ecosystems and soils. For lithium, the expected increase in its use in battery manufacturing is likely to put additional pressure on extraction and refining operations, what would recommend including lithium in the scope of the supply chain due diligence obligations. The expected massive increase in demand for batteries in the Union should not contribute to an increase of such environmental and social risks.
- (60) Some of the raw materials in question, such as cobalt, lithium and natural graphite, are considered as critical raw materials for the EU¹⁷ and their sustainable sourcing is required for the EU battery ecosystem to perform adequately.
- (61) A number of voluntary efforts from actors in the battery supply chain are already in place in order to encourage adherence to sustainable sourcing practices, including the Initiative for Responsible Mining Assurance (IRMA), the Responsible Minerals Initiative (RMI) and the Cobalt Industry Responsible Assessment Framework (CIRAF). However, voluntary efforts to set up due diligence schemes may not ensure that all economic operators placing batteries in the Union market abide by the same set of minimum rules.
- (62) In the Union, general requirements on due diligence in relation to certain minerals and metals were introduced by Regulation (EU) No 2017/821 of the European Parliament and of the Council¹⁸. That Regulation does not, however, address the minerals and materials used for battery production.
- (63) Therefore, in view of the expected exponential growth in battery demand in the EU, the economic operator that places a battery on the EU market should set up a supply chain due diligence policy. The requirements therefore should be laid down, with the objective to address the social and environmental risks inherent in the extraction, processing and trading of certain raw materials for battery manufacturing purposes.
- (64) When putting in place a risk-based due diligence policy, it should be based on internationally recognised due diligence principles in the Ten Principles of the United Nations Global Compact¹⁹, the Guidelines for Social Life Cycle Assessment of

¹⁷ Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions: Critical Raw Materials Resilience: Charting a Path towards greater Security and Sustainability (COM(2020) 474 final).

¹⁸ Regulation (EU) 2017/821 of the European Parliament and of the Council of 17 May 2017 laying down supply chain due diligence obligations for Union importers of tin, tantalum and tungsten, their ores, and gold originating from conflict-affected and high-risk areas (OJ L 130, 19.5.2017, p. 1)

¹⁹ The Ten Principles of the UN Global Compact, available at <https://www.unglobalcompact.org/what-is-gc/mission/principles>

Products²⁰, the ILO Tripartite Declaration of Principles concerning Multinational Enterprises and Social Policy²¹, and the OECD Due Diligence Guidance for Responsible Business Conduct (RBC)²², which reflect a common understanding amongst governments and stakeholders, and should be tailored to the specific context and circumstances of each economic operator. In relation to the extraction, processing and trading of natural mineral resources used for battery production, the OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas²³ (‘OECD Due Diligence Guidance’) represents a long-standing effort by governments and stakeholders to establish good practice in this area.

- (65) According to the OECD Due Diligence Guidance²⁴, due diligence is an on-going, proactive and reactive process through which companies can ensure that they respect human rights and do not contribute to conflict.²⁵ Risk-based due diligence refers to the steps companies should take to identify and address actual or potential risks in order to prevent or mitigate adverse impacts associated with their activities or sourcing decisions. A company can assess risk posed by its activities and relationships and adopt risks mitigating measures in line with relevant standards provided under national and international law, recommendations on responsible business conduct by international organisations, government-backed tools, private sector voluntary initiatives and a company's internal policies and systems. This approach also helps to scale the due diligence exercise to the size of the company's activities or supply chain relationships.
- (66) Mandatory supply chain due diligence policies should be adopted or modified and address, at least, the most prevalent social and environmental risk categories. This should cover the current and foreseeable impacts, on one hand, on social life, in particular human rights, human health and safety as well as occupational health and safety and labour rights, and, on the other hand, on the environment, in particular on water use, soil protection, air pollution and biodiversity, including community life.
- (67) As regards the social risk categories, due diligence policies should address the risks in the battery supply chain in relation to the protection of human rights, including human health, protection of children and gender equality, in line with international human rights law²⁶. The due diligence policies should include information on how the

²⁰ UNEP Guidelines for social life cycle assessment of products, available at <https://www.lifecycleinitiative.org/wp-content/uploads/2012/12/2009%20-%20Guidelines%20for%20sLCA%20-%20EN.pdf>

²¹ Tripartite Declaration of Principles concerning Multinational Enterprises and Social Policy, available at https://www.ilo.org/wcmsp5/groups/public/---ed_emp/---emp_ent/---multi/documents/publication/wcms_094386.pdf

²² OECD (2018), OECD Due Diligence Guidance for Responsible Business Conduct, available at <http://mneguidelines.oecd.org/OECD-Due-Diligence-Guidance-for-Responsible-Business-Conduct.pdf>

²³ OECD (2016), OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas: Third Edition, OECD Publishing, Paris, <https://doi.org/10.1787/9789264252479-en>.

²⁴ Page 15 of the OECD Due Diligence Guidance.

²⁵ OECD (2011), OECD Guidelines for Multinational Enterprises, OECD, Paris; OECD (2006), OECD Risk Awareness Tool for Multinational Enterprises in Weak Governance Zones, OECD, Paris; and, Guiding Principles on Business and Human Rights: Implementing the United Nations “Protect, Respect and Remedy” Framework (Report of the Special Representative of the Secretary-General on the Issue of Human Rights and Transnational Corporations and other Business Enterprises, John Ruggie, A/HRC/17/31, 21 March 2011).

²⁶ Including The Universal Declaration of Human Rights, The International Covenant on Economic, Social and Cultural Rights, The International Covenant on Civil and Political Rights, the Convention on

economic operator has contributed to the prevention of human rights abuses and on the instruments in place with the operator's business structure to fight corruption and bribery. The due diligence policies should also ensure correct implementation of the rules of fundamental conventions of the International Labour Organisation²⁷ as listed in Annex I of the ILO Tripartite Declaration.

- (68) As regards the environmental risk categories, the due diligence policies should address the risks in the battery supply chain in relation to protection of the natural environment and of the biological diversity in line with the Convention on Biological Diversity²⁸, which includes also the consideration of local communities, and the protection and the development of those communities.
- (69) The supply chain due diligence obligations on the identification and mitigation of social and environmental risks associated with raw materials going into battery manufacturing should contribute to the implementation of UNEP Resolution 19 on Mineral Resource Governance, which recognizes the important contribution of the mining sector towards the achievement of the 2030 Agenda and the Sustainable Development Goals.
- (70) Other EU legislative instruments that lay down requirements regarding supply chain due diligence should apply in so far as there are no specific provisions with the same objective, nature and effect in this Regulation which may be adapted in the light of future legislative amendments.
- (71) In order to adapt to developments in the battery value chain, including to changes in the scope and nature of the relevant environmental and social risks, as well as to technical and scientific progress in batteries and battery chemistries, the power to adopt acts in accordance with Article 290 of the Treaty on the Functioning of the European Union should be delegated to the Commission in respect of amending the list of raw materials and risk categories and the supply chain due diligence requirements.
- (72) Harmonised rules for waste management are necessary to ensure that producers and other economic operators are subject to the same rules across the Member States in the implementation of the extended producer responsibility for batteries. Maximising separate collection of waste batteries and ensuring that all batteries collected are recycled through processes that reach common minimum recycling efficiencies is necessary to attain a high level of material recovery. The evaluation of the Directive 2006/66/EC found that one of its shortcomings is lack of detail in its provisions, leading to uneven implementation and creating significant barriers to the functioning of recycling markets and suboptimal levels of recycling. Consequently, more detailed and harmonised rules should avoid distortion of the market for the collection,

the Elimination of All Forms of Discrimination against Women, the Convention on the Rights of the Child and the Convention on the Rights of Persons with Disabilities.

²⁷ The eight fundamental Conventions are 1. Freedom of Association and Protection of the Right to Organise Convention, 1948 (No. 87), 2. Right to Organise and Collective Bargaining Convention, 1949 (No. 98), 3. Forced Labour Convention, 1930 (No. 29) (and its 2014 Protocol), 4. Abolition of Forced Labour Convention, 1957 (No. 105), 5. Minimum Age Convention, 1973 (No. 138), 6. Worst Forms of Child Labour Convention, 1999 (No. 182), 7. Equal Remuneration Convention, 1951 (No. 100), 8. Discrimination (Employment and Occupation) Convention, 1958 (No. 111)

²⁸ Such as set out in the Convention on biological diversity, available at <https://www.cbd.int/convention/text/> and, in particular, Decision COP VIII/28 "Voluntary guidelines on Biodiversity-Inclusive impact assessment, available at <https://www.cbd.int/decision/cop/?id=11042>.

treatment and recycling of waste batteries, ensure even implementation of the requirements across the Union, further harmonisation of the quality of waste management services provided by economic operators and facilitate the markets of secondary raw materials.

- (73) This Regulation builds on the waste management rules and general principles laid down in Directive 2008/98/EC of the European Parliament and of the Council²⁹, which should be adapted to reflect the specific situation of batteries. For the collection of waste batteries to be organised in the most effective way, it is important that this is done in close connection to the place where the batteries are sold in a Member State, and close to the end user. Also, waste batteries may be collected both together with waste electrical and electronic equipment and with end-of-life vehicles, by way of national collection schemes set up on the basis of Directive 2012/19/EU of the European Parliament and of the Council³⁰, and of Directive 2000/53/EC. While the current Regulation sets up specific rules for batteries there is a need for a coherent and complementary approach, building upon and further harmonising existing waste management structures. Consequently, and in order to effectively realise extended producer responsibility related to the waste management, obligations should be laid down with respect to the Member State where batteries are made available on the market for the first time.
- (74) In order to monitor that producers meet their obligations to ensure the waste treatment of batteries made available on the market for the first time within the territory of a Member State, it is necessary that a register is established in and managed by the competent authority in each Member State. Producers should be obliged to register, in order to provide the necessary information to allow the competent authorities to monitor that the producers comply with their obligations. Registration requirements should be simplified across the Union. In order to ensure uniform conditions across the Union for the application for registration and the information to be provided, by means of a harmonised format, implementing powers should be conferred on the Commission.
- (75) In view of the polluter pays principle, it is appropriate to lay the obligations for the end-of-life management of batteries on producers which should include any manufacturer, importer or distributor who, irrespective of the selling technique used, including by means of distance contracts as defined in Article 2(7) of Directive 2011/83/EU of the European Parliament and of the Council³¹, supplies a battery for the first time for distribution or use, including when incorporated into appliances or vehicles, within the territory of a Member State on a professional basis.
- (76) Producers should have extended producer responsibility for the management of their batteries at the end-of-life stage. Accordingly, they should finance the costs of collecting, treating and recycling all collected batteries, for reporting on batteries and waste batteries and for the provision of information to end-users and waste operators

²⁹ Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste and repealing certain Directives (OJ L 312, 22.11.2008, p. 3).

³⁰ Directive 2012/19/EU of the European Parliament and of the Council of 4 July 2012 on waste electrical and electronic equipment (WEEE) (OJ L 197, 24.7.2012, p.38).

³¹ Directive 2011/83/EU of the European Parliament and of the Council of 25 October 2011 on consumer rights, amending Council Directive 93/13/EEC and Directive 1999/44/EC of the European Parliament and of the Council and repealing Council Directive 85/577/EEC and Directive 97/7/EC of the European Parliament and of the Council (OJ L 304, 22.11.2011, p. 64).

about batteries and appropriate re-use and management of waste batteries. The obligations related to extended producer responsibility should apply to all forms of supply, including distance selling. Producers should be able to exercise those obligations collectively, by means of producer responsibility organisations taking up the responsibility on their behalf. Producers or producer responsibility organisations should be subject to authorisation and they should document that they have the financial means to cover the costs entailed by the extended producer responsibility. Where necessary to avoid distortion of the internal market and to ensure uniform conditions for the modulation of the financial contributions paid to producer responsibility organisations by producers, implementing powers should be conferred on the Commission.

- (77) This Regulation should regulate the extended producer responsibility for batteries exhaustively and therefore the rules laid down on extended producer responsibility schemes in Directive 2008/98/EC should not apply to batteries.
- (78) In order to ensure high quality recycling in the batteries supply chains, boost the uptake of quality secondary raw materials and protect the environment, a high level of collection and recycling of waste batteries should be the rule. The collection of waste batteries is a fundamental crucial step for closing the loop for the valuable materials contained in batteries through their recycling and to keep the batteries value chain inside the Union, thus facilitating the access to the recovered materials that can further be used to manufacture new products.
- (79) Producers of all batteries should be responsible for financing and organising the separate collection of waste batteries. They should do so by establishing a collection network that covers the whole territory of the Member States, that is close to the end user and that does not only target areas and batteries where the collection is profitable. The collection network should include any distributor, authorised treatment facility for waste electric and electronic equipment and end-of-life vehicles, civic amenity sites and other actors based on their own accord, such as public authorities and schools. In order to verify and improve the effectiveness of the collection network and the information campaigns, regular compositional surveys at least at NUTS 2 level³² should be carried out on mixed municipal waste and waste electrical and electronic equipment collected to determine the amount of waste portable batteries therein.
- (80) Batteries may be collected together with waste electrical and electronic equipment, by way of national collection schemes set up on the basis of Directive 2012/19/EU and with end-of-life vehicles in accordance with Directive 2000/53/EC. In this case, as an obligatory minimum treatment requirement, batteries should be removed from the collected waste appliances and end-of-life vehicles. After their removal, batteries should be subject to the requirements of this Regulation, notably they should be counted towards the attainment of the collection target for the type of battery in question and be subject to treatment and recycling requirements laid down in this Regulation.
- (81) Considering the environmental impact and the loss of materials due to waste batteries not being separately collected, and consequently not treated in an environmentally

³² Regulation (EC) No 1059/2003 of the European Parliament and of the Council of 26 May 2003 on the establishment of a common classification of territorial units for statistics (NUTS)(OJ L 154 21.6.2003, p. 1).

sound way, the collection target for portable batteries already established under Directive 2006/66/EC should continue to apply and should be gradually increased. This Regulation entails that portable batteries also include batteries powering light means of transport. Since the current increase in sales of this type of batteries makes it difficult to calculate the amount of them that are placed in the market and collected at the end of their life, these portable batteries should be excluded from the current collection rate for portable batteries. This exclusion is to be reviewed along with the collection target for waste portable batteries, which may also address changes in the methodology to calculate the collection rate for portable batteries. The Commission shall prepare a report to underpin these reviews.

- (82) The collection rate of portable batteries should continue to be calculated on the basis of average annual sales in the preceding years so as to have targets proportionate to the level of battery consumption in a Member State. In order to best reflect changes in the composition of the portable batteries category, as well as in the lifetime and consumption patterns of batteries, the power to adopt acts in accordance with Article 290 of the Treaty on the Functioning of the European Union should be delegated to the Commission in respect of amending the methodology to calculate and verify the collection rate for portable batteries.
- (83) All automotive, industrial and electric vehicles batteries should be collected and for that purpose the producers of such batteries should be required to accept and take back free of charge, all waste automotive, industrial and electric vehicles batteries from end-users. Detailed reporting obligations should be established for all actors involved in the collection of waste automotive, industrial and electric vehicles batteries.
- (84) In view of the waste hierarchy as established by Article 4 of Directive 2008/98/EC which prioritises prevention, preparing for reuse and recycling and in line with Article 11(4) of Directive 2008/98/EC and Article 5(3)(f) of Directive 1999/31/EC³³, batteries collected should not be incinerated or disposed of in landfill.
- (85) Any permitted facility carrying out treatment and recycling operations of batteries should comply with minimum requirements to prevent negative environmental and human health impacts and to allow a high degree of recovery of materials contained in batteries. Directive 2010/75/EU of the European Parliament and of the Council³⁴ regulates a number of industrial activities involved in the treatment and recycling of waste batteries, for which it ensures specific permitting requirements and controls reflecting best available techniques. Where industrial activities relating to the treatment and recycling of batteries are not covered by Directive 2010/75/EC, operators should in any case be obliged to apply best available techniques, as defined in Article 3(10) of that Directive, and the specific requirements laid down in the present Regulation. The requirements regarding the treatment and recycling of batteries should, where relevant, be adapted by the Commission in the light of scientific and technical progress and emerging new technologies in waste management. Therefore, the power to adopt acts in accordance with Article 290 of the Treaty on the Functioning of the European Union should be delegated to the Commission in respect of amending those requirements.

³³ Council Directive 1999/31/EC of 26 April 1999 on the landfill of waste (OJ L 182, 16.7.1999, p.1).

³⁴ Directive 2010/75/EU of the European Parliament and of the Council of 24 November 2010 on industrial emissions (integrated pollution prevention and control) (OJ L 334, 17.12.2010, p. 17).

- (86) Targets for the efficiency of the recycling processes and material recovery targets should be established to ensure the production of recovered materials of quality for the battery industry, while at the same time ensuring clear and common rules for recyclers and avoiding distortions of competition or other impediments to the smooth functioning of the internal market for secondary raw materials from waste batteries. Recycling efficiencies, as a measure of the total amount of materials recovered, should be established for lead-acid batteries, nickel-cadmium batteries and lithium batteries and targets should also be set out for the levels of recovered cobalt, lead, lithium and nickel materials to attain a high level of material recovery throughout the Union. The rules on the calculation and reporting on recycling efficiencies laid down in Commission Regulation (EU) No 493/2012³⁵ should continue to apply. In order to ensure uniform conditions for the calculation and verification of recycling efficiencies and recovery of materials in the recycling processes for batteries, implementing powers should be conferred on the Commission to the establishment of such rules. The Commission should also review Commission Regulation (EU) No 493/2012 to properly reflect technological developments and changes occurred in industrial recovery processes, to extend their scope to cover existing and new targets, and to provide tools for the characterization of intermediate products. Treatment and recycling facilities should be encouraged to introduce certified environmental management schemes in accordance with Regulation (EC) No 1221/2009 of the European Parliament and of the Council³⁶.
- (87) It should only be possible to carry out treatment and recycling outside the Member State concerned or outside the Union, where the shipment of waste batteries is in compliance with Regulation (EC) No 1013/2006 of the European Parliament and of the Council³⁷ and Commission Regulation (EC) No 1418/2007³⁸ and where the treatment and recycling activities meet the requirements applicable for this type of wastes, according to their classification in Commission Decision 2000/532/EC, as amended.³⁹ That Decision, as amended, should be revised to reflect all battery chemistries. Where such treatment or recycling takes place outside the Union, in order to be counted towards the recycling efficiencies and targets, the operator for whose account it is carried out should be obliged to report on it to the competent authority of the respective Member State and to prove that the treatment is carried out in conditions equivalent to those under this Regulation. In order to lay down what are

³⁵ Commission Regulation (EU) No 493/2012 of 11 June 2012 laying down, pursuant to Directive 2006/66/EC of the European Parliament and of the Council, detailed rules regarding the calculation of recycling efficiencies of the recycling processes of waste batteries and accumulators (OJ L 151, 12.6.2012, p. 9).

³⁶ Regulation (EC) No 1221/2009 of the European Parliament and of the Council of 25 November 2009 on the voluntary participation by organisations in a Community eco-management and audit scheme (EMAS), repealing Regulation (EC) No 761/2001 and Commission Decisions 2001/681/EC and 2006/193/EC (OJ L 342, 22.12.2009, p. 1)

³⁷ Regulation (EC) No 1013/2006 of the European Parliament and of the Council of 14 June 2006 on shipments of waste (OJ L 190, 12.7.2006, p. 1).

³⁸ Commission Regulation (EC) No 1418/2007 of 29 November 2007 concerning the export for recovery of certain waste listed in Annex III or IIIA to Regulation (EC) No 1013/2006 of the European Parliament and of the Council to certain countries to which the OECD Decision on the control of transboundary movements of wastes does not apply (OJ L 316, 4.12.2007, p. 6).

³⁹ 2000/532/EC: Commission Decision of 3 May 2000 replacing Decision 94/3/EC establishing a list of wastes pursuant to Article 1(a) of Council Directive 75/442/EEC on waste and Council Decision 94/904/EC establishing a list of hazardous waste pursuant to Article 1(4) of Council Directive 91/689/EEC on hazardous waste, OJ L 226, 6.9.2000, p. 3.

the requirements for such treatment to be considered equivalent, the power to adopt acts in accordance with Article 290 of the Treaty on the Functioning of the European Union should be delegated to the Commission in respect of laying down detailed rules containing criteria for the assessment of equivalent conditions.

- (88) Industrial and electric vehicle batteries that are no longer fit for the initial purpose for which they were manufactured may be used for a different purpose as stationary energy storage batteries. A market for the second life of used industrial and electric vehicle batteries is emerging and in order to support the practical application of the waste hierarchy, specific rules should thus be defined to allow responsible repurposing of used batteries while taking into account the precautionary principle and ensuring safety of use for end users. Any such used battery should undergo an assessment of its state of health and available capacity to ascertain its suitability for use for any other than its original purpose. In order to ensure uniform conditions for the implementation of provisions related to the estimation of the state of health of batteries, implementing powers should be conferred on the Commission.
- (89) Producers and distributors should be actively involved in providing information to end users that batteries should be collected separately, that collection schemes are available and that end users have an important role in ensuring an environmentally optimal management of waste batteries. The disclosure of information to all end users as well as reporting on batteries should make use of modern information technologies. The information should be provided either by classical means, such as outdoors, posters and social media campaigns, or by more innovative means, such as electronic access to websites provided by QR codes affixed to the battery.
- (90) To enable the verification of compliance with and the effectiveness of the obligations regarding the collection and treatment of batteries, it is necessary that the respective operators report back to the competent authorities. Producers of batteries and other waste management operators collecting batteries should report for each calendar year, where applicable, the data on batteries sold and waste batteries collected. Regarding treatment and recycling, reporting obligations should be incumbent upon the waste management operators and recyclers respectively.
- (91) For each calendar year, Member States should provide the Commission with information on the amount of batteries supplied within their territory and the amount of waste batteries collected, by type and chemistry. With regard to portable batteries, data on batteries and waste batteries from light means of transport should be reported separately in view of the need to gather data to allow for adapting the collection target, considering the market share of such batteries and their specific purpose and characteristics. Such information should be provided electronically and be accompanied by a quality check report. In order to ensure uniform conditions for the reporting of that data and information to the Commission, as well as for the verification methods, implementing powers should be conferred on the Commission.
- (92) For each calendar year, Member States should report to the Commission the levels of recycling efficiencies and the levels of recovered materials achieved taking into account all the individual steps of the recycling process and the output fractions.
- (93) In order to enhance transparency along supply and value chains for all stakeholders, it is necessary to provide for an electronic system that maximises the exchange of information, enabling tracking and tracing of batteries, provides information about the carbon intensity of their manufacturing processes as well as the origin of the materials used, their composition, including raw materials and hazardous chemicals, repair,

repurposing and dismantling operations and possibilities, and the treatment, recycling and recovery processes to which the battery could be subject to at the end of their life. That electronic system should be established in phases with a prototype system being made available to the concerned economic operators and Member States authorities at least a year in advance of the finalisation of the implementing measures defining the final features and the data access policy of the system to enable their input and timely compliance. Such data access policy should take into account the relevant principles established in EU legislation, including the Commission's proposal for a Regulation of the European Parliament and of the Council on European data governance (Data Governance Act).⁴⁰ In order to ensure uniform conditions for the implementation of the electronic exchange system for battery information, implementing powers should be conferred on the Commission.

- (94) A Battery Passport should be established, allowing economic operators to gather and reuse in a more efficient way the information and data on individual batteries placed on the market and to make better informed choices in their planning activities. In order to ensure uniform conditions for the implementation of the battery passport, implementing powers should be conferred on the Commission.
- (95) Regulation (EU) 2019/1020 of the European Parliament and of the Council⁴¹ lays down rules on market surveillance and control of products entering the Union market. In order to ensure that products benefiting from the free movement of goods fulfil requirements providing a high level of protection of public interests such as human health, safety, protection of property and of the environment, that Regulation should apply to batteries covered by this Regulation. Therefore, Regulation (EU) 2019/1020 should be amended accordingly.
- (96) Batteries should be placed on the market only if they do not present a risk to human health, safety, property or the environment when properly stored and used for their intended purpose, or under conditions of use which can be reasonably foreseen, that is when such use could result from lawful and readily predictable human behaviour.
- (97) A procedure should exist under which interested parties are informed of measures intended to be taken with regard to batteries presenting a risk to human health, safety, property or the environment. It should also allow market surveillance authorities in the Member States, in cooperation with the relevant economic operators, to act at an early stage in respect of such batteries. In order to ensure uniform conditions for the implementation of this Regulation, implementing powers to adopt acts should be conferred on the Commission in order to determine whether national measures in respect of non-compliant batteries are justified or not.
- (98) The market surveillance authorities should have the right to require economic operators to take corrective actions on the basis of findings that either the battery is not compliant with the requirements of this Regulation or the economic operator infringes the rules on the placing or making available on the market of a battery, or on sustainability, safety and labelling or on supply chain due diligence.
- (99) Public procurement constitutes an important sector with regard to reducing the impacts on the environment of human activities and to stimulate market transformation

⁴⁰ <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52020PC0767&from=DA>

⁴¹ Regulation (EU) 2019/1020 of the European Parliament and of the Council of 20 June 2019 on market surveillance and compliance of products and amending Directive 2004/42/EC and Regulations (EC) No 765/2008 and (EU) No 305/2011 (OJ L 169, 25.6.2019, p. 1)

towards more sustainable products. Contracting authorities, as defined in Directive 2014/24/EU⁴² of the European Parliament and of the Council and Directive 2014/25/EU of the European Parliament and of the Council⁴³, and contracting entities as defined in Directive 2014/25/EU should take account of the environmental impacts when procuring batteries or products containing batteries, in order to promote and stimulate the market for clean and energy-efficient mobility and energy-storage and thus contribute to the environment, climate and energy policy objectives of the Union.

- (100) In order to establish the equivalence of due diligence schemes that have been developed by governments, industry associations and groupings of interested organisation, implementing powers should be conferred on the Commission. In order to ensure that the list of raw materials and the associated social and environmental risks are kept up-to-date, as well the consistency with the Conflict Minerals Regulation and the OECD Due Diligence in terms of obligations for economic operators, implementing powers should be conferred on the Commission.
- (101) In order to ensure uniform conditions for the implementation of the Commission's recognition of supply chain due diligence schemes, implementing powers should be conferred on the Commission.
- (102) When adopting delegated acts under this Regulation, it is of particular importance that the Commission carry out appropriate consultations during its preparatory work, including at expert level, and that those consultations be conducted in accordance with the principles laid down in the Interinstitutional Agreement of 13 April 2016 on Better Law-Making⁴⁴. In particular, to ensure equal participation in the preparation of delegated acts, the European Parliament and the Council receive all documents at the same time as Member States' experts, and their experts systematically have access to meetings of Commission expert groups dealing with the preparation of delegated acts.
- (103) The implementing powers that are conferred on the Commission by this Regulation and that do not relate to the determination whether measures taken by Member States in respect of non-compliant batteries are justified or not should be exercised in accordance with Regulation (EU) No 182/2011 of the European Parliament and of the Council⁴⁵.
- (104) The advisory procedure should be used for the adoption of an implementing act in situations where the Commission ascertains that a notified body does not meet or no longer meets the requirements for its notification, in order to request the notifying authority to take the necessary corrective action, including withdrawal of the notification if necessary.
- (105) The Commission should adopt immediately applicable implementing acts determining whether a national measure taken in respect of a compliant battery that presents a risk

⁴² Directive 2014/24/EU of the European Parliament and of the Council of 26 February 2014 on public procurement and repealing Directive 2004/18/EC (OJ L 94, 28.3.2014, p. 65)

⁴³ Directive 2014/25/EU of the European Parliament and of the Council of 26 February 2014 on procurement by entities operating in the water, energy, transport and postal services sectors and repealing Directive 2004/17/EC (OJ L 94, 28.3.2014, p. 243)

⁴⁴ OJ L 123, 12.5.2016, p.1

⁴⁵ Regulation (EU) No 182/2011 of the European Parliament and of the Council of 16 February 2011 laying down the rules and general principles concerning mechanisms for control by Member States of the Commission's exercise of implementing powers (OJ L 55, 28.2.2011, p. 13)

is justified or not where, in duly justified cases relating to the protection of human health, safety, property or the environment, imperative grounds of urgency so require.

- (106) Member States should lay down rules on penalties applicable to infringements of this Regulation and ensure that those rules are enforced. The penalties provided for should be effective, proportionate and dissuasive.
- (107) In view of the need to ensure a high level of environmental protection and the need to take into account new developments based on scientific facts, the Commission should submit to the European Parliament and to the Council a report on the implementation of this Regulation and its impact on the environment and the functioning of the internal market. The Commission should in its report include an evaluation of the sustainability, safety, labelling and information criteria provisions, the waste batteries management measures and the supply chain due diligence requirements. Where appropriate, the report should be accompanied by a proposal to amend relevant provisions of this Regulation.
- (108) It is necessary to provide for sufficient time for economic operators to comply with their obligations under this Regulation, and for Member States to set up the administrative infrastructure necessary for its application. The application of this Regulation should therefore also be deferred to a date where those preparations can reasonably be finalised.
- (109) In order to allow Member States to adapt the register of producers set up under Directive 2006/66/EC and to take the necessary administrative measures regarding the organisation of the authorisation procedures by the competent authorities, while keeping continuity for economic operators, Directive 2006/66/EC should be repealed as of 1 July 2023. Obligations under that Directive related to monitoring and reporting the collection rate of portable batteries and the recycling efficiencies of recycling processes shall remain in force until 31 December 2023, and the related obligations for the transmission of data to the Commission shall remain in force until 31 December 2025, in order to ensure continuity until new calculation rules and reporting formats are adopted by the Commission under this Regulation.
- (110) Since the objective of this Regulation, namely to guarantee the functioning of the internal market while ensuring that batteries placed on the market fulfil the requirements providing for a high level of protection of human health, safety, property and the environment, cannot be sufficiently achieved by the Member States but can rather, by reason of the need for harmonisation, be better achieved at Union level, the Union may adopt measures, in accordance with the principle of subsidiarity as set out in Article 5 of the Treaty on European Union. In accordance with the principle of proportionality, as set out in that Article, this Regulation does not go beyond what is necessary in order to achieve that objective,

HAVE ADOPTED THIS REGULATION:

Chapter I

General provisions

Article 1

Subject matter and scope

1. This Regulation establishes requirements on sustainability, safety, labelling and information to allow the placing on the market or putting into service of batteries, as well as requirements for the collection, treatment and recycling of waste batteries.
2. This Regulation shall apply to all batteries, namely portable batteries, automotive batteries, electric vehicle batteries and industrial batteries, regardless of their shape, volume, weight, design, material composition, use or purpose. It shall also apply to batteries incorporated in or added to other products.
3. This Regulation shall not apply to batteries in:
 - (a) equipment connected with the protection of Member States' essential security interests, arms, munitions and war material, with the exclusion of products that are not intended for specifically military purposes; and
 - (b) equipment designed to be sent into space.

Article 2

Definitions

For the purposes of this Regulation, the following definitions shall apply:

- (1) 'battery' means any source of electrical energy generated by direct conversion of chemical energy and consisting of one or more non-rechargeable or rechargeable battery cells or of groups of them;
- (2) 'battery cell' means the basic functional unit in a battery constituted by electrodes, electrolyte, container, terminals and, if applicable, separators and containing the active materials the reaction of which generates electrical energy;
- (3) 'active materials' means material which reacts chemically to produce electric energy when the battery cell discharges;
- (4) 'non-rechargeable battery' means a battery that is not designed to be electrically recharged;
- (5) 'rechargeable battery' means a battery that is designed to be electrically recharged;
- (6) 'battery with internal storage' means a battery with no attached external devices to store energy;
- (7) 'portable battery' means any battery that:
 - is sealed;
 - weighs below 5 kg;
 - is not designed for industrial purposes; and
 - is neither an electric vehicle battery nor an automotive battery;

- (8) 'portable batteries of general use' means portable batteries with the following common formats: 4,5 Volts (3R12), D, C, AA, AAA, AAAA, A23, 9 Volts (PP3);
- (9) 'light means of transport' means wheeled vehicles that have an electric motor of less than 750 watts, on which travellers are seated when the vehicle is moving and that can be powered by the electric motor alone or by a combination of motor and human power;
- (10) 'automotive battery' means any battery used only for automotive starter, lighting or ignition power;
- (11) 'industrial battery' means any battery designed for industrial uses and any other battery excluding portable batteries, electric vehicle batteries and automotive batteries;
- (12) 'electric vehicle battery' means any battery specifically designed to provide traction to hybrid and electric vehicles for road transport;
- (13) 'stationary battery energy storage system' means a rechargeable industrial battery with internal storage specifically designed to store and deliver electric energy into the grid, regardless of where and by whom this battery is being used;
- (14) 'placing on the market' means making available a battery for the first time on the Union market;
- (15) 'making available on the market' means any supply of a battery for distribution or use on the market in the course of a commercial activity, whether in return for payment or free of charge;
- (16) 'putting into service' means the first use, for its intended purpose, in the Union, of a battery;
- (17) 'battery model' is any manufactured battery that is produced in series;
- (18) 'carbon footprint' means the sum of greenhouse gas (GHG) emissions and GHG removals in a product system, expressed as carbon dioxide (CO₂) equivalents and based on a Product Environmental Footprint (PEF) study using the single impact category of climate change ;
- (19) 'economic operator' means the manufacturer, the authorised representative, the importer, the distributor or the fulfilment service provider who is subject to obligations in relation to manufacturing batteries, making them available or placing them on the market or putting them into service in accordance with the present Regulation;
- (20) 'independent operator' means a natural or legal person, other than an authorised dealer or repairer or remanufacturer, who is independent from the manufacturer and the producer and is directly or indirectly involved in the repair, maintenance or repurposing of batteries, and include waste management operators, repairers, manufacturers or distributors of repair equipment, tools or spare parts, as well as publishers of technical information, operators offering inspection and testing services, operators offering training for installers, manufacturers and repairers of equipment for alternative-fuel vehicles;
- (21) 'QR code' means a matrix barcode that links to information about a battery model;
- (22) 'battery management system' means an electronic device that controls or manages the electric and thermal functions of the battery, that manages and stores the data on

the parameters for determining the state of health and expected lifetime of batteries laid down in Annex VII and that communicates with the vehicle or appliance in which the battery is incorporated;

- (23) ‘appliance’ means any electrical or electronic equipment, as defined by Directive 2012/19/EU, which is fully or partly powered by a battery or is capable of being so;
- (24) ‘state of charge’ means the available capacity in a battery expressed as a percentage of rated capacity;
- (25) ‘state of health’ means a measure of the general condition of a rechargeable battery and its ability to deliver the specified performance compared with its initial condition;
- (26) ‘repurposing’ means any operation that results in parts or the complete battery being used for a different purpose or application than the one that the battery was originally designed for;
- (27) ‘manufacturer’ means any natural or legal person who manufactures a battery or has a battery designed or manufactured, and markets that battery under its own name or trademark;
- (28) ‘technical specification’ means a document that prescribes technical requirements to be fulfilled by a product, process or service;
- (29) ‘harmonised standard’ means a standard as defined in Article 2(1)(c) of Regulation (EU) No 1025/2012;
- (30) ‘CE marking’ means a marking by which the manufacturer indicates that the battery is in conformity with the applicable requirements set out in Union harmonisation legislation providing for its affixing;
- (31) ‘accreditation’ means accreditation as defined in Article 2(10) of Regulation (EC) No 765/2008;
- (32) ‘national accreditation body’ a national accreditation body as defined in Article 2(11) of Regulation (EC) No 765/2008;
- (33) ‘conformity assessment’ means the process demonstrating whether the sustainability, safety and labelling requirements of this Regulation relating to a battery have been fulfilled;
- (34) ‘conformity assessment body’ means a body that performs conformity assessment activities including calibration, testing, certification and inspection;
- (35) ‘notified body’ means a conformity assessment body notified in accordance with Article 22 of this Regulation;
- (36) ‘supply chain due diligence’ means the obligations of the economic operator which places a rechargeable industrial battery or an electric-vehicle battery on the market, in relation to its management system, risk management, third party verifications by notified bodies and disclosure of information with a view to identifying and addressing actual and potential risks linked to the sourcing, processing and trading of the raw materials required for battery manufacturing;
- (37) ‘producer’ means any manufacturer, importer or distributor who, irrespective of the selling technique used, including by means of distance contracts as defined in Article 2(7) of Directive 2011/83/EU, supplies a battery for the first time for distribution or

use, including when incorporated into appliances or vehicles, within the territory of a Member State on a professional basis;

- (38) ‘producer responsibility organisation’ means a legal entity that financially or operationally organises the fulfilment of extended producer responsibility obligations on behalf of several producers;
- (39) ‘waste battery’ means any battery which is waste within the meaning of Article 3(1) of Directive 2008/98/EC;
- (40) ‘reuse’ means the complete or partial direct re-use of the battery for the original purpose the battery was designed for;
- (41) ‘hazardous substance’ means any substance which fulfils the criteria for any of the following hazard classes or categories set out in Annex I of Regulation (EC) No 1272/2008 of the European Parliament and of the Council⁴⁶:
- (a) hazard classes 2.1 to 2.4, 2.6 and 2.7, 2.8 types A and B, 2.9, 2.10, 2.12, 2.13 categories 1 and 2, 2.14 categories 1 and 2, 2.15 types A to F;
 - (b) hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10;
 - (c) hazard class 4.1;
 - (d) hazard class 5.1;
- (42) ‘treatment’ means any activity carried out on waste batteries after they have been handed over to a facility for sorting or preparation for recycling;
- (43) ‘voluntary collection points’ means any non-profit, commercial or other economic undertaking or public body involved on their own initiative in the separate collection of waste portable batteries, by collecting the waste portable batteries it generates or which are generated by other end-users before they are picked up by waste management operators for subsequent treatment;
- (44) ‘waste management operator’ means any natural or legal person dealing on a professional basis with the separate collection, sorting, or treatment of waste batteries;
- (45) ‘permitted facility’ means any facility that is permitted in accordance with Directive 2008/98/EC to carry out the treatment or recycling of waste batteries;
- (46) ‘recycler’ means any natural or legal person established in the Union who carries out recycling processes in a permitted facility;
- (47) ‘lifetime’ of a battery means the period of time that starts when the battery is placed on the market, and ends when the battery becomes waste;
- (48) ‘level of recycling’ means, for a given Member State in a given calendar year, the percentage obtained by dividing the weight of waste batteries that undergo treatment and recycling in accordance with Article 56 of this Regulation in that calendar year, by the weight of waste batteries collected in accordance with Articles 48 and 49 of this Regulation;

⁴⁶ Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 (OJ L 353, 31.12.2008, p. 1)

- (49) ‘recycling process’ means any recycling operation of waste batteries, excluding sorting or preparation for recycling, that may be carried out in a single or several permitted facilities;
- (50) ‘recycling efficiency’ of a recycling process means the ratio obtained by dividing the mass of output fractions accounting for recycling by the mass of the waste batteries input fraction, expressed as a percentage;
- (51) ‘Union harmonisation legislation’ means any Union legislation harmonising the conditions for the marketing of products;
- (52) ‘national authority’ means an approval authority or any other authority involved in and responsible for market surveillance as set out in Chapter VI or border control in a Member State in respect of batteries;
- (53) ‘authorised representative’ means any natural or legal person established in the Union who has received a written mandate from a manufacturer to act on its behalf in relation to specified tasks with regard to the manufacturer’s obligations under the requirements of this Regulation;
- (54) ‘importer’ means any natural or legal person established within the Union who places a battery from a third country on the Union market;
- (55) ‘distributor’ means any natural or legal person in the supply chain, other than the manufacturer or the importer, who makes a battery available on the market;
- (56) ‘risk’ means the combination of the probability of occurrence of harm and the severity of that harm limited to human health or safety of persons, to property or to the environment.

The definitions of ‘waste’, ‘waste holder’, ‘waste management’, ‘collection’, ‘separate collection’, ‘prevention’, ‘preparing for re-use’, ‘recovery’ and ‘recycling’ laid down in Article 3 of Directive 2008/98/EC shall apply.

The definitions of ‘end-user’, ‘market surveillance’, ‘market surveillance authority’, ‘fulfilment service provider’, ‘corrective action’, ‘recall’ and ‘withdrawal’ laid down in Article 3 of Regulation (EU) 2019/1020 shall apply.

The definitions of ‘independent aggregator’ and ‘market participant’ laid down in Article 2 of Directive (EU) 2019/944 shall apply.

Article 3 *Free movement*

1. Member States shall not, for reasons relating to sustainability, safety, labelling and information requirements of batteries or management of waste batteries covered by this Regulation, prohibit, restrict or impede the making available on the market or the putting into service of batteries that comply with this Regulation.
2. At trade fairs, exhibitions, demonstrations or similar events, Member States shall not prevent the showing of batteries, which do not comply with this Regulation, provided that a visible sign clearly indicates that such batteries do not comply with this Regulation and that they are not for sale until they have been brought into conformity.

Article 4

Sustainability, safety, labelling and information requirements for batteries

1. Batteries shall only be placed on the market or put into service if they meet:
 - (a) the sustainability and safety requirements set out in Chapter II;
 - (b) the labelling and information requirements set out Chapter III.
2. For any aspects not covered by Chapters II and III, batteries shall not present a risk to human health, to safety, to property or to the environment.

Article 5

Competent authority

1. Member States shall designate one or more competent authorities responsible for carrying out obligations arising from Chapter VII and monitoring and verifying compliance of the producers and producer responsibility organisations with the requirements of that Chapter.
2. Member States shall lay down the details of the competent authority's or authorities' organisation and operation, including the administrative and procedural rules to ensure:
 - (a) the registration of producers in accordance with Article 46;
 - (b) the authorisation of producers and producer responsibility organisations in accordance with Article 47 and the authorisation and monitoring regarding the requirements under Article 48;
 - (c) the oversight of implementation of extended producer responsibility obligations in accordance with Article 47;
 - (d) the collection of data on batteries in accordance with Article 61;
 - (e) making information available in accordance with Article 62.
3. By [*three months after the date of entry into force of this Regulation*], Member States shall notify the Commission of the names and addresses of the competent authorities designated pursuant to paragraph 1. Member States shall inform the Commission without undue delay of any changes to the names or addresses of those competent authorities.

Chapter II

Sustainability and safety requirements

Article 6

Restrictions of hazardous substances

1. In addition to the restrictions set out in Annex XVII of Regulation (EC) No 1907/2006, batteries shall not contain hazardous substances for which Annex I contains a restriction unless they comply with the conditions of that restriction.
2. When there is an unacceptable risk to human health or the environment, arising from the use of a substance in the manufacture of batteries, or from a substance present in the batteries when they are placed on the market, or during their subsequent life cycle stages, including the waste phase, that needs to be addressed on a Union-wide basis, the Commission shall adopt a delegated act in accordance with the procedure

referred to in Article 73 to amend the restrictions in Annex I, pursuant to the procedure laid down in Article 71.

3. In adopting a delegated act referred to in paragraph 2, the Commission shall take into account the socio-economic impact of the restriction, including the availability of alternatives for the hazardous substance.
4. Restrictions adopted pursuant to paragraph 2 shall not apply to the use of a substance in scientific research and development (of batteries) as defined in Article 3(23) of Regulation (EC) No 1907/2006.
5. If a restriction adopted pursuant to paragraph 2 shall not apply to product and process oriented research and development, as defined in Article 3(22) of Regulation (EC) No 1907/2006, this exemption, as well as the maximum quantity of the substance exempted, shall be specified in Annex I.

Article 7

Carbon footprint of electric vehicle batteries and rechargeable industrial batteries

1. Electric vehicle batteries and rechargeable industrial batteries with internal storage and a capacity above 2 kWh shall be accompanied by technical documentation that includes, for each battery model and batch per manufacturing plant, a carbon footprint declaration drawn up in accordance with the delegated act referred to in the second sub-paragraph and containing, at least, the following information:
 - (a) administrative information about the producer;
 - (b) information about the battery for which the declaration applies;
 - (c) information about the geographic location of the battery manufacturing facility;
 - (d) the total carbon footprint of the battery, calculated as kg of carbon dioxide equivalent;
 - (e) the carbon footprint of the battery differentiated per life cycle stage as described in point 4 of Annex II;
 - (f) the independent third party verification statement;
 - (g) a web link to get access to a public version of the study supporting the carbon footprint declaration results.

The carbon footprint declaration requirement in the first subparagraph shall apply as of 1 July 2024 to electric vehicle batteries and to rechargeable industrial batteries.

The Commission shall, no later than 1 July 2023, adopt:

- (a) a delegated act in accordance with Article 73 to supplement this Regulation by establishing the methodology to calculate the total carbon footprint of the battery referred to in point (d), in accordance with the essential elements set out in Annex II;
- (b) an implementing act establishing the format for the carbon footprint declaration referred to in the first subparagraph. That implementing act shall be adopted in accordance with the examination procedure referred to in Article 74(3).

The Commission shall be empowered to adopt delegated acts in accordance with Article 73 to amend the information requirements set out in the first subparagraph.

2. Electric vehicle batteries and rechargeable industrial batteries with internal storage and a capacity above 2 kWh shall bear a conspicuous, clearly legible and indelible label indicating the carbon footprint performance class that the individual battery corresponds to.

In addition to the information set out in paragraph 1, the technical documentation shall demonstrate that the carbon footprint declared and the related classification into a carbon footprint performance class have been calculated in accordance with the methodology set out in the delegated act adopted by the Commission pursuant to the fourth subparagraph.

The carbon footprint performance class requirements in the first subparagraph shall apply as of 1 January 2026 for electric vehicle batteries and for rechargeable industrial batteries.

The Commission shall, no later than 31 December 2024, adopt

- (a) a delegated act in accordance with Article 73 to supplement this Regulation by establishing the carbon footprint performance classes referred to in the first subparagraph. In preparing that delegated act, the Commission shall take into account the relevant essential elements set out in Annex II;
 - (b) an implementing act establishing the formats for the labelling referred to in the first subparagraph and the format for the declaration on the carbon footprint performance class referred to in the second subparagraph. That implementing act shall be adopted in accordance with the examination procedure referred to in Article 74(3).
3. Electric vehicle batteries and rechargeable industrial batteries with internal storage and a capacity above 2 kWh shall, for each battery model and batch per manufacturing plant, be accompanied by technical documentation demonstrating that the declared life cycle carbon footprint value, is below the maximum threshold established in the delegated act adopted by the Commission pursuant to the third subparagraph.

The requirement for a maximum life cycle carbon footprint threshold in the first subparagraph shall apply as of 1 July 2027 for electric vehicle batteries and for rechargeable industrial batteries.

The Commission shall, no later than 1 July 2026, adopt a delegated act in accordance with Article 73 to supplement this Regulation by determining the maximum life cycle carbon footprint threshold referred to in the first subparagraph. In preparing that delegated act, the Commission shall take into account the relevant essential elements set out in Annex II.

The introduction of a maximum life cycle carbon footprint threshold shall trigger, if necessary, a reclassification of the carbon footprint performance classes of the batteries referred to in paragraph 2.

Article 8

Recycled content in industrial batteries, electric vehicle batteries and automotive batteries

1. From 1 January 2027, industrial batteries, electric vehicle batteries and automotive batteries with internal storage and a capacity above 2 kWh that contain cobalt, lead, lithium or nickel in active materials shall be accompanied by technical documentation containing information about the amount of cobalt, lead, lithium or

nickel recovered from waste present in active materials in each battery model and batch per manufacturing plant.

By 31 December 2025, the Commission shall adopt an implementing act laying down the methodology for the calculation and verification of the amount of cobalt, lead, lithium or nickel recovered from waste present in active materials in the batteries referred to in the first subparagraph and the format for the technical documentation. That implementing act shall be adopted in accordance with the examination procedure referred to in Article 74(3).

2. From 1 January 2030, industrial batteries, electric vehicle batteries and automotive batteries with internal storage and a capacity above 2 kWh that contain cobalt, lead, lithium or nickel in active materials shall be accompanied by technical documentation demonstrating that those batteries contain the following minimum share of cobalt, lead, lithium or nickel recovered from waste present in active materials in each battery model and batch per manufacturing plant:
 - (a) 12% cobalt;
 - (b) 85% lead;
 - (c) 4% lithium;
 - (d) 4% nickel.
3. From 1 January 2035, industrial batteries, electric vehicle batteries and automotive batteries with internal storage and a capacity above 2 kWh that contain cobalt, lead, lithium or nickel in active materials shall be accompanied by a technical documentation demonstrating that those batteries contain the following minimum share of cobalt, lead, lithium or nickel recovered from waste present in active materials in each battery model and batch per manufacturing plant:
 - (a) 20% cobalt;
 - (b) 85 % lead;
 - (c) 10% lithium;
 - (d) 12% nickel.
4. Where justified and appropriate due to the availability of cobalt, lead, lithium or nickel recovered from waste, or the lack thereof, the Commission shall be empowered to adopt, by 31 December 2027, a delegated act in accordance with Article 73, to amend the targets laid down in paragraphs 2 and 3.

Article 9

Performance and durability requirements for portable batteries of general use

1. From 1 January 2027, portable batteries of general use shall meet the values for the electrochemical performance and durability parameters set out in Annex III as laid down in the delegated act adopted by the Commission pursuant to paragraph 2.
2. By 31 December 2025, the Commission shall adopt a delegated act in accordance with Article 73 to supplement this Regulation by establishing minimum values for the electrochemical performance and durability parameters laid down in Annex III that portable batteries of general use shall attain.

The Commission is empowered to adopt delegated acts in accordance with Article 73 to amend the electrochemical performance and durability parameters laid down in Annex III in view of technical and scientific progress.

In preparing the delegated act referred to in the first subparagraph, the Commission shall consider the need to reduce the life cycle environmental impact of portable batteries of general use and take into consideration relevant international standards and labelling schemes. The Commission shall also ensure that the provisions laid down by that delegated act do not have a significant negative impact on the functionality of those batteries or the appliances into which those batteries are incorporated, the affordability and the cost for end-users and the industry's competitiveness. No excessive administrative burden shall be imposed on manufacturers of the batteries and the appliances concerned.

3. By 31 December 2030, the Commission shall assess the feasibility of measures to phase out the use of non-rechargeable portable batteries of general use in view of minimising their environmental impact based on the life cycle assessment methodology. To that end, the Commission shall submit a report to the European Parliament and to the Council and consider taking the appropriate measures, including the adoption of legislative proposals.

Article 10

Performance and durability requirements for rechargeable industrial batteries and electric vehicle batteries

1. From [12 months after entry into force of the Regulation], rechargeable industrial batteries and electric vehicle batteries with internal storage and a capacity above 2 kWh shall be accompanied by a technical documentation containing values for the electrochemical performance and durability parameters laid down in Part A of Annex IV.

The technical documentation referred to in the first subparagraph shall also contain an explanation of the technical specifications, standards and conditions used to measure, calculate or estimate the values for the electrochemical performance and durability parameters. That explanation shall include, at least, the elements laid down in Part B of Annex IV.

2. From 1 January 2026, rechargeable industrial batteries with internal storage and a capacity above 2 kWh shall meet the minimum values laid down in the delegated act adopted by the Commission pursuant to paragraph 3 for the electrochemical performance and durability parameters set out in Part A of Annex IV.
3. By 31 December 2024, the Commission shall adopt a delegated act in accordance with Article 73 to supplement this Regulation by establishing minimum values for the electrochemical performance and durability parameters laid down in Part A of Annex IV that rechargeable industrial batteries with internal storage and capacity above 2 kWh shall attain.

In preparing the delegated act referred to in the first subparagraph, the Commission shall consider the need to reduce the life cycle environmental impact of rechargeable industrial batteries with internal storage and a capacity above 2 kWh and ensure that the requirements laid down therein do not have a significant negative impact on the functionality of those batteries or the appliances into which those batteries are incorporated, its affordability and industry's competitiveness. No excessive

administrative burden shall be imposed on manufacturers of the batteries and the appliances concerned.

Article 11

Removability and replaceability of portable batteries

1. Portable batteries incorporated in appliances shall be readily removable and replaceable by the end-user or by independent operators during the lifetime of the appliance, if the batteries have a shorter lifetime than the appliance, or at the latest at the end of the lifetime of the appliance.

A battery is readily replaceable where, after its removal from an appliance, it can be substituted by a similar battery, without affecting the functioning or the performance of that appliance.

2. The obligations set out in paragraph 1 shall not apply where
 - (a) continuity of power supply is necessary and a permanent connection between the appliance and the portable battery is required for safety, performance, medical or data integrity reasons; or
 - (b) the functioning of the battery is only possible when the battery is integrated into the structure of the appliance.
3. The Commission shall adopt guidance to facilitate harmonised application of the derogations set out in paragraph 2.

Article 12

Safety of stationary battery energy storage systems

1. Stationary battery energy storage systems shall be accompanied by technical documentation demonstrating that they are safe during their normal operation and use, including evidence that they have been successfully tested for the safety parameters laid down in Annex V, for which state-of-the-art testing methodologies should be used.
2. The Commission is empowered to adopt delegated acts in accordance with Article 73 to amend the safety parameters laid down in Annex V in view of technical and scientific progress.

Chapter III

Labelling and information requirements

Article 13

Labelling of batteries

1. From 1 January 2027, batteries shall be marked with a label containing the information laid down in Part A of Annex VI.
2. From 1 January 2027, portable and automotive batteries shall be marked with a label containing information on their capacity and portable batteries shall be marked with a label containing information on their minimum average duration when used in specific applications.
3. From 1 July 2023, batteries shall be labelled with the symbol indicating ‘separate collection’ in accordance with the requirements laid down in Part B of Annex VI.

The symbol shall cover at least 3 % of the area of the largest side of the battery up to a maximum size of 5 × 5 cm.

In the case of cylindrical battery cells, the symbol shall cover at least 1,5 % of the surface area of the battery and shall have a maximum size of 5 × 5 cm.

Where the size of the battery is such that the symbol would be smaller than 0,5 × 0,5 cm, the battery does not need to be marked but a symbol measuring at least 1 × 1 cm shall be printed on the packaging.

4. From 1 July 2023, batteries containing more than 0,002 % cadmium or more than 0,004 % lead, shall be marked with the chemical symbol for the metal concerned: Cd or Pb.

The symbol indicating the heavy metal content shall be printed beneath the symbol shown in Part B of Annex VI and shall cover an area of at least one-quarter the size of that symbol.

5. Batteries shall be marked with a QR code in accordance with Part C of Annex VI which shall provide access to the following information:

- (a) from 1 January 2027, for all batteries the information referred to in paragraph 1;
- (b) from 1 January 2027, for portable and automotive batteries the information referred to in paragraph 2;
- (c) from 1 January 2023, for all batteries the symbol referred to in paragraph 3;
- (d) from 1 January 2023, for batteries containing more than 0,002 % cadmium or more than 0,004 % lead, the symbol referred to in paragraph 4;
- (e) from [12 months after the entry into force of this Regulation], for rechargeable industrial batteries and electric vehicle batteries the report referred to in Article 39(6);
- (f) from 1 July 2024, for electric vehicle batteries and for rechargeable industrial batteries with internal storage and a capacity above 2 kWh the carbon footprint declaration referred to in Article 7(1);
- (g) from 1 January 2026, for electric vehicle batteries and for rechargeable industrial batteries with internal storage and a capacity above 2 kWh the carbon footprint performance class referred to in Article 7(2);
- (h) from 1 January 2027, for rechargeable industrial batteries, automotive batteries and electric vehicle batteries with internal storage and a capacity above 2 kWh the amount of cobalt, lead, lithium or nickel recovered from waste and present in active materials in the battery, in accordance with Article 8;
- (i) from 1 January 2023, for all batteries the declaration referred to in Article 18;
- (j) from 1 July 2023, for all batteries the information referred to in points (a) to (f) of Article 60(1).

6. Labels and QR code referred to in paragraphs 1 to 5 shall be printed or engraved visibly, legibly and indelibly on the battery. Where this is not possible or not warranted on account of the nature and size of the battery, labels shall be affixed to the packaging and to the documents accompanying the battery.

7. The Commission shall, by 31 December 2025, adopt implementing acts to establish harmonised specifications for the labelling requirements referred to in paragraphs 1 and 2. Those implementing acts shall be adopted in accordance with the examination procedure referred to in Article 74(3).

Article 14

Information on the state of health and expected lifetime of batteries

1. Rechargeable industrial batteries and electric vehicle batteries with internal storage and a capacity above 2 kWh shall include a battery management system containing data on the parameters for determining the state of health and expected lifetime of batteries as laid down in Annex VII.
2. Access to the data in the battery management system referred to in paragraph 1 shall be provided on a non-discriminatory basis to the legal or natural person who has legally purchased the battery or any third party acting on their behalf at any time for the purpose of:
 - (a) evaluating the residual value of the battery and capability for further use;
 - (b) facilitating the reuse, repurposing or remanufacturing of the battery;
 - (c) making the battery available to independent aggregators or market participants through energy storage.
3. The provisions of this Article shall apply in addition to those laid down in Union law on type approval of vehicles.

Chapter IV

Conformity of batteries

Article 15

Presumption of conformity of batteries

1. For the purposes of compliance and verification of compliance with the requirements set out in Articles 9, 10, 12, 13 and 59(5)(a) of this Regulation, measurements and calculations shall be made using a reliable, accurate and reproducible method, which takes into account the generally recognised state-of-the-art methods, and whose results are deemed to be of low uncertainty, including methods set out in standards, the reference numbers of which have been published for that purpose in the Official Journal of the European Union.
2. Batteries which are tested following harmonised standards or parts thereof the references of which have been published in the Official Journal of the European Union shall be presumed to be in conformity with the requirements referred to in Articles 9, 10, 13 and 59(5)(a) to the extent that those requirements are covered by such harmonised standards.
3. Batteries which are in conformity with harmonised standards or parts thereof the references of which have been published in the Official Journal of the European Union shall be presumed to be in conformity with the requirements set out in Article 12 to the extent that those requirements are covered by such harmonised standards.

Article 16
Common specifications

1. The Commission shall be empowered to adopt implementing acts laying down common specifications for the requirements set out in Articles 9, 10, 12, 13, 59(5)(a) or tests referred to in Article 15(2), where:
 - (a) those requirements or tests are not covered by harmonised standards or parts thereof, the references of which have been published in the Official Journal of the European Union; or
 - (b) the Commission observes undue delays in the adoption of requested harmonised standards, or considers that relevant harmonised standards are not sufficient; or
 - (c) the Commission has decided in accordance with the procedure referred to in Article 11(5) of Regulation (EU) No 1025/2012 to maintain with restriction or to withdraw the references to the harmonised standards or parts thereof by which those requirements or tests are covered.

Those implementing acts shall be adopted in accordance with the examination procedure referred to in Article 74(3).

2. Batteries which are tested following common specifications or parts thereof shall be presumed to be in conformity with the requirements set out in Articles 9, 10, 13 and 59(5)(a) to the extent that those requirements are covered by those common specifications or parts thereof, and, if applicable, to the extent that the minimum values established for those requirements are attained.
3. Batteries which are in conformity with common specifications or parts thereof shall be presumed to be in conformity with the requirements set out in Article 12 to the extent that those requirements are covered by those common specifications or parts thereof.

Article 17
Conformity assessment procedures

1. Before a battery is placed on the market or put it into service, the manufacturer or its authorised representative shall ensure that an assessment of the product's conformity with the requirements of Chapters II and III of this Regulation is carried out.
2. Conformity assessment of batteries with the requirements set out in Articles 6, 9, 10, 11, 12, 13 and 14 shall be carried out in accordance with the procedure set out in Part A of Annex VIII.
3. Conformity assessment of batteries with requirements set out in Articles 7, 8 and 39 shall be carried out in accordance with the procedure set out in Part B of Annex VIII.
4. The Commission is empowered to adopt delegated acts in accordance with Article 73 to amend Annex VIII by introducing additional verification steps in the conformity assessment modules or by replacing those modules by other modules set out in Decision No 768/2008/EC, if necessary after adapting them to the specific requirements for batteries.
5. Records and correspondence relating to the conformity assessment of batteries shall be drawn up in an official language of the Member State where the notified body

carrying out the conformity assessment procedures referred to in paragraphs 1 and 2 is established, or in a language accepted by that body.

Article 18

EU declaration of conformity

1. The EU declaration of conformity shall state that the fulfilment of the requirements set out in Chapters II and III has been demonstrated.
2. The EU declaration of conformity shall have the model structure set out in Annex IX, shall contain the elements specified in the relevant modules set out in Annex VIII and shall be continuously updated. It shall be translated into the language or languages required by the Member State in which the battery is placed on the market or put into service.
3. Where a battery model is subject to more than one Union act requiring an EU declaration of conformity, a single EU declaration of conformity shall be drawn up in respect of all such Union acts. That declaration shall state the Union acts concerned and their publication references.

Article 19

General principles of the CE marking

The CE marking shall be subject to the general principles set out in Article 30 of Regulation (EC) No 765/2008.

Article 20

Rules and conditions for affixing the CE marking

1. The CE marking shall be affixed visibly, legibly and indelibly to the battery. Where that is not possible or not warranted due to the nature of the battery, it shall be affixed to the packaging and to the documents accompanying the battery.
2. The CE marking shall be affixed before the battery is placed on the market.
3. The CE marking shall be followed by the identification number of the notified body that has carried out the conformity assessment. That identification number shall be affixed by the notified body itself or, under its instructions, by the manufacturer or by the manufacturer's authorised representative.
4. The CE marking and the identification number referred to in paragraph 3 shall be followed, if applicable, by any labelling indicating a special risk, use or other danger linked to the use, storage, treatment or transport of the battery.
5. Member States shall build upon existing mechanisms to ensure correct application of the regime governing the CE marking and shall take appropriate action in the event of improper use of that marking.

Chapter V

Notification of conformity assessment bodies

Article 21 *Notification*

Member States shall notify the Commission and the other Member States of conformity assessment bodies authorised to carry out conformity assessment in accordance with this Regulation

Article 22 *Notifying authorities*

1. Member States shall designate a notifying authority that shall be responsible for setting up and carrying out the necessary procedures for the assessment and notification of conformity assessment bodies and the monitoring of notified bodies, including compliance with Article 25.
2. Member States may decide that the assessment and monitoring referred to in paragraph 1 shall be carried out by a national accreditation body within the meaning of and in accordance with Regulation (EC) No 765/2008.
3. Where the notifying authority delegates or otherwise entrusts the assessment, notification or monitoring referred to in paragraph 1 of this Article to a body, which is not a governmental entity, that body shall be a legal entity and shall comply *mutatis mutandis* with the requirements laid down in Article 23. In addition, it shall have arrangements to cover liabilities arising out of its activities.
4. The notifying authority shall take full responsibility for the tasks performed by the body referred to in paragraph 3.

Article 23 *Requirements relating to notifying authorities*

1. A notifying authority shall be established, organised and operated so as to safeguard the objectivity and impartiality of its activities and to avoid conflicts of interest with notified bodies and conformity assessment bodies applying for notification in accordance with Article 28.
2. A notifying authority shall be organised in such a way that each decision relating to notification of a conformity assessment body is taken by competent persons different from those who carried out the assessment of the conformity assessment bodies applying for notification in accordance with Article 28.
3. A notifying authority shall not offer or provide any activities that conformity assessment bodies perform or consultancy services on a commercial or competitive basis.
4. A notifying authority shall safeguard the confidentiality of the information it obtains. However, it shall exchange information on notified bodies with the Commission as well as with notifying authorities of other Member States and other relevant national authorities.

5. A notifying authority shall have a sufficient number of competent personnel at its disposal for the proper performance of its tasks.

Article 24

Information obligation on notifying authorities

Member States shall inform the Commission of their procedures for the assessment and notification of conformity assessment bodies and the monitoring of notified bodies, and of any changes thereto.

The Commission shall make that information publicly available.

Article 25

Requirements related to notified bodies

1. For the purposes of notification, a conformity assessment body shall meet the requirements laid down in paragraphs 2 to 11.
2. A conformity assessment body shall be established under the national law of a Member State and have legal personality.
3. A conformity assessment body shall be a third-party body independent from any and all business ties and from the battery model it assesses, in particular from battery manufacturers, the battery manufacturers' trade partners, shareholding investors on the battery manufacturers' plants and from other notified bodies and the notified bodies' business associations, parent companies or subsidiaries.
4. A conformity assessment body, its top level management and the personnel responsible for carrying out the conformity assessment tasks shall not be the designer, manufacturer, supplier, installer, purchaser, owner, user or maintainer of the batteries which they assess, nor the representative of any of those parties. This shall not preclude the use of batteries that are necessary for the operations of the conformity assessment body or the use of batteries for personal purposes.

A conformity assessment body, its top level management and the personnel responsible for carrying out the conformity assessment tasks shall not be directly involved in the design, manufacture, marketing, installation, use or maintenance of those batteries, or represent the parties engaged in those activities. They shall not engage in any activity that may conflict with their independence of judgement or integrity in relation to conformity assessment activities for which they are notified. This shall in particular apply to consultancy services.

A conformity assessment body shall ensure that the activities of its parent or sister companies, subsidiaries or subcontractors do not affect the confidentiality, objectivity or impartiality of its conformity assessment activities.

5. A conformity assessment body and its personnel shall carry out the conformity assessment activities with the highest degree of professional integrity and the requisite technical competence in the specific field and shall be free from all pressures and inducements, particularly financial, which might influence their judgement or the results of its conformity assessment activities, especially as regards persons or groups of persons with an interest in the results of those activities.
6. A conformity assessment body shall be capable of carrying out all the conformity assessment activities mentioned in Annex VIII and in relation to which it has been

notified, whether those tasks are carried out by the conformity assessment body itself or on its behalf and under its responsibility.

At all times, and for each conformity assessment procedure and each battery model in relation to which it has been notified, a conformity assessment body shall have at its disposal the necessary:

- (a) in-house personnel with technical knowledge and sufficient and appropriate experience to perform the conformity assessment activities;
- (b) descriptions of procedures in accordance with which conformity assessment is carried out, ensuring the transparency and the ability of reproduction of those procedures;
- (c) appropriate policies and procedures to distinguish between activities that it carries out as a notified body and other activities;
- (d) procedures for the performance of conformity assessment activities which take due account of the size of an undertaking, the sector in which it operates, its structure, the degree of complexity of the battery technology in question and the mass or serial nature of the production process.

A conformity assessment body shall at all times have access to all testing equipment or facilities needed for each conformity assessment procedure and each battery model in relation to which it has been notified.

7. The personnel responsible for carrying out conformity assessment tasks shall have the following:
 - (a) sound technical and vocational training covering all the conformity assessment activities in relation to which the conformity assessment body has been notified;
 - (b) satisfactory knowledge of the requirements of the assessments they carry out and adequate authority to carry out those assessments;
 - (c) appropriate knowledge and understanding of the requirements set out in Chapters II and III, of the applicable harmonised standards referred to in Article 15 and common specifications referred to in Article 16 and of the relevant provisions of Union harmonisation legislation and of national legislation;
 - (d) the ability to draw up certificates, records and reports demonstrating that conformity assessments have been carried out.

8. The impartiality of a conformity assessment body, its top level management and the personnel responsible for carrying out the conformity assessment activities shall be guaranteed.

The remuneration of the top level management and the personnel responsible for carrying out the conformity assessments activities shall not depend on the number of conformity assessments carried out or on the results of those assessments.

9. A conformity assessment body shall take out liability insurance unless liability is assumed by the state in accordance with national law in the Member state where its activities are carried out, or that Member State itself is directly responsible for the conformity assessment.

10. The personnel of a conformity assessment body shall observe professional secrecy with regard to all information obtained in carrying out the conformity assessment activities in accordance with Annex VIII, except in relation to the competent authorities of the Member State in which its activities are carried out. Proprietary rights shall be protected.
11. A conformity assessment body shall participate in, or ensure that its personnel responsible for carrying out the conformity assessment activities are informed of, the relevant standardisation activities and the activities of the notified body coordination group established pursuant to Article 37 and shall apply as general guidance the administrative decisions and documents produced as a result of the work of that group.

Article 26

Presumption of conformity of notified bodies

Where a conformity assessment body demonstrates its conformity with the criteria laid down in the relevant harmonised standards or parts thereof the references of which have been published in the Official Journal of the European Union it shall be presumed to comply with the requirements set out in Article 25 in so far as the applicable harmonised standards cover those requirements.

Article 27

Subsidiaries of and subcontracting by notified bodies

1. Where a notified body subcontracts specific tasks connected with conformity assessment or has recourse to a subsidiary, it shall ensure that the subcontractor or the subsidiary meets the requirements set out in Article 25 and shall inform the notifying authority accordingly.
2. A notified body shall take full responsibility for the tasks performed by subcontractors or subsidiaries wherever those are established
3. Activities may be subcontracted or carried out by a subsidiary only with the agreement of the client. The establishment and the supervision of internal procedures, general policies, codes of conduct or other internal rules, the assignment of personnel to specific tasks and the decision on certification may not be delegated to a subcontractor or a subsidiary.
4. A notified body shall keep at the disposal of the notifying authority the relevant documents concerning the assessment of the qualifications of the subcontractor or the subsidiary and the work carried out by them under Annex VIII.

Article 28

Application for notification

1. A conformity assessment body shall submit an application for notification to the notifying authority of the Member State in which it is established.
2. The application for notification shall be accompanied by a description of the conformity assessment activities, of the conformity assessment modules set out in Annex VIII and of the battery model for which the conformity assessment body claims to be competent, as well as by an accreditation certificate, issued by a national

accreditation body attesting that the conformity assessment body fulfils the requirements laid down in Article 25.

3. Where the conformity assessment body concerned cannot provide an accreditation certificate as referred to in paragraph 2, it shall provide the notifying authority with all the documentary evidence necessary for the verification, recognition and regular monitoring of its compliance with the requirements laid down in Article 25, including appropriate documentation demonstrating that the conformity assessment body is independent in the meaning of paragraph 3 of that Article.

Article 29

Notification procedure

1. A notifying authority may notify only conformity assessment bodies which have satisfied the requirements laid down in Article 25.
2. The notifying authority shall send a notification to the Commission and the other Member States of each conformity assessment body referred to in paragraph 1 using the electronic notification tool developed and managed by the Commission.
3. The notification shall include full details of the conformity assessment activities, the conformity assessment module or modules and the batteries concerned and the relevant attestation of competence.
4. Where a notification is not based on an accreditation certificate as referred to in Article 28(2), the notifying authority shall provide the Commission and the other Member States with documentary evidence which attests to the conformity assessment body's competence and the arrangements in place to ensure that that body will be monitored regularly and will continue to satisfy the requirements laid down in Article 25.
5. The conformity assessment body concerned may perform the activities of a notified body only where no objections are raised by the Commission or the other Member States within two weeks of the notification where it includes an accreditation certificate referred to in Article 28(2) or within two months of the notification where it includes documentary evidence referred to in Article 28(3).
6. The notifying authority shall inform the Commission and the other Member States of any subsequent relevant changes to the notification referred to in paragraph 2.

Article 30

Identification numbers and lists of notified bodies

1. The Commission shall assign an identification number to a notified body.
It shall assign a single such number even where the body is notified under several Union acts.
2. The Commission shall make publicly available the list of notified bodies, including the identification numbers that have been assigned to them and the conformity assessment activities for which they have been notified.

The Commission shall ensure that the list is kept up to date.

Article 31
Changes to notifications

1. Where a notifying authority has ascertained or has been informed that a notified body no longer meets the requirements laid down in Article 25 or that it is failing to fulfil its obligations the notifying authority shall restrict, suspend or withdraw the notification, as appropriate, depending on the seriousness of the failure to meet those requirements or fulfil those obligations. It shall immediately inform the Commission and the other Member States accordingly.
2. In the event of restriction, suspension or withdrawal of notification, or where the notified body has ceased its activity, the notifying authority shall take appropriate steps to ensure that the files of that body are either processed by another notified body or kept available for the responsible notifying and market surveillance authorities at their request.

Article 32
Challenge of the competence of notified bodies

1. The Commission shall investigate all cases where it doubts, or doubt is brought to its attention regarding, the competence of a notified body or the continued fulfilment by a notified body of the requirements and responsibilities to which it is subject.
2. The notifying authority shall provide the Commission, on request, with all information relating to the basis for the notification or the maintenance of the competence of the notified body concerned.
3. The Commission shall ensure that all sensitive information obtained in the course of its investigations is treated confidentially.
4. Where the Commission ascertains that a notified body does not meet or no longer meets the requirements for its notification, it shall adopt an implementing act requesting the notifying authority to take the necessary corrective action, including withdrawal of the notification if necessary. That implementing act shall be adopted in accordance with the advisory procedure referred to in Article 74(2).

Article 33
Operational obligations of notified bodies

1. A notified body shall carry out conformity assessments in accordance with the conformity assessment procedures set out in Annex VIII.
2. A notified body shall perform its activities in a proportionate manner, avoiding unnecessary burdens for economic operators, and taking due account of the size of an undertaking, the sector in which the undertaking operates, the structure of the undertaking, the degree of complexity of the battery to be assessed and the mass or serial nature of the production process.

In so doing, the notified body shall nevertheless respect the degree of rigour and the level of protection required for the compliance of the battery with this Regulation.
3. Where a notified body finds that the requirements set out in Chapters II and III , harmonised standards referred to in Article 15, common specifications referred to in Article 16 or other technical specifications have not been met by a manufacturer, it shall require that manufacturer to take appropriate corrective action in view of a

second and final certification decision, unless the deficiencies cannot be remedied, in which case the certificate cannot be issued.

4. Where, in the course of the monitoring of conformity following the issue of a certificate of conformity or the adoption of an approval decision, a notified body finds that a battery no longer complies, it shall require the manufacturer to take appropriate corrective action and shall suspend or withdraw the certificate of conformity or the approval decision, if necessary.
5. Where corrective action is not taken or do not have the required effect, the notified body shall restrict, suspend or withdraw any certificates of conformity or approval decisions, as appropriate.

Article 34

Appeal against decisions of notified bodies

Member States shall ensure that an appeal procedure against the decisions of notified bodies is available.

Article 35

Information obligation on notified bodies

1. A notified body shall inform the notifying authority of the following:
 - (a) any refusal, restriction, suspension or withdrawal of a certificate of conformity or approval decision;
 - (b) any circumstances affecting the scope of, or the conditions for, its notification;
 - (c) any request for information which it has received from market surveillance authorities regarding its conformity assessment activities;
 - (d) on request, any conformity assessment activities performed within the scope of its notification and any other activity performed, including cross-border activities and subcontracting.
2. A notified body shall provide other notified bodies carrying out similar conformity assessment activities covering the same batteries with relevant information on issues relating to negative and, on request, positive conformity assessment results.

Article 36

Exchange of experience

The Commission shall provide for the organisation of exchange of experience between the Member States' national authorities responsible for notification policy.

Article 37

Coordination of notified bodies

The Commission shall ensure that appropriate coordination and cooperation between notified bodies are put in place and properly operated in the form of a sectoral group or groups of notified bodies.

A notified body shall participate in the work of that group or those groups, directly or by means of designated representatives.

Chapter VI

Obligations of economic operators other than the obligations in Chapter VII

Article 38

Obligations of manufacturers

1. When placing a battery on the market or putting it into service, including for the manufacturers' own purposes, manufacturers shall ensure that the battery:
 - (a) has been designed and manufactured in accordance with the requirements set out in Articles 6 to 12 and Article 14; and
 - (b) is labelled in accordance with the requirements set out in Article 13.
2. Manufacturers shall draw up the technical documentation referred to in Annex VIII for the battery and carry out the relevant conformity assessment procedure, as applicable and referred to, in paragraphs 2 and 3 of Article 17 or have it carried out before placing a battery on the market or putting it into service.
3. Where compliance of a battery with the applicable requirements has been demonstrated by the relevant conformity assessment procedure referred to in paragraphs 2 and 3 of Article 17, manufacturers shall draw up an EU declaration of conformity in accordance with Article 18 and affix the CE marking in accordance with Articles 19 and 20.
4. Manufacturers shall ensure that an EU declaration of conformity is drawn up in accordance with Article 18 in a language which can be easily understood by consumers and other end-users for each battery that they place on the market or put into service.

However, where several batteries are delivered simultaneously to a single user, the batch or consignment concerned may be accompanied by a single copy of the EU declaration of conformity.
5. Manufacturers shall keep the technical documentation referred to in Annex VIII and the EU declaration of conformity at the disposal of the market surveillance authorities and national authorities for 10 years after the battery has been placed on the market or put into service.
6. Manufacturers shall ensure that procedures are in place for a battery that is part of a series production to remain in conformity with this Regulation. Changes in the production process or in battery design or characteristics and changes in the harmonised standards referred to in article 15, common specifications referred to in Article 16 or other technical specifications by reference to which the conformity of the battery is declared or by application of which its conformity is verified shall trigger a re-examination of the conformity assessment in accordance with the relevant conformity assessment procedure referred to in paragraphs 2 and 3 of Article 17.
7. Manufacturers shall ensure that the battery is labelled in accordance with the requirements in paragraphs 1 to 8 of Article 13.
8. Manufacturers shall indicate their name, registered trade name or registered trade mark and the postal address and web address at which they can be contacted on the

packaging of the battery. The postal address shall indicate a single point at which the manufacturer can be contacted. Such information shall be in a language easily understood by end-users and market surveillance authorities and shall be clear, understandable and legible.

9. Manufacturers shall ensure that each battery that they place on the market or put into service is accompanied by instructions and safety information in accordance with Articles 6 to 12 and Article 14.
10. Manufacturers shall provide access to the data on the parameters in the battery management system referred to in paragraph 1 of Article 14 and paragraphs 1 and 2 of Article 59, in accordance with the requirements laid down in those Articles.
11. Manufacturers who consider or have reason to believe that a battery which they have placed on the market or put into service is not in conformity with the requirements set out in Chapters II and III shall immediately take the corrective action necessary to bring that battery into conformity, to withdraw it or recall it, as appropriate. Furthermore, where the battery presents a risk, manufacturers shall immediately inform the national authority of the Member State in which they made the battery available on the market to that effect, giving details, in particular, of the non-compliance and of any corrective action taken.
12. Manufacturers shall, further to a reasoned request from a national authority, provide it with all the information and technical documentation necessary to demonstrate the conformity of the battery with the requirements set out in Chapters II and III, in a language which can be easily understood by that authority. That information and the technical documentation shall be provided in either paper or electronic form. Manufacturers shall cooperate with the national authority, at its request, on any action taken to eliminate the risks posed by a battery which they have placed on the market or put into service.

Article 39

Obligation for economic operators that place rechargeable industrial batteries and electric-vehicle batteries with internal storage and a capacity above 2 kWh on the market to establish supply chain due diligence policies

1. As of [12 months after the entry into force of the Regulation] the economic operator that places rechargeable industrial batteries and electric-vehicle batteries with internal storage and a capacity above 2 kWh on the market shall comply with the supply chain due diligence obligations set out in paragraphs 2 to 5 of this Article and shall keep documentation demonstrating its respective compliance with those obligations, including the results of the third-party verification carried out by notified bodies.
2. The economic operator referred to in paragraph 1 shall
 - (a) adopt, and clearly communicate to suppliers and the public, a company policy for the supply chain of raw materials indicated in Annex X, point 1;
 - (b) incorporate in its supply chain policy standards consistent with the standards set out in the model supply chain policy in Annex II to the OECD Due Diligence Guidance;
 - (c) structure its respective internal management systems to support supply chain due diligence by assigning responsibility to senior management to oversee the

supply chain due diligence process as well as maintain records of those systems for a minimum of five years;

- (d) establish and operate a system of controls and transparency over the supply chain, including a chain of custody or traceability system or the identification of upstream actors in the supply chain.

Such a system shall be supported by documentation that provides the following information:

- (i) description of the raw material, including its trade name and type;
- (ii) name and address of the supplier that supplied the raw material present in the batteries to the economic operator that places on the market the batteries containing the raw material in question;
- (iii) country of origin of the raw material and the market transactions from the raw material's extraction to the immediate supplier to the economic operator;
- (iv) quantities of the raw material present in the battery placed on the market, expressed in percentage or weight.

The requirements set out in the current point (d) may be implemented through participation in industry-led schemes.

- (e) incorporate its supply chain policy into contracts and agreements with suppliers, including their risk management measures;
- (f) establish a grievance mechanism as an early-warning risk-awareness system or provide such mechanism through collaborative arrangements with other economic operators or organisations, or by facilitating recourse to an external expert or body, such as an ombudsman.

3. The economic operator referred to in paragraph 1 shall

- (a) identify and assess the adverse impacts associated to the risk categories listed in Annex X, point 2, in its supply chain on the basis of the information provided pursuant to paragraph 2 against the standards of their supply chain policy;
- (b) implement a strategy to respond to the identified risks designed so as to prevent or mitigate adverse impacts by:
 - (i) reporting findings of the supply chain risk assessment to senior management designated for that purpose;
 - (ii) adopting risk management measures consistent with Annex II to the OECD Due Diligence Guidance, considering their ability to influence, and where necessary take steps to exert pressure on suppliers who can most effectively prevent or mitigate the identified risk;
 - (iii) implementing the risk management plan, monitoring and tracking performance of risk mitigation efforts, reporting back to senior management designated for this purpose and considering suspending or discontinuing engagement with a supplier after failed attempts at mitigation, based on relevant contractual arrangements in line with the second subparagraph to paragraph 2 above;

- (iv) undertaking additional fact and risk assessments for risks requiring mitigation, or after a change of circumstances.

If the economic operator referred to in paragraph 1 pursues risk mitigation efforts while continuing trade or temporarily suspending trade, it shall consult with suppliers and with the stakeholders concerned, including local and central government authorities, international or civil society organisations and affected third parties, and agree on a strategy for measurable risk mitigation in the risk management plan.

The economic operator referred to in paragraph 1 shall identify and assess the probability of adverse impacts in the risk categories listed in Annex X, point 2, in its supply chain based on available reports by third-party verification done by a notified body concerning the suppliers in that chain, and, by assessing, as appropriate, its due diligence practices. Those verification reports shall be in accordance with the first subparagraph in paragraph 4. In the absence of such third-party verification reports concerning suppliers, the economic operator referred to in paragraph 1 shall identify and assess the risks in its supply chain as part of its own risk management systems. In such cases, economic operators referred to in paragraph 1 shall carry out third party verifications of its own supply chains due diligence via a notified body in accordance with the first subparagraph in paragraph 4.

The economic operator referred to in paragraph 1 shall report the findings of the risk assessment referred to in the third subparagraph to its senior management designated for that purpose and a response strategy designed to prevent or mitigate adverse impacts shall be implemented.

- 4. The economic operator referred to in paragraph 1 shall have their supply chain due diligence policies verified by a notified body (“third-party verification”).

The third-party verification by a notified body shall:

- (a) include in its scope all activities, processes and systems used by economic operators to implement their supply chain due diligence requirements in accordance with paragraphs 2, 3 and 5;
- (b) have as its objective the determination of conformity of the supply chain due diligence practices of economic operators placing batteries on the market with paragraphs 2, 3 and 5;
- (c) make recommendations to the economic operators that place batteries on the market on how to improve their supply chain due diligence practices;
- (d) respect the audit principles of independence, competence and accountability, as set out in the OECD Due Diligence Guidance;

- 5. The economic operator referred to in paragraph 1 shall make available upon request to Member States’ market surveillance authorities the reports of any third-party verification carried out in accordance with paragraph 4 or evidence of compliance with a supply chain due diligence scheme recognised by the Commission in accordance with Article 72.

- 6. The economic operator referred to in paragraph 1 shall make available to its immediate downstream purchasers all information gained and maintained pursuant to its supply chain due diligence policies with due regard for business confidentiality and other competitive concerns.

The economic operator referred to in paragraph 1 shall on an annual basis, publicly report as widely as possible, including on the internet, on its supply chain due diligence policies. That report shall contain the steps taken by that economic operator to comply with the requirements set out in paragraphs 2 and 3, including findings of significant adverse impacts in the risk categories listed in Annex X, point 2, and how they have been addressed, as well as a summary report of the third-party verifications carried out in accordance with point 4, including the name of the notified body, with due regard for business confidentiality and other competitive concerns.

Where the economic operator referred to in paragraph 1 can reasonably conclude that the raw materials listed in Annex X, point 1, that are present in the battery are derived only from recycled sources, it shall publicly disclose its conclusions in reasonable detail, with due regard for business confidentiality and other competitive concerns.

7. The Commission shall develop guidance as regards the application of the due diligence requirements defined in paragraphs 2 and 3 of this Article, with regard to the social and environmental risks referred to in Annex X, point 2, and particularly in line with the international instruments referred to in Annex X, point 3.
8. The Commission is empowered to adopt delegated acts in accordance with Article 73 to:
 - (a) Amend the lists of raw materials and risk categories in Annex X in view of scientific and technological progress in battery manufacturing and chemistries and amendments to Regulation (EU) 2017/821;
 - (b) amend the obligations on the economic operator referred to in paragraph 1 set out in paragraphs 2 to 4 in view of amendments to Regulation (EU) 2017/821 and changes to the due diligence recommendations set out in Annex I to the OECD Due Diligence Guidance.

Article 40

Obligations of authorised representatives

1. Where the manufacturer of a battery is not established in a Member State, the battery may only be placed on the Union market if the manufacturer designates a sole authorised representative.
2. The designation shall constitute the authorised representative's mandate, it shall be valid only when accepted in writing by the authorised representative and shall be effective at least for all batteries of the same battery model.
3. The obligations laid down in Article 38(1) and the obligation to draw up technical documentation shall not form part of the authorised representative's mandate.
4. An authorised representative shall perform the tasks specified in the mandate received from the manufacturer. The authorised representative shall provide a copy of the mandate to the competent authority, upon request. The mandate shall allow the authorised representative to do at least the following:
 - (a) verify that the EU declaration of conformity and technical documentation have been drawn up and, where applicable, that an appropriate conformity assessment procedure has been carried out by the manufacturer

- (b) keep the EU declaration of conformity and the updated technical documentation at the disposal of market surveillance authorities for 10 years after the battery has been placed on the market;
- (c) further to a reasoned request from a national authority, provide that authority with all the information and documentation necessary to demonstrate the conformity of the battery;
- (d) cooperate with the national authorities, at their request, on any action taken to eliminate the risks posed by batteries covered by the authorised representative's mandate;
- (e) fulfil the manufacturer's obligations under Chapter V
- (f) terminate the mandate if the manufacturer acts contrary to its obligations under this Regulation.

Article 41
Obligations of importers

1. Importers shall only place on the market or put into service a battery which is compliant with the requirements of Chapters II and III
2. Before placing a battery on the market or putting it into service, importers shall verify that the relevant conformity assessment procedure referred to in Article 17 has been carried out by the manufacturer. They shall verify that the manufacturer has drawn up the technical documentation referred to in Annex VIII, that the battery bears the CE marking referred to in Article 19 and the QR code referred to in Article 13(5), is accompanied by the required documents and that the manufacturer has complied with the obligations set out in paragraphs 7, 8 and 9 of Article 38.

Where an importer considers or has reason to believe that a battery is not in conformity with the requirements set out in Chapters II and III, the importer shall not place it on the market or put it into service until it has been brought into conformity. Furthermore, where the battery presents a risk, the importer shall inform the manufacturer and the market surveillance authorities to that effect.

3. Importers shall indicate on the battery their name, registered trade name or registered trade mark, and the address at which they can be contacted or, where that is not possible, on its packaging or in a document accompanying the battery. The contact details shall be in a language easily understood by consumers, other end-users and the market surveillance authorities.
4. Importers shall ensure the manufacturer has fulfilled its obligations under paragraphs 7, 9 and 10 of Article 38.
5. Importers shall ensure that, while a battery is under their responsibility, storage or transport conditions do not jeopardise its compliance with the requirements set out in Chapters II and III.
6. When deemed appropriate with regard to the risks presented by a battery, importers shall, to protect the human health and safety of consumers, carry out sample testing of marketed batteries, investigate, and, if necessary, keep a register of complaints, of non-conforming batteries and battery recalls, and shall keep distributors informed of such monitoring.

7. Importers who consider or have reason to believe that a battery, which they have placed on the market or put into service, is not in conformity with the requirements set out in Chapters II and III, shall immediately take the corrective action necessary to bring that battery into conformity, to withdraw it or recall it, as appropriate. Furthermore, where the battery presents a risk, importers shall immediately inform the national authority of the Member State in which they made the battery available on the market to that effect, giving details, in particular, of the non-compliance and of any corrective action taken.
8. Importers shall keep the technical documentation referred to in Annex VIII and a copy of the EU declaration of conformity at the disposal of the national authorities and market surveillance authorities for 10 years after the battery has been placed on the market or put into service.
9. Importers shall, further to a reasoned request from a national authority provide it with all the information and technical documentation necessary to demonstrate the conformity of a battery with the requirements set out in Chapters II and III in a language that can be easily understood by that authority. That information and the technical documentation shall be provided either in paper or electronic form. Importers shall cooperate with the national authority, at its request, on any action taken to eliminate the risks posed by batteries, which they have placed on the market or put into service.

Article 42
Obligations of distributors

1. When making a battery available on the market, distributors shall act with due care in relation to the requirements of this Regulation.
2. Before making a battery available on the market, distributors shall verify that:
 - (a) the manufacturer, the manufacturer's authorised representative, importer or other distributors are registered on the territory of a Member State in accordance with Article 46;
 - (b) the battery bears the CE marking,
 - (c) battery is accompanied by the required documents in a language which can be easily understood by the consumers and other end-user in the Member State in which the battery is to be made available on the market and by instructions and safety information and
 - (d) the manufacturer and the importer have complied with the requirements set out in paragraphs 7, 9 and 10 of Article 38 and Article 41(3) and (4) respectively.
3. Where a distributor considers or has reason to believe that a battery is not in conformity with the requirements set out in Chapters II and III, the distributor shall not make the battery available on the market until it has been brought into conformity. Furthermore, where the battery presents a risk, the distributor shall inform the manufacturer or the importer to that effect as well as the relevant market surveillance authorities.
4. Distributors shall ensure that, while a battery is under their responsibility, storage or transport conditions do not jeopardise its compliance with the requirements set out in Chapters II and III.

5. Distributors who consider or have reason to believe that a battery, which they have made available on the market, is not in conformity with the requirements set out in Chapters II and III shall make sure that the corrective action necessary to bring that battery into conformity, to withdraw it or recall it, as appropriate, are taken. Furthermore, where the battery presents a risk, distributors shall immediately inform the national authority of the Member States in which they made the battery available on the market to that effect, giving details, in particular, of the non-compliance and of any corrective action taken.
6. Distributors shall, further to a reasoned request from a national authority provide it with all the information and the technical documentation necessary to demonstrate the conformity of a battery with the requirements set out in Chapters II and III in a language that can be easily understood by that authority. That information and the technical documentation shall be provided in paper or electronic form. Distributors shall cooperate with the national authority, at its request, on any action taken to eliminate the risks posed by batteries that they have made available on the market.

Article 43

Obligations of fulfilment service providers

Fulfilment service providers shall ensure that, for batteries that they handle, the conditions during warehousing, packaging, addressing or dispatching, do not jeopardise the batteries' compliance with the requirements set out in Chapters II and III.

Article 44

Case in which obligations of manufacturers apply to importers and distributors

An importer or distributor shall be considered a manufacturer for the purposes of this Regulation and that importer or distributor shall be subject to the obligations of the manufacturer under Article 40, where

- (a) a battery is placed on the market or put into service under that importer's or distributor's own name or trademark;
- (b) a battery already placed on the market or put into service is modified by that importer or distributor in such a way that compliance with the requirements of this Regulation may be affected;
- (c) the purpose of a battery already placed on the market or put into service is modified by that importer or distributor.

Article 45

Identification of economic operators

Upon a request of a market surveillance authority or a national authority, for a period of 10 years after the placing on the market of a battery, economic operators shall provide information on the following:

- (a) the identity of any economic operator that has supplied them with a battery;
- (b) the identity of any economic operator to which they have supplied a battery, as well as the quantity and exact models.

Chapter VII

End-of-life management of batteries

Article 46 *Register of producers*

1. Member States shall establish a register of producers which shall serve to monitor compliance of producers with the requirements of this Chapter. The register shall be managed by the competent authority.
2. Producers shall be obliged to register. They shall to that end submit an application to the competent authority of the Member State where they make a battery available on the market for the first time. Where a producer has appointed a producer responsibility organisation in accordance with Article 47(2), the obligations under this article shall be met by that organisation *mutatis mutandis* unless otherwise specified.

In its application for registration, the producer shall provide the following information to the competent authority:

- (a) name and address of the producer including postal code and place, street and number, country, telephone and fax numbers, if any, internet address and e-mail address;
- (b) national identification code of the producer, including its trade register number or equivalent official registration number including European or national tax number;
- (c) in the case of an authorisation in accordance with Article 47(2), the producer responsibility organisation shall, in addition to the information required under points (a) and (b), provide
 - (i) the name and contact details, including postal code and place, street and number, country, telephone and fax numbers, internet address and e-mail address of the producers represented;
 - (ii) the represented producer's mandate;
 - (iii) where the authorised representative represents more than one producer, separate indications of the name and the contact details of each one of the represented producers.
- (d) the type of batteries that the producer intends to make available on the market for the first time within the territory of a Member State, namely portable batteries, industrial batteries, electric vehicle batteries, or automotive batteries;
- (e) the brand under which the producer intends to supply the batteries in the Member State;
- (f) information on how the producer meets its responsibilities set out in Article 47 and the requirements under Article 48 and Article 49 respectively:
 - (i) for portable batteries, the requirements of this point (f) shall be met by providing:
 - a declaration demonstrating the measures put in place by the producer to attain the producer responsibility obligations set out in

Article 47, the measures put in place to meet the separate collection obligations set out in Article 48(1) with regard to the amount of batteries the producer supplies and the system to ensure that the data reported to the competent authorities is reliable;

- where applicable, the name and contact details, including postal code and place, street and number, country, telephone and fax numbers, internet address and e-mail address and the national identification code of the producer responsibility organisation entrusted by the producer to fulfil its extended producer responsibility obligations in accordance with Article 47(2), including the trade register number or an equivalent official registration number of the producer responsibility organisation including the European or national tax number of the producer responsibility organisation, and the represented producer's mandate;
- (ii) for automotive, industrial and electric vehicle batteries, the requirements of this point (f) shall be met by providing:
- a declaration providing information on the measures put in place by the producer to attain the producer responsibility obligations set out in Article 47, the measures put in place to meet the collection obligations set out in Article 49(1) with regard to the amount of batteries the producer supplies and the system to ensure that the data reported to the competent authorities is reliable;
 - where applicable, the national identification code of the producer responsibility organisation entrusted by the producer to fulfil its extended producer responsibility obligations in accordance with paragraphs 2 and 4 of Article 47, including the trade register number or an equivalent official registration number of the producer responsibility organisation including the European or national tax number of the producer responsibility organisation, and the represented producer's mandate;
 - where the producer responsibility organisation represents more than one producer, it shall indicate separately how each one of the represented producers meets the responsibilities set out in Article 47.
- (g) a declaration by the producer or the producer responsibility organisation appointed in accordance with Article 47(2) stating that the information provided is true.

3. The competent authority:

- (a) shall receive applications for the registration of producers referred to in paragraph 2 via an electronic data-processing system the details of which shall be made available on the competent authorities' website;
- (b) shall grant registrations and provide a registration number within a maximum period of six weeks from the moment that all the information laid down in paragraph 2 is provided;

- (c) may lay down modalities with respect to the requirements and process of registration without adding substantive requirements to the ones laid down in paragraph 2;
 - (d) may charge cost-based and proportionate fees to producers for the processing of applications referred to in paragraph 2.
4. The producer, or, where applicable, the producer responsibility organisation appointed in accordance with Article 47(2) on behalf of the producers it represents shall without undue delay notify the competent authority of any changes to the information contained in the registration and of any permanent cessation as regards the making available on the market within the territory of the Member State of the batteries referred to in the registration in accordance with paragraph 1(d).

Article 47
Extended Producer Responsibility

1. Producers of batteries shall have extended producer responsibility for batteries that they make available on the market for the first time within the territory of a Member State, to ensure the attainment of the waste management obligations set out in this Chapter. This responsibility shall include the obligation to:
- (a) organise the separate collection of waste batteries in accordance with Article 48 and Article 49 and the subsequent transport, preparation for repurposing and remanufacturing, treatment and recycling of waste batteries, including the necessary safety measures, in accordance with Article 56;
 - (b) report on obligations relating to batteries made available on the market for the first time within the territory of a Member State in accordance with Article 61;
 - (c) promote the separate collection of batteries, including by covering the costs of carrying out surveys to identify batteries discarded inappropriately by end-users in accordance with Article 48(1);
 - (d) provide information including end-of-life information about batteries in accordance with Article 60;
 - (e) finance the activities referred to in points (a) to (d).
2. Producers may entrust a producer responsibility organisation authorised in accordance with paragraph 6 to carry out the extended producer responsibility obligations on their behalf.
3. Producers and, where appointed in accordance with paragraph 2, producer responsibility organisations acting on their behalf shall:
- (a) have the necessary organisational and financial means to fulfil the extended producer responsibility obligations referred to in paragraph 1;
 - (b) put in place an adequate self-control mechanism, supported by regular independent audits, to regularly appraise:
 - (i) their financial management, including compliance with the requirements laid down in paragraph 1(e) and point (a) of this paragraph;
 - (ii) the quality of data collected and reported in accordance with paragraph 1(b) of this Article and with the requirements of Regulation (EC) No 1013/2006.

4. In the case of a collective exercise of extended producer responsibility, producer responsibility organisations shall ensure that the financial contributions paid to them by producers:
 - (a) are modulated as a minimum by battery type and battery chemistry and, as appropriate, taking into account the rechargeability and the level of recycled content in the manufacture of batteries;
 - (b) are adjusted to take account of any revenues by the producer responsibility organisations from reuse and from sales of secondary raw materials from the batteries and waste batteries;
 - (c) ensure equal treatment of producers regardless of their origin or size, without placing a disproportionate regulatory burden on producers, including small and medium sized enterprises, of small quantities of batteries.
5. Where, in accordance with Articles 48(2), 49(3), 53(1), 56(1), and paragraphs 1, 2 and 3 of Article 61, activities to carry out obligations referred to in points (a) to (d) of paragraph 1 are carried out by a third party other than a producer or a producer responsibility organisation, the costs to be covered by producers shall not exceed the costs that are necessary to provide those activities in a cost-efficient way. Such costs shall be established in a transparent way between the producers and the third parties concerned and adjusted to take account of any revenues from reuse and from sales of secondary raw materials from the batteries and waste batteries.
6. Producer responsibility organisations shall apply for an authorisation from the competent authority. The authorisation shall be granted only where it is demonstrated that the measures put in place by the producer responsibility organisation are sufficient to meet the obligations set out in this Article with regard to the amount of batteries made available on the market for the first time within the territory of a Member State by the producers on whose behalf it acts. The competent authority shall in regular intervals, verify whether the conditions for the authorisation laid down in paragraphs 1, 3, 4 and 5 continue to be met. The competent authorities shall fix the details of the authorisation procedure and the modalities for verifying compliance, including the information to be provided by producers to that end.

Producer responsibility organisations shall notify the competent authority without undue delay of any changes to the information contained in the application for an authorisation, of any changes that concern the terms of the authorisation and of the permanent cessation of operations.

Where, in the territory of a Member State, multiple producer responsibility organisations are authorised to fulfil extended producer responsibility obligations on behalf of producers, they shall carry out their extended producer responsibility obligations in a coordinated manner so as to ensure a coverage across the whole territory of the Member State of the activities under paragraph 1(a). Member States shall entrust the competent authority or appoint an independent third party to oversee that producer responsibility organisations fulfil their obligation to coordinate in accordance with the previous sentence.
7. In order to demonstrate compliance with paragraph 3(a), producers or, where appointed in accordance with paragraph 2, producer responsibility organisations acting on their behalf, shall provide a guarantee which may take the form of a recycling insurance or a blocked bank account, or participation by the producer in a producer responsibility organisation.

8. Producer responsibility organisations shall ensure the confidentiality of the data in its possession as regards proprietary information or information directly attributable to individual producers or their authorised representatives.
9. Producer responsibility organisations shall publish the following information on their websites by the end of each year, subject to commercial and industrial confidentiality:
 - (a) ownership of the producer responsibility organisation;
 - (b) list of producers that have entrusted the producer responsibility organisation to carry out their extended producer responsibility obligations on their behalf;
 - (c) the rate of separate collection of waste batteries, the level of recycling and recycling efficiencies achieved based on the amount of batteries made available on the market for the first time in the Member State by their member producers;
 - (d) the financial contributions paid by their member producers per battery or per weight of batteries, indicating also fee modulation categories applied in accordance with paragraph 4(a).
10. The competent authorities shall verify compliance of producers, including those that supply batteries by means of distance contracts and, where appointed in accordance with paragraph 2, producer responsibility organisations acting on their behalf, with the obligations set out in this Article.
11. Member States shall establish a mechanism to ensure a regular dialogue between relevant stakeholders involved in the fulfilment of extended producer responsibility obligations for batteries, including producers and distributors, private or public waste operators, local authorities, civil society organisations and, where applicable, social economy actors, re-use and repair networks and preparing for re-use operators.
12. Where necessary to avoid distortion of the internal market, the Commission is empowered to adopt an implementing act laying down criteria for the application of paragraph 4(a). That implementing act cannot concern the a precise determination of the level of the contributions. That implementing acts shall be adopted in accordance with the examination procedure referred to in Article 74(3).
13. Articles 8 and 8a of Directive 2008/98/EC shall not apply to batteries.

Article 48

Collection of waste portable batteries

1. Producers or, where appointed in accordance with Article 47(2), producer responsibility organisations acting on their behalf, shall ensure the collection of all waste portable batteries, regardless of their nature, brand or origin in the territory of a Member State where they make batteries available on the market for the first time. For that purpose they shall:
 - (a) establish waste portable battery collection points;
 - (b) offer the collection of waste portable batteries, free of charge, to the entities referred to in paragraph 2(a) and provide for the collection of waste portable batteries from all entities that have made use of that offer (“connected collection points”);

- (c) provide for the necessary practical arrangements for collection and transport, including the provision free of charge of suitable collection and transport containers meeting the requirements of Directive 2008/98/EC to the connected collection points;
 - (d) ensure the collection free of charge of the waste portable batteries collected by the connected collection points, with a frequency that is proportionate to the area covered and the volume and hazardous nature of the waste portable batteries usually collected through those collection points;
 - (e) ensure that the waste portable batteries collected from the connected collection points are subsequently subject to treatment and recycling in a permitted facility by a waste management operator in accordance with Article 56.
2. Producers or, where appointed in accordance with Article 47(2), producer responsibility organisations acting on their behalf, shall ensure that the network of connected collection points :
- (a) consists of collection points provided by them in cooperation with:
 - (i) distributors in accordance with Article 50;
 - (ii) waste electrical and electronic equipment and end-of-life vehicle treatment and recycling facilities in accordance with Article 52;
 - (iii) public authorities or third parties carrying out waste management on their behalf in accordance with Article 53;
 - (iv) voluntary collection points in accordance with Article 54;.
 - (b) covers the whole territory of the Member State taking into account population size, expected volume of waste portable batteries, accessibility and vicinity to end-users, not being limited to areas where the collection and subsequent management of waste portable batteries is profitable.
3. End users, when discarding waste portable batteries at collection points referred to in paragraph 2, shall not be charged or be obliged to buy a new battery.
4. Producers or, where appointed in accordance with Article 47(2), producer responsibility organisations acting on their behalf, shall attain, and maintain durably, at least the following collection targets of waste portable batteries, calculated as percentages of the portable batteries, excluding batteries from light means of transport, made available on the market for the first time in a Member State by the respective producer or collectively by the producers covered by a producer responsibility organisation:
- (a) 45 % by 31 December 2023 ;
 - (b) 65 % by 31 December 2025;
 - (c) 70 % by 31 December 2030.
- Producers or, where appointed in accordance with Article 47(2), producer responsibility organisations acting on their behalf, shall calculate the collection rate referred to in this paragraph in accordance with Annex XI.
5. Collection points set up in accordance with paragraphs 1 and paragraph 2(a) shall not be subject to the registration or permit requirements of Directive 2008/98/EC.

6. Producers or, where appointed in accordance with Article 47(2), producer responsibility organisations shall request an authorisation from the competent authority that shall verify compliance of the arrangements put in place to ensure compliance with the requirements of this Article. In case the authorisation is requested by a producer responsibility organisation, the request for authorisation shall clearly identify the active member producers that it is representing.
7. The producer responsibility organisation shall ensure the confidentiality of the data in its possession as regards proprietary information or information directly attributable to individual producers. The competent authority may in its authorisation, establish conditions to be met to that end.
8. The authorisation under paragraph 6 may be granted only where it is demonstrated, by providing documentary evidence, that the requirements of paragraphs 1, 2 and 3 of this Article are met and that all the arrangements are in place to allow attaining and maintaining durably at least the collection target referred to in paragraph 4. Where the authorisation is requested by a producer responsibility organization, it shall be obtained as part of the authorisation referred to in Article 47(6).
9. The competent authority shall establish the details of the procedure to grant the authorisation under paragraph 6 to ensure compliance with the requirements set out in paragraphs 1 to 4 and Article 56. This shall include the requirement of an independent experts' report for an ex-ante verification of the arrangements for collection under this article being made in a way to ensure compliance with the requirements under this Article. It shall also include timeframes for verification of the respective steps and the decision to be taken by the competent authority, which shall not exceed six weeks from the submission of a complete application dossier.
10. The competent authority shall review regularly, and at least every three years, whether the conditions for the authorisation under paragraph 6 still are met. The authorisation may be revoked when the collection target set out in paragraph 4 is not met or the producer or producer responsibility organisation is in material breach of its obligations according to paragraphs 1 to 3.
11. The producer or, where appointed in accordance with Article 47(2), the producer responsibility organisation acting on its behalf, shall immediately notify the competent authority of any changes to the conditions covered by the application for authorisation referred to in paragraph 7, of any changes that concern the terms of the authorisation under paragraph 8, and of the permanent cessation of operations.
12. Every five years the Member States shall carry out a compositional survey at least at NUTS 2 level of collected mixed municipal waste and waste electric and electronic equipment streams to determine the share of waste portable batteries therein. The first survey shall be carried out by 31 December 2023. On the basis of the information obtained, the competent authorities may require, when granting or reviewing an authorisation under paragraphs 6 and 10 that the producers of portable batteries or producer responsibility organisations take corrective action to increase their network of connected collection points and carry out information campaigns in accordance with Article 60(1) in proportion to the share of waste portable batteries in mixed municipal waste and waste electric and electronic equipment streams detected in the survey.

Article 49

Collection of waste automotive batteries, industrial batteries and electric vehicle batteries

1. Producers of automotive batteries, industrial batteries and electric vehicle batteries or, where appointed in accordance with Article 47(2), producer responsibility organisations, shall take back, free of charge and without an obligation on the end user to buy a new battery, nor to have bought the battery from them, all waste automotive batteries, industrial batteries and electric vehicle batteries of the respective type that they have made available on the market for the first time in the territory of that Member State. For that purpose they shall accept to take back waste automotive batteries, industrial batteries and electric vehicle batteries from end-users, or from collection points provided in cooperation with:
 - (a) distributors of automotive, industrial and electric vehicle batteries in accordance with Article 50(1);
 - (b) waste electrical and electronic equipment and end-of-life vehicle treatment and recycling facilities referred to in Article 52 for the waste automotive, industrial and electric vehicle batteries arising from their operations;
 - (c) public authorities or third parties carrying out waste management on their behalf in accordance with Article 53.

Where waste industrial batteries require prior dismantling at the premises of private, non-commercial users, the obligation of the producer to take back those batteries shall include covering the costs of dismantling and collecting waste batteries at the premises of those users.

2. The take back arrangements put in place in accordance with paragraph 1 shall cover the whole territory of a Member State taking into account population size and density, expected volume of waste automotive, industrial and electric vehicle batteries, accessibility and vicinity to end-users, not being limited to areas where the collection and subsequent management of waste automotive, industrial and electric vehicle batteries is most profitable.
3. Producers of automotive batteries, industrial batteries and electric vehicle batteries or, where appointed in accordance with Article 47(2), producer responsibility organisations, shall:
 - (a) provide the collection points referred to in paragraph 1 with suitable collection infrastructure for the separate collection of waste automotive batteries, industrial batteries and electric vehicle batteries meeting the applicable safety requirements and cover the necessary costs incurred by those collection points in relation to the take back activities. The containers to collect and temporarily store such batteries at the collection point shall be adequate to provide for the volume and hazardous nature of waste automotive batteries, industrial batteries and electric vehicle batteries that are likely to be collected through those collection points;
 - (b) collect waste automotive batteries, industrial batteries and electric vehicle batteries from the collection points referred to in paragraph 1 with a frequency that is proportionate to the storage capacity of the separate collection infrastructure and the volume and hazardous nature of waste batteries that are usually collected through those collection points;

- (c) provide for the delivery of waste automotive batteries, industrial batteries and electric vehicle batteries collected from end-users and from the collection points referred to in paragraph 1 to facilities for treatment and recycling in accordance with Article 56.
4. The entities referred to in points (a), (b) and (c) of paragraph 3 may hand over collected waste automotive batteries, industrial batteries and electric vehicle batteries to authorised waste management operators for treatment and recycling in accordance with Article 56. In such cases, the obligation of producers pursuant to paragraph 3(c) shall be deemed to be met.

Article 50
Obligations of distributors

1. Distributors shall take back waste batteries from the end-user at no charge and without an obligation to buy a new battery, regardless of their chemical composition or origin. Take back for portable batteries shall be provided at or in the immediate vicinity of their retail outlet. Take back for waste automotive batteries, industrial batteries and electric vehicle batteries shall be provided at or in the vicinity of their retail outlet. This obligation is limited to the types of waste batteries which the distributor has, or had, as new batteries in its offer and, for portable batteries, to the quantity that non professional end-users normally discard.
2. The take back obligation laid down in paragraph 1 does not apply to waste products containing batteries. It shall apply in addition to the separate collection obligation for waste appliances and end-of-life vehicles laid down in Directives 2000/53/EC and 2012/19/EU.
3. Distributors shall hand over waste batteries that they have taken back to the producers or producer responsibility organisations who are responsible for the collection of those batteries in accordance with Articles 48 and 49 respectively, or to an waste management operator with a view to their treatment and recycling in accordance with Article 56.
4. The obligations under this article shall apply *mutatis mutandis* to operators supplying batteries by means of distance contracts to end users. Those operators shall provide for a sufficient number of collection points covering the whole territory of a Member State and taking into account population size and density, expected volume of waste automotive, industrial and electric vehicle batteries, accessibility and vicinity to end users allowing end users to return batteries.

Article 51
Obligations of end users

1. End users shall discard waste batteries separately from other waste streams, including from mixed municipal waste.
2. End users shall discard waste batteries in designated separate collection points set up by or in accordance with the specific arrangements concluded with the producer or a producer responsibility organisation, in accordance with Articles 48 and 49.
3. Waste portable batteries incorporated in appliances that are readily removable by the end user without the use of professional tools shall be removed and discarded by end users in accordance with paragraph 1.

4. Waste batteries incorporated in vehicles or appliances and that are not readily removable by the end-user, shall be discarded by the end user in accordance with the Directives 2000/53/EC and 2012/19/EU, where applicable.

Article 52

Obligations of treatment facilities

Operators of waste treatment facilities subject to Directives 2000/53/EC and 2012/19/EU shall hand over waste batteries resulting from the treatment of end-of-life vehicles and waste electrical and electronic equipment to the producers of the relevant batteries or, where appointed in accordance with Article 47(2) of this Regulation, producer responsibility organisations acting on their behalf or to waste management operators with a view to their treatment and recycling in accordance with the requirements of Article 56 of this Regulation. The operators of waste treatment facilities shall keep records of those transactions.

Article 53

Participation of public waste management authorities

1. Waste batteries originating from private, non-commercial users may be discarded in separate collection points set up by public waste management authorities.
2. Public waste management authorities shall hand over collected waste batteries to the producers or, where appointed in accordance with Article 47(2), to producer responsibility organisations acting on their behalf, or to waste management operators with a view to treatment and recycling of those waste batteries in accordance with the requirements of Article 56 or carry out their treatment and recycling themselves in accordance with the requirements of Article 56.

Article 54

Participation of voluntary collection points

Voluntary waste portable battery collection points shall hand over waste portable batteries to the producers of portable batteries or third parties acting on their behalf, including producer responsibility organisations, or to waste management operators with a view to their treatment and recycling in accordance with the requirements of Article 56.

Article 55

Collection rates for waste portable batteries

1. Member States shall achieve the following minimum collection targets for waste portable batteries, excluding waste batteries from light means of transport:
 - (a) 45 % by 31 December 2023;
 - (b) 65 % by 31 December 2025;
 - (c) 70 % by 31 December 2030.
2. Member States shall calculate the collection rates set out in paragraph 1 in accordance with the methodology set out in Annex XI.
3. The Commission shall, by 31 December 2030, review the target laid down in paragraph 1(c) and, as part of that review consider the setting of a collection target for batteries powering light means of transport, in the light of the evolution of the market share, as a separate target or as part of a review of the target laid down in

paragraph 1(c) and in Article 48(4). This review may also consider introducing a calculation methodology for the calculation of the separate collection rate with a view to reflecting the quantity of waste batteries available for collection. To that end, the Commission shall submit a report to the European Parliament and the Council on the outcome of the review accompanied, if appropriate, by a legislative proposal.

4. The Commission is empowered to adopt delegated acts in accordance with Article 73 to amend the methodology to calculate the collection rate for portable batteries laid down in Annex XI.

Article 56
Treatment and recycling

1. Collected waste batteries shall not be landfilled or incinerated.
2. Without prejudice to Directive 2010/75/EU, permitted facilities shall ensure that all treatment and recycling processes for waste batteries comply, as a minimum, with Part A of Annex XII and with best available techniques as defined in Article 3(10) of Directive 2010/75/EU.
3. In addition to Article 51(3), where batteries are collected while still incorporated in a waste appliance, they shall be removed from the collected waste appliance in accordance with the requirements laid down in Directive 2012/19/EU.
4. The Commission is empowered to adopt delegated acts in accordance with Article 73 to amend the treatment and recycling requirements for waste batteries laid down in Part A of Annex XII in light of technical and scientific progress and emerging new technologies in waste management.

Article 57
Recycling efficiencies and material recovery targets

1. All waste batteries collected shall enter a recycling process.
2. Recyclers shall ensure that each recycling process shall achieve the minimum recycling efficiencies and the levels of recovered materials laid down, respectively, in Parts B and C of Annex XII.
3. The recycling efficiencies and the recovery of materials laid down in Parts B and C of Annex XII shall be calculated in accordance with the rules laid down in an implementing act adopted pursuant to paragraph 4.
4. The Commission shall, by 31 December 2023, adopt an implementing act to establish detailed rules regarding the calculation and verification of recycling efficiencies and recovery of materials. Those implementing acts shall be adopted in accordance with the examination procedure referred to in Article 74(3).
5. The Commission shall be empowered to adopt delegated acts, in accordance with Article 73, to amend the minimum levels of recovered materials for waste batteries laid down in Annex XII, Parts B and C, in light of technical and scientific progress and emerging new technologies in waste management.

Article 58
Shipments of waste batteries

1. Treatment and recycling may be undertaken outside the Member State concerned or outside the Union, provided that the shipment of waste batteries is in compliance with Regulation (EC) No 1013/2006 and Regulation (EC) No 1418/2007.
2. Waste batteries exported out of the Union in accordance with paragraph 1 shall only count towards the fulfilment of obligations, efficiencies and targets set out in Article 56 and Article 57 if the recycler or other waste holder exporting the waste batteries for treatment and recycling can prove that the treatment took place in conditions that are equivalent to the requirements of this Regulation.
3. The Commission is empowered to adopt a delegated act, in accordance with Article 73, laying down detailed rules supplementing those in paragraph 2 of this Article, by laying down the criteria for the assessment of equivalent conditions.

Article 59
Requirements related to the repurposing and remanufacturing of industrial batteries and electric-vehicle batteries

1. Independent operators shall be given access to the battery management system of rechargeable industrial batteries and electric vehicle batteries with internal storage with a capacity above 2 kWh, on equal terms and conditions, for the purpose of assessing and determining the state of health and remaining lifetime of batteries, according to the parameters laid down in Annex VII.
2. Independent operators carrying out repurposing or remanufacturing operations shall be given adequate access on equal terms and conditions, to the information relevant for the handling and testing of rechargeable industrial batteries and electric vehicle batteries, or of appliances and vehicles in which such batteries are incorporated as well as of components of such batteries, appliances or vehicles, including safety aspects.
3. Operators carrying out repurposing or remanufacturing operations of batteries shall ensure that the examination, performance testing, packing and shipment of batteries and their components is carried out following adequate quality control and safety instructions.
4. Operators carrying out repurposing or remanufacturing operations of batteries shall ensure that the repurposed or remanufactured battery complies with this Regulation, relevant product, environmental and human health protection requirements in other legislation and technical requirements for its specific purpose of use when placed on the market.

A battery that has been repurposed or remanufactured shall not be subject to the obligations laid down in Article 7(1), (2) and (3), Article 8(1), (2) and (3), Article 10(1) and (2) and Article 39(1) where the economic operator placing a repurposed or remanufactured battery on the market can demonstrate that the battery, before its repurposing or remanufacturing, was placed on the market before the dates on which those obligations become applicable in accordance with those Articles.

5. In order to document that a waste battery, subject to a repurposing or remanufacturing operation, is no longer waste, the battery holder shall demonstrate the following upon request by a competent authority:

- (a) evidence of state of health evaluation or testing carried out in a Member State in the form of a copy of the record confirming the capability of the battery to deliver the performance relevant for its use following a repurposing or remanufacturing operation;
 - (b) further use of the battery that is subject to repurposing or remanufacturing, is documented by means of an invoice or a contract for the sale or transfer of ownership of the battery;
 - (c) evidence of appropriate protection against damage during transportation, loading and unloading, including through sufficient packaging and appropriate stacking of the load.
6. Information referred to in paragraph 4 and point (a) of paragraph 5 shall be made available to end users and third parties acting on their behalf, on equal terms and conditions, as part of the technical documentation accompanying the repurposed or remanufactured battery when placed on the market or put into service.
7. The provision of information in accordance with paragraphs 1, 2, 5 and 6 shall be without prejudice to preserving the confidentiality of commercially sensitive information in conformity with the relevant Union and national law.
8. The Commission is empowered to adopt implementing acts establishing detailed technical requirements that batteries have to fulfil to cease to be waste and requirements for the data and the methodology for estimating the state of health of batteries. Those implementing acts shall be adopted in accordance with the examination procedure referred to in Article 74(3).

Article 60

End-of-life information

1. Producers or, where appointed in accordance with Article 47(2), producer responsibility organisations acting on their behalf shall make available to end users and distributors the following information regarding the prevention and management of waste batteries with respect to the types of batteries that the producers supply within the territory of a Member State:
- (a) the contribution of end users to waste prevention, including by information on good practices concerning the use of batteries aiming at extending their use phase and the possibilities of preparation for reuse;
 - (b) the role of end users in contributing to the separate collection of waste batteries in accordance with their obligations under Article 51 so as to allow their treatment and recycling;
 - (c) the separate collection, preparation for re-use and recycling systems available for waste batteries;
 - (d) the necessary safety instructions to handle waste batteries, including in relation to the risks associated with, and the handling of, batteries containing lithium;
 - (e) the meaning of the labels and symbols printed on batteries or on their packaging;
 - (f) the impact of substances contained in batteries on the environment and on human health, including impact due to inappropriate discarding of waste batteries such as littering or discarding as unsorted municipal waste.

This information shall be made available

- (a) in regular time intervals for each model from the moment the battery model concerned is being made available on the market for the first time in a Member State as a minimum at the point of sale in a visible manner and through online marketplaces;
 - (b) in a language, which can be easily understood by consumers and other end-users, as determined by the Member State concerned.
2. Producers shall make available to distributors and operators referred to in Articles 50, 52 and 53 and other waste management operators carrying out repair, remanufacturing, preparing for re-use, treatment and recycling activities information regarding the safety and protective measures, including on occupational safety, applicable to the storage and collection of waste batteries.
3. From the moment that a battery model is supplied within the territory of a Member State producers shall make available electronically, upon request, to waste management operators carrying out repair, remanufacturing, preparing for re-use, treatment and recycling activities, as far as it is needed by those operators to carry out those activities, the following battery model specific information regarding the proper and environmentally sound treatment of waste batteries:
 - (a) the processes to ensure the dismantling of vehicles and appliances in a way that allows the removal of incorporated batteries;
 - (b) the safety and protective measures, including on occupational safety, applicable to the storage, transport, treatment and recycling processes for waste batteries.

That information shall identify the components and materials, and the location of all hazardous substances in a battery, as far as it is needed by operators carrying out repair, remanufacturing, preparing for re-use, treatment and recycling activities in order to enable them to comply with the requirements of this Regulation.

That information shall be made available in a language, which can be easily understood by the operators mentioned in the first subparagraph, as determined by the Member State concerned.

4. Distributors that supply batteries to end-users shall provide in their retail premises, in a visible manner, and through their online marketplaces the information listed in paragraph 1 and 2, and information on how the end users may return waste batteries free of charge to the respective collection points established at retail outlets or on behalf of a marketplace. That obligation shall be limited to the types of batteries which the distributor or retailer has, or had, as new batteries in its offer.
5. The costs covered by the producer under Article 47(1)(e) shall be shown separately to the end-user at the point of sale of a new battery. The costs mentioned shall not exceed the best estimate of the actual costs incurred.
6. Where information is provided publicly to end users under this Article, the confidentiality of commercially sensitive information in conformity with the relevant Union and national law shall be preserved.

Article 61
Reporting to the competent authorities

1. Producers of portable batteries or, where appointed in accordance with Article 47(2), producer responsibility organisations acting on their behalf shall report to the competent authority for each calendar year the following information according to the battery chemistry, specifying the amounts of batteries powering light means of transport:
 - (a) the amount of portable batteries made available on the market for the first time in the territory of a Member State, excluding any portable batteries that have left the territory of that Member State in that year before being sold to end users;
 - (b) the amount of waste portable batteries collected in accordance with Article 48, calculated on the basis of the methodology set out in Annex XI;
 - (c) the collection target reached by the producer or producer responsibility organisation acting on behalf of their members;
 - (d) the amount of collected waste portable batteries delivered for treatment and recycling to permitted facilities.

Where waste management operators other than producers or, where appointed in accordance with Article 47(2), producer responsibility organisations acting on their behalf, collect waste portable batteries from distributors or other collection points for waste portable batteries, they shall report to the competent authority for each calendar year the amount of waste portable batteries collected according to their chemistry and specifying the amounts of batteries powering light means of transport.

The operators referred to in the first and second subparagraph shall report this data within 4 months of the end of the reporting year for which the data are collected. The first reporting period shall concern the first full calendar year after the adoption of the implementing act that establishes the format for reporting to the Commission, in accordance with Article 62(6).

The competent authorities shall establish the format and procedures in accordance to which data shall be reported to them.

2. Producers of automotive batteries, industrial batteries and electric vehicle batteries or where appointed in accordance with Article 47(2) producer responsibility organisations acting on their behalf, shall report to the competent authority for each calendar year the following information, according to chemistries and types of batteries:
 - (a) the amount of automotive batteries, industrial batteries and electric vehicle batteries made available on the market for the first time in a Member State, excluding batteries that have left the territory of that Member State in that year before being sold to end users;
 - (b) the amount of waste automotive batteries, industrial batteries and electric vehicle batteries collected and delivered for treatment and recycling to permitted facilities.
3. Where waste management operators collect waste batteries from distributors or other waste automotive, industrial and electric vehicle batteries collection points or end-

users, they shall report to the competent authority for each calendar year the following information according to their chemistries and types of batteries:

- (a) the amount of waste automotive, industrial and electric vehicle batteries collected;
- (b) the amount of waste automotive, industrial and electric vehicle batteries delivered for treatment and recycling to permitted facilities.

The operators mentioned in this paragraph shall report that data within four months of the end of the reporting year for which the data are collected. The first reporting period shall concern the first full calendar year after the adoption of the implementing act that establishes the format for reporting to the Commission in accordance with Article 62(5).

The competent authorities shall establish electronic systems through which data shall be reported to them and specify the formats to be used. Electronic systems for the reporting of information set up by the competent authorities shall be compatible and interoperable with the requirements of the information exchange system established pursuant to Article 64.

4. The data referred to in points (a) and (b) of paragraph 1 shall include batteries incorporated into vehicles and appliances, and waste batteries removed from those in accordance with Article 52.
5. Waste management operators carrying out treatment and recyclers shall report to the competent authorities for each calendar year the following information:
 - (a) the amount of waste batteries received for treatment and recycling;
 - (b) the amount of waste batteries entering recycling processes;
 - (c) information on recycling efficiencies and levels of recovered materials for waste batteries.

Reporting on the recycling efficiency and levels of recovered materials shall cover all individual steps of recycling and all corresponding output fractions. Where a recycling process is carried out at more than one facility, the first recycler is responsible for collecting the information and reporting this information to the competent authorities.

Recyclers shall report this data within four months of the end of the reporting year for which the data are collected. The first reporting period shall concern the first full calendar year after the adoption of the implementing act that establishes the format for reporting to the Commission, in accordance with Article 62(6).

6. Where waste holders other than those referred to in paragraph 4 export batteries for treatment and recycling they shall report the data on the amount of separately collected waste batteries exported for treatment and recycling and the data referred to in paragraph 4(b) and (c) to the competent authorities within four months of the end of the reporting year for which the data are collected.

Article 62 *Reporting to the Commission*

1. Member States shall make publicly available in an aggregated format for each calendar year the following data on portable batteries, automotive batteries, industrial batteries and electric vehicle batteries according to battery types and their chemistries

and, regarding portable batteries, identifying separately batteries powering light means of transport:

- (a) the amount of batteries made available on the market for the first time in a Member State, excluding batteries that have left the territory of that Member State in that year before being sold to end users;
- (b) the amount of waste batteries collected in accordance with Article 48 and 49, calculated on the basis of the methodology set out in Annex XI;
- (c) the values of the achieved recycling efficiencies as referred to in Annex XII, Part B, and the values of the achieved material recovery referred to in Part C of Annex XII.

Member States shall make this data available within 18 months of the end of the reporting year for which the data are collected. They shall make that information public electronically in the format established by the Commission in accordance with paragraph 6, using easily accessible data services that are interoperable with the System established pursuant to Article 64. The data shall be machine readable, sortable and searchable, respecting open standards for third party use. Member States shall notify the Commission when the data referred to in the first sub-paragraph is made available.

The first reporting period shall concern the first full calendar year after the adoption of the implementing act that establishes the format for reporting, in accordance with paragraph 6.

In addition to the obligations under Directives 2000/53/EC and 2012/19/EU, data referred to in points (a) and (b) of paragraph 1 shall include batteries incorporated into vehicles and appliances, and waste batteries removed from those in accordance with Article 52.

2. Reporting on the recycling efficiency and levels of recovered materials referred to in paragraph 1 shall cover all individual steps of recycling and all corresponding output fractions.
3. The data made available by Member States in accordance with this Article shall be accompanied by a quality check report. That information shall be presented in the format established by the Commission in accordance with paragraph 6.
4. The Commission shall collect and review the information made available in accordance with this Article. The Commission shall publish a report assessing the organisation of the data collection, the sources of data and the methodology used in Member States as well as the completeness, reliability, timeliness and consistency of that data. The assessment may include specific recommendations for improvement. The report shall be drawn up after the first reporting of the data by Member States and every four years thereafter.
5. The Commission shall, by 31 December 2023, adopt implementing acts laying down the format for the data and information to be reported to the Commission, as well as verification methods and operational conditions, for the purpose of paragraphs 1 and 4. Those implementing acts shall be adopted in accordance with the examination procedure referred to in Article 74(3).

Article 63
Application of Chapter VII

Chapter VII shall apply from 1 July 2023.

Chapter VIII

Electronic exchange of information

Article 64
Electronic exchange system

1. By 1 January 2026, the Commission shall set up the electronic exchange system for battery information (“the system”).
2. The system shall contain the information and data on rechargeable industrial batteries and electric vehicle batteries with internal storage and a capacity above 2 kWh as laid down in Annex XIII. That information and data shall be sortable and searchable, respecting open standards for third party use.
3. The economic operators that place a rechargeable industrial battery or an electric vehicle battery with internal storage on the market shall make the information referred to in paragraph 2 available electronically in a machine readable format using interoperable and easily accessible data services in the format established in accordance with paragraph 5.
4. The Commission shall, after a review in accordance with Article 62(5), publish through the System the information referred to in Article 62(1) as well as the assessment referred to in Article 62(5).
5. The Commission shall, by 31 December 2024, adopt implementing acts to establish:
 - (a) the architecture of the system;
 - (b) the format in which the data and information referred to in paragraph 2 shall be made available;
 - (c) the rules for accessing, sharing, managing, exploring, publishing and reusing of the information and data in the system.

Those implementing acts shall be adopted in accordance with the examination procedure referred to in Article 74(3).

Article 65
Battery passport

1. By 1 January 2026, each industrial battery and electric vehicle battery placed on the market or put into service and whose capacity is higher than 2 kWh shall have an electronic record (“battery passport”).
2. The battery passport shall be unique for each individual battery referred to in paragraph 1 and shall be identified through a unique identifier that the economic operator placing the battery on the market shall attribute to it and which shall be printed or engraved on it.
3. The battery passport shall be linked to the information about the basic characteristics of each battery type and model stored in the data sources of the System established pursuant to Article 64. The economic operator that places an industrial battery or an

electric vehicle battery on the market shall ensure that the data included in the battery passport is accurate, complete and up-to-date.

4. The battery passport shall be accessible online, through electronic systems interoperable with the System established pursuant to Article 64.
5. The battery passport shall allow access to information about the values for performance and durability parameters referred to in Article 10(1), when the battery is placed on the market and when it is subject to changes in its status.
6. When the change in the status is due to repairing or repurposing activities, the responsibility for the battery record in the battery passport shall be transferred to the economic operator that is considered to place the industrial battery or the electric vehicle battery on the market or that puts it into service.
7. The Commission is empowered to adopt implementing acts to establish the rules for accessing, sharing, managing, exploring, publishing and reusing of the information and data accessible through the battery passport.

Those implementing acts shall be adopted in accordance with the examination procedure referred to in Article 74(3).

Chapter IX

Union market surveillance, control of batteries entering the Union market and Union safeguard procedures

Article 66

Procedure at national level for dealing with batteries presenting a risk

1. Where the market surveillance authorities of one Member State have sufficient reason to believe that a battery covered by this Regulation presents a risk to human health or safety of persons, to property or to the environment, they shall carry out an evaluation in relation to the battery concerned covering all relevant requirements laid down in this Regulation.

Where, in the course of the evaluation referred to in the first subparagraph, the market surveillance authorities find that the battery does not comply with the requirements laid down in this Regulation, they shall without delay require the relevant economic operator to take all appropriate corrective action to bring the battery into compliance with those requirements, to withdraw it from the market, or to recall it within a reasonable period which is commensurate with the nature of the risk referred to in the first subparagraph.

The market surveillance authorities shall inform the relevant notified body accordingly.

2. Where the market surveillance authorities consider that non-compliance is not restricted to their national territory, they shall inform the Commission and the other Member States of the results of the evaluation and of the actions which they have required the economic operator to take.
3. The economic operator shall ensure that all appropriate corrective action is taken in respect of all the concerned batteries that the economic operator has made available on the market throughout the Union.

4. Where the relevant economic operator does not take adequate corrective action within the period referred to in the second subparagraph of paragraph 1, the market surveillance authorities shall take all appropriate provisional measures to prohibit or restrict the batteries being made available on their national market, to withdraw the battery from that market or to recall it.

The market surveillance authorities shall inform the Commission and the other Member States, without delay, of those measures.

5. The information referred to in the second subparagraph of paragraph 4 shall include all available details, in particular the data necessary for the identification of the non-compliant battery, the origin of that battery, the nature of the non-compliance alleged and the risk involved, the nature and duration of the national measures taken and the arguments put forward by the relevant economic operator. In particular, the market surveillance authorities shall indicate whether the non-compliance is due to either of the following:
 - (a) failure of the battery to meet the requirements set out in Chapter II or III of this Regulation
 - (b) shortcomings in the harmonised standards referred to in Article 15;
 - (c) shortcomings in the common specifications referred to in Article 16.
6. Member States other than the Member State initiating the procedure under this Article shall without delay inform the Commission and the other Member States of any measures adopted and of any additional information at their disposal relating to the non-compliance of the battery concerned, and, in the event of disagreement with the adopted national measure, of their objections.
7. Where, within three months of receipt of the information referred to in the second subparagraph of paragraph 4, no objection has been raised by either a Member State or the Commission in respect of a provisional measure taken by a Member State, that measure shall be deemed justified.
8. Member States shall ensure that appropriate restrictive measures, such as withdrawal of the battery from the market, are taken in respect of the battery concerned without delay.

Article 67

Union safeguard procedure

1. Where, on completion of the procedure set out in Article 66(3) and (4), objections are raised against a measure taken by a Member State, or where the Commission considers a national measure to be contrary to Union legislation, the Commission shall without delay enter into consultation with the Member States and the relevant economic operator or operators and shall evaluate the national measure. On the basis of the results of that evaluation, the Commission shall decide by means of an implementing act whether the national measure is justified or not.

That implementing act shall be adopted in accordance with the examination procedure referred to in Article 74(3).

2. The Commission shall address its decision to all Member States and shall without delay communicate it to them and the relevant economic operator or operators.

If the national measure is considered justified, all Member States shall take the necessary measures to ensure that the non-compliant battery is withdrawn from their market, and shall inform the Commission accordingly.

If the national measure is considered unjustified, the Member State concerned shall withdraw that measure.

3. Where the national measure is considered justified and the non-compliance of the battery is attributed to shortcomings in the harmonised standards referred to in Article 15 of this Regulation, the Commission shall apply the procedure provided for in Article 11 of Regulation (EU) No 1025/2012.

Article 68

Compliant batteries which present a risk

1. Where, having carried out an evaluation under Article 67(1), a Member State finds that although a battery is in compliance with the requirements set out in Chapters II and III, it presents a risk to the human health or safety of persons, to the protection of property or to the environment, it shall require the relevant economic operator to take all appropriate measures to ensure that the battery concerned, when placed on the market, no longer presents that risk, to withdraw the battery from the market or to recall it, within a reasonable period which is commensurate with the nature of that risk.
2. The economic operator shall ensure that corrective action is taken in respect of all the concerned batteries that the economic operator has made available on the market throughout the Union.
3. The Member State shall immediately inform the Commission and the other Member States. That information shall include all available details, in particular the data necessary for the identification of the batteries concerned, the origin and the supply chain of the battery, the nature of the risk involved and the nature and duration of the national measures taken.
4. The Commission shall without delay enter into consultation with the Member States and the relevant economic operator or operators and shall evaluate the national measures taken. On the basis of the results of that evaluation, the Commission shall adopt an implementing act in the form of a decision determining whether the national measure is justified or not and, where necessary, ordering appropriate measures.
5. That implementing act shall be adopted in accordance with the examination procedure referred to in Article 74(3).
6. On duly justified imperative grounds of urgency relating to the protection of human health and safety of persons, and to the protection of property or to the environment, the Commission shall adopt an immediately applicable implementing act in accordance with the procedure referred to in Article 74(3).
7. The Commission shall address its decision to all Member States and shall immediately communicate it to them and the relevant economic operator or operators.

Article 69
Other non-compliance

1. Without prejudice to Article 66, where a Member State finds that a battery falling outside the scope of Article 68 is non-compliant with this Regulation or an economic operator has infringed an obligation set out in this Regulation, shall require the relevant economic operator to put an end to the non-compliance concerned. Such non-compliances shall include the following:
 - (a) the CE marking has been affixed in violation of Article 30 of Regulation (EC) No 765/2008 or of Article 20 of this Regulation;
 - (b) the CE marking has not been affixed;
 - (c) the identification number of the notified body involved in the production control phase has been affixed in violation of Article 20 or has not been affixed;
 - (d) the EU declaration of conformity has not been drawn up or has not been drawn up correctly;
 - (e) the EU declaration of conformity is not accessible via the QR code on the battery;
 - (f) the technical documentation is not available, is not complete or contains errors;
 - (g) the information referred to in paragraphs 7, 9 and 10 of Article 38 or Article 41(3) and (4) is absent, false or incomplete or, in the case of the instructions for use, not translated into a language accepted by the Member States where the battery is placed on the market or made available;
 - (h) any other administrative requirement provided for in Article 38 or Article 40 is not fulfilled;
 - (i) the requirements for safe operation and use of stationary battery energy storage systems set out in Article 12 are not respected;
 - (j) the sustainability and safety requirements set out in Articles 6 to 12 in Chapter II and the labelling and information requirements set out in Articles 13 and 14 in Chapter III are not fulfilled;
 - (k) the requirements related to the supply chain due diligence policy in Article 39 are not fulfilled.
2. Where the operator does not put an end to the non-compliance referred to in point (k) of paragraph 1, a notice of remedial action shall be issued.
3. Where the non-compliance referred to in paragraph 1 persists, the Member State concerned shall take all appropriate measures to restrict or prohibit the battery being made available on the market or ensure that it is recalled or withdrawn from the market. In case of the non-compliance referred to in point (k) of paragraph 1, this paragraph shall apply as a last resort if the non-compliance is serious and persists after the issuing of a notice of remedial action as referred to in paragraph 2.

Chapter X

Green public procurement, procedure for amending restrictions on hazardous substances and Commission recognition of supply chain due diligence schemes

Article 70

Green public procurement

1. Contracting authorities, as defined in Article 2(1) of Directive 2014/24/EU or Article 3(1) of Directive 2014/25/EU, or contracting entities, as defined in Article 4(1) of Directive 2014/25/EU shall, when procuring batteries or products containing batteries in situations covered by those Directives, take account of the environmental impacts of batteries over their life cycle with a view to ensure that such impacts of the batteries procured are kept to a minimum.
2. The obligation set out in paragraph 1 shall apply to any contracts entered into by contracting authorities or contracting entities for the purchase of batteries or products containing batteries and shall mean that these contracting authorities and contracting entities are obliged to include technical specifications and award criteria based on Articles 7 to 10 to ensure that a product is chosen among products with significantly lower environmental impacts over their lifecycle.
3. The Commission shall, by 31 December 2026, adopt delegated acts in accordance with Article 73 supplementing this Regulation by establishing minimum mandatory green public procurement criteria or targets based on the requirements set out in Articles 7 to 10.

Article 71

Procedure for amending restrictions on hazardous substances

1. If the Commission considers that the use of a substance in the manufacture of batteries, or the presence of a substance in the batteries when they are placed on the market, or during their subsequent life cycle stages, including the waste phase, poses a risk to human health or the environment that is not adequately controlled and needs to be addressed on a Union-wide basis, it shall request the European Chemicals Agency (the 'Agency') to prepare a dossier that conforms to the requirements of point (3) of Part II of Annex XV to Regulation (EC) No 1907/2006 ('restriction dossier'). The restriction dossier shall include a socio-economic assessment, including an analysis of alternatives.
2. The Agency shall publish without delay the intention of the Commission to initiate such restriction process life cycle for a substance, and shall inform stakeholders concerned.
3. Within 12 months of the receipt of the request from the Commission in paragraph 1 and if the restriction dossier prepared by the Agency pursuant to that paragraph demonstrates that action is necessary on a Union-wide basis, the Agency shall suggest restrictions in order to initiate the restriction process described in paragraphs 4 to 14.
4. The Agency shall make publicly available on its website the restriction dossier, including the restrictions suggested pursuant to paragraph 3, without delay, clearly indicating the date of publication. The Agency shall invite all interested parties to

submit individually or jointly, within four months of the date of publication, comments on the restriction dossier.

5. Within 12 months of the date of publication referred to in paragraph 4, the Committee for Risk Assessment, set up pursuant to Article 76(1)(c) of Regulation (EC) No 1907/2006, shall adopt an opinion as to whether the suggested restrictions are appropriate in reducing the risk to human health and/or the environment, based on its consideration of the relevant parts of the restriction dossier. This opinion shall take account of the restriction dossier prepared by the Agency at the request of the Commission, and the views of interested parties referred to in paragraph 4.
6. Within 15 months of the date of publication referred to in paragraph 4, the Committee for Socio-economic Analysis, set up pursuant to Article 76(1)(d) of Regulation (EC) No 1907/2006, shall adopt an opinion on the suggested restrictions, based on its consideration of the relevant parts of the dossier and the socio-economic impact. Prior to that, it shall prepare a draft opinion on the suggested restrictions and on the related socio-economic impact, taking account of the analyses or information according to paragraph 4, if there are any.
7. The Agency shall publish the draft opinion of the Committee for Socio-economic Analysis on its website without delay and invite interested parties to provide their comments on the draft opinion no later than 60 days from the publication of that draft opinion.
8. The Committee for Socio-economic Analysis shall without delay adopt its opinion, taking into account where appropriate further comments received by the deadline set in paragraph 7. This opinion shall take account of the comments of interested parties submitted under paragraphs 4 and 7.
9. Where the opinion of the Committee for Risk Assessment diverges significantly from the restrictions suggested, the Agency shall postpone the deadline for the opinion of the Committee for Socio-economic Analysis by a maximum of 90 days.
10. The Agency shall submit to the Commission without delay the opinions of the Committees for Risk Assessment and Socio-economic Analysis on the restrictions suggested pursuant to the request made by the Commission under paragraph 1. Where the opinions of the Committees for Risk Assessment and Socio-economic Analysis diverge significantly from the restrictions suggested pursuant to paragraph 3, the Agency shall submit an explanatory note to the Commission providing a detailed explanation of the reasons for such differences. If one or both of the Committees do not adopt an opinion by the deadline set in paragraphs 5 and 6 the Agency shall inform the Commission accordingly, stating the reasons.
11. The Agency shall publish the opinions of the two Committees on its website without delay.
12. The Agency shall provide the Commission on request with all documents and evidence submitted to or considered by it.
13. If the Commission concludes that the conditions laid down in Article 6(2) are fulfilled, it shall adopt a delegated act pursuant to Article 6(2). This delegated act shall be adopted without undue delay following the receipt of the opinion of the Committee for Socio-economic Analysis referred to in paragraph 8 or after the deadline set out under paragraphs 6 and 9, as applicable, if that Committee does not adopt an opinion.

14. Where the Committees for Risk Assessment and Socio-economic Analysis provide an opinion pursuant to paragraphs 5 and 6, they shall make use of rapporteurs as specified in Article 87 of Regulation (EC) No 1907/2006. The rapporteurs or co-rapporteurs concerned, or their employer, shall be remunerated by the Agency in accordance with a scale of fees to be included in the financial arrangements related to restrictions established by the Management Board, set up pursuant to Article 76(1)(a) of Regulation (EC) No 1907/2006. Where the persons concerned fail to fulfil their duties, the Executive Director of the Agency has the right to terminate or suspend the contract or withhold remuneration.

Article 72

Supply chain due diligence schemes

1. Governments, industry associations and groupings of interested organisations that have developed and oversee due diligence schemes (“scheme owners”) may apply to the Commission to have their supply chain due diligence schemes recognised by the Commission. The Commission is empowered to adopt implementing acts establishing the information requirements that the application to the Commission shall contain. Those implementing acts shall be adopted in accordance with the examination procedure referred to in Article 74(3).
2. Where, on the basis of the evidence and information provided pursuant to the first sub-paragraph 1, the Commission determines that the supply chain due diligence scheme referred to in paragraph 1, enables that economic operators to comply with the requirements set out in Article 39 of this Regulation, it shall adopt an implementing act granting that scheme a recognition of equivalence with the requirements set out in this Regulation. The OECD Secretariat shall, as appropriate, be consulted prior to the adoption of such implementing acts. Those implementing acts shall be adopted in accordance with the examination procedure referred to in Article 74(3).

When making a determination on the recognition of a due diligence scheme, the Commission shall take into account the diverse industry practices covered by that scheme and shall have regard to the risk-based approach and method used by that scheme to identify risks.

3. The Commission is empowered to adopt implementing acts setting out the criteria and the methodology according to which the Commission shall determine, in accordance with paragraph 2, whether supply chain due diligence schemes ensure that economic operators fulfil the requirements set out in Article 39 of this Regulation. Those implementing acts shall be adopted in accordance with the examination procedure referred to in Article 74(3). The Commission shall also, as appropriate, periodically verify that recognised supply chain due diligence schemes continue to fulfil the criteria that led to a recognition of equivalence decision adopted pursuant to paragraph 2.
4. The owner of a supply chain due diligence scheme for which the recognition of equivalence was granted in accordance with paragraph 2 shall inform the Commission without delay of any changes or updates made to that scheme.
5. If there is evidence of repeated or significant cases where economic operators implementing a scheme recognised in accordance with paragraph 2 have failed to fulfil the requirements set out in Article 39 of this Regulation, the Commission shall

examine, in consultation with the owner of the recognised scheme, whether those cases indicate deficiencies in the scheme.

6. Where the Commission identifies a failure to comply with the requirements set out in Article 39 of this Regulation or deficiencies in a recognised supply chain due diligence scheme, it may grant the scheme owner an appropriate period of time to take remedial action.
7. Where the scheme owner fails or refuses to take the necessary remedial action, and where the Commission has determined that the failure or deficiencies referred to in paragraph 6 compromise the ability of the economic operator referred to in Article 39(1) implementing a scheme to comply with the requirements set out in Article 39 of this Regulation or where repeated or significant cases of non-compliance by economic operators implementing a scheme are due to deficiencies in the scheme, the Commission shall adopt an implementing act withdrawing the recognition of equivalence of the scheme. Those implementing acts shall be adopted in accordance with the examination procedure referred to in Article 74(3).
8. The Commission shall establish and keep up-to-date a register of recognised supply chain due diligence schemes. That register shall be made publicly available on the internet.

Chapter XI

Delegated powers and committee procedure

Article 73

Exercise of the delegation

1. The power to adopt delegated acts is conferred on the Commission subject to the conditions laid down in this Article.
2. The power to adopt delegated acts referred to in Articles 6(2), 7(1), (2) and (3), 9(2), 10(3), 12(2), 17(4), 27(3), 39(8), 55(4), 56(4), 57(6), 58(3) and 70(2) shall be conferred on the Commission for a period of five years from [date of entry into force of this Regulation]. The Commission shall draw up a report in respect of the delegation of power no later than nine months before the end of the five-year period. The delegation of power shall be tacitly extended for periods of an identical duration, unless the European Parliament or the Council opposes such extension no later than three months before the end of each period.
3. The delegation of power referred to in Articles 6(2), 7(1), (2) and (3), 9(2), 10(3), 12(2), 17(4), 27(3), 39(8), 55(4), 56(4), 57(6), 58(3) and 70(2) may be revoked at any time by the European Parliament or by the Council. A decision to revoke shall put an end to the delegation of the power specified in that decision. It shall take effect the day following the publication of the decision in the Official Journal of the European Union or at a later date specified therein. It shall not affect the validity of any delegated acts already in force.
4. Before adopting a delegated act, the Commission shall consult experts designated by each Member State in accordance with the principles laid down in the Interinstitutional Agreement of 13 April 2016 on Better Law-Making.
5. As soon as it adopts a delegated act, the Commission shall notify it simultaneously to the European Parliament and to the Council.

6. A delegated act adopted pursuant to Articles 6(2), 7(1), (2) and (3), 9(2), 10(3), 12(2), 17(4), 27(3), 39(8), 55(4), 56(4), 57(6), 58(3) and 70(2) shall enter into force only if no objection has been expressed either by the European Parliament or the Council within a period of two months of notification of that act to the European Parliament and the Council or if, before the expiry of that period, the European Parliament and the Council have both informed the Commission that they will not object. That period shall be extended by two months at the initiative of the European Parliament or of the Council.

Article 74
Committee procedure

1. The Commission shall be assisted by a committee established by Article 39 of Directive 2008/98/EC. That committee shall be a committee within the meaning of Regulation (EU) No 182/2011.
2. Where reference is made to this paragraph, Article 4 of Regulation (EU) No 182/2011 shall apply.
3. Where reference is made to this paragraph, Article 5 of Regulation (EU) No 182/2011 shall apply.

Where the committee delivers no opinion, the Commission shall not adopt the draft implementing act and the third subparagraph of Article 5(4) of Regulation (EU) No 182/2011 shall apply.
4. Where reference is made to this paragraph, Article 8 of Regulation (EU) No 182/2011, in conjunction with Article 5 thereof, shall apply.

Chapter XII **Amendments**

Article 75
Amendments to Regulation (EU) 2019/1020

Regulation (EU) 2019/1020 is amended as follows:

- (1) in Article 4(5), the text “(EU) 2016/425(35) and (EU) 2016/426(36)” is replaced by the following:
“(EU) 2016/425 (*), (EU) 2016/426 (**) and [(EU) 2020/...(***)]”

* Regulation (EU) 2016/425 of the European Parliament and of the Council of 9 March 2016 on personal protective equipment and repealing Council Directive 89/686/EEC (OJ L 81, 31.3.2016, p. 51).

** Regulation (EU) 2016/426 of the European Parliament and of the Council of 9 March 2016 on appliances burning gaseous fuels and repealing Directive 2009/142/EC (OJ L 81, 31.3.2016, p. 99).

*** [Regulation of the European Parliament and of the Council on batteries and waste batteries, amending Regulation (EU) No 2019/1020 and repealing Directive 2006/66/EC (For the Publications Office to fill in the OJ publication details)]”;
- (2) in Annex I, the following point 71 is added to the list of Union harmonisation legislation:

71. Regulation of the European Parliament and of the Council on batteries and waste batteries, amending Regulation (EU) No 2019/1020 and repealing Directive 2006/66/EC (the Publications Office to fill in the OJ publication details);

Chapter XIII

Final provisions

Article 76 *Penalties*

Member States shall lay down the rules on penalties applicable to infringements of this Regulation and shall take all measures necessary to ensure that they are implemented. The penalties provided for shall be effective, proportionate and dissuasive. Member States shall, without delay, notify the Commission of those rules and of those measures and shall notify it, without delay, of any subsequent amendment affecting them.

Article 77 *Review*

1. By 31 December 2030, the Commission shall draw up a report on the application of this Regulation and its impact on the environment and the functioning of the internal market.
2. Taking account of technical progress and practical experience gained in Member States, the Commission shall in its report include an evaluation on the following aspects of this Regulation:
 - (a) sustainability and safety requirements set out in Chapter II;
 - (b) labelling and information requirements set out in Chapter III;
 - (c) supply chain due diligence requirements set out in Articles 39 and 72;
 - (d) measures regarding end-of-life management of batteries set out in Chapter VII.

Where appropriate, the report shall be accompanied by a legislative proposal for amendment of the relevant provisions of this Regulation.

Article 78 *Repeal and transitional rules*

Directive 2006/66/EC is repealed with effect from 1 July 2023; however, its:

- (a) Article 10(3), Article 12(4) and Article 12(5) shall continue to apply until 31 December 2023, except as regards the transmission of data to the Commission which shall continue to apply until 31 December 2025;
- (b) Article 21(2) shall continue to apply until 31 December 2026.

References to the repealed Directive shall be construed as references to this Regulation.

Article 79 *Entry into force and application*

This Regulation shall enter into force on the twentieth day following that of its publication in the Official Journal of the European Union.

It shall apply from 1 January 2022.

This Regulation shall be binding in its entirety and directly applicable in all Member States.

Done at Brussels,

For the European Parliament
The President

For the Council
The President

LEGISLATIVE FINANCIAL STATEMENT

1. FRAMEWORK OF THE PROPOSAL/INITIATIVE

- 1.1. Title of the proposal/initiative
- 1.2. Policy area(s) concerned in the ABM/ABB structure
- 1.3. Nature of the proposal/initiative
- 1.4. Objective(s)
- 1.5. Grounds for the proposal/initiative
- 1.6. Duration and financial impact
- 1.7. Management mode(s) planned

2. MANAGEMENT MEASURES

- 2.1. Monitoring and reporting rules
- 2.2. Management and control system
- 2.3. Measures to prevent fraud and irregularities

3. ESTIMATED FINANCIAL IMPACT OF THE PROPOSAL/INITIATIVE

- 3.1. Heading(s) of the multiannual financial framework and expenditure budget line(s) affected
- 3.2. Estimated impact on expenditure
 - 3.2.1. *Summary of estimated impact on expenditure*
 - 3.2.2. *Estimated impact on operational appropriations*
 - 3.2.3. *Estimated impact on appropriations of an administrative nature*
 - 3.2.4. *Compatibility with the current multiannual financial framework*
 - 3.2.5. *Third-party contributions*
- 3.3. Estimated impact on revenue

1. FRAMEWORK OF THE PROPOSAL/INITIATIVE

1.1. Title of the proposal/initiative

Proposal for a Regulation of the European Parliament and of the Council on batteries and accumulators and waste batteries and accumulators replacing and repealing Directive 2006/66/EU of the European Parliament and of the Council.

1.2. Policy area(s) concerned

Policy area: 09 Environment

Activity: 09 02 02 Programme for Environment and Climate Action (LIFE) - Circular economy and quality of life

09 10 01 - European Chemicals Agency — Activities in the field of legislation on import and export of hazardous chemicals and in relation with the circular economy

03.020101 – Operation and development of the internal market of goods and services

1.3. The proposal relates to

a new action

a new action following a pilot project/preparatory action¹

the extension of an existing action

a merger of one or more actions towards another/a new action

1.4. Objective(s)

1.4.1. General objective(s)

Strengthening battery sustainability throughout their life cycle , by ensuring minimum sustainability requirements for batteries placed in the EU internal market.

Increasing the resilience of the EU battery supply chain by closing the materials loop.

Reducing the environmental and social impacts throughout all the stages of the life cycle of batteries.

1.4.2. Specific objective(s)

Strengthening sustainability

- Foster the production and placing on the EU market of high quality and performing batteries.
- Develop and use EU battery raw materials potential, both primary and secondary, ensuring they are produced in an efficient and sustainable way.
- Ensure functioning markets for secondary raw materials and related industrial processes.

¹ As referred to in Article 58(2)(a) or (b) of the Financial Regulation.

- Promote innovation and the development and implementation of EU technological expertise.

Increasing resilience and closing material loops

- Reduce EU's dependence on imports of materials of strategic importance.
- Ensure appropriate collection and recycling of all of waste batteries.

Reducing environmental and social impacts

- Contributing to responsible sourcing
- Efficient use of raw and recycled materials,
- Reduce GHG emissions across the entire life cycle of batteries.
- Reduce risks for human health and for the quality of the environment and improve social conditions of local communities.

1.4.3. *Expected result(s) and impact*

Specify the effects which the proposal/initiative should have on the beneficiaries/groups targeted.

The proposed regulation will ensure better alignment with current EU approaches on sustainable management of materials and waste, which focus on the optimisation of products and production processes. It aims at developing an EU framework covering the entire life cycle of batteries, comprising harmonised and more ambitious rules for batteries, components, waste batteries and recyclates in view of establishing a common set of rules that guarantee the smooth functioning of the EU Internal Market for batteries and the primary and secondary materials needed to manufacture them while promoting higher levels of sustainability in the EU market.

1.4.4. *Indicators of performance*

Specify the indicators for monitoring progress and achievements.

The indicators of progress and achievement of the objectives will be:

- Increased quality of batteries placed on the market;
- Better recycling efficiencies and better material recovery for Ni, Co, Li and Cu
- Higher degrees of recycled materials in batteries;
- More batteries will be collected and recycled;
- Industrial and EV batteries will be counted, tracked and reported;
- All collected batteries will be recycled; recycling processes will be performant at reduced occupational health and safety risks;
- End-users will have better and easier access to information on the batteries they buy in terms of materials they contain, their expected durability, and how their production meets environmental and social standards;
- All industrial and EV batteries have their CO2 footprint calculated;
- Manufacturers of industrial and EV batteries, will also provide information on how their materials sourcing meets social responsibility criteria;
- Battery manufacturers will have a clear and predictable EU legal framework that supports them in innovating and being competitive in a growing market.

1.5. Grounds for the proposal/initiative

1.5.1. Requirement(s) to be met in the short or long term including a detailed timeline for roll-out of the implementation of the initiative

The detailed requirements would need to be adopted through implementing/delegated acts in a time horizon of 3-8 years.

A series of actions in terms of mandates, delegated or implementing decisions and impact assessment reports will stem from this proposed regulation.

These will cover verification of compliance with sustainability requirements, conformity checking system, sustainability requirements, as well as information and labelling. A detailed list of these envisaged actions is provided below:

- Follow standardisation work in CEN/CENELEC;
- Develop common specifications on performance and durability of general use portable batteries;
- Develop common specifications on performance and durability for rechargeable batteries (industrial/EV);
- Develop common specifications on safety for stationary battery storage energy systems;
- Develop harmonised calculation rules for separate collection of portable batteries;
- Develop harmonised calculation rules for the declaration of carbon footprint (including the revision of the PEFCR category rules for batteries), for the calculation of batteries carbon intensity performance classes, for the calculation of batteries recycled content and for the calculation of recycling efficiencies (to cover Lithium and Lead) and recovery of materials;
- Guidance on removability, replaceability of portable batteries;
- Establish an open dataspace for submission of battery related information;
- Develop GPP criteria on batteries;
- Delegated act for carbon footprint – mandatory thresholds;
- Amend the List of Waste;
- Risk assessment/management of substances used in batteries;
- Amend reporting obligations.

1.5.2. Added value of Union involvement (it may result from different factors, e.g. coordination gains, legal certainty, greater effectiveness or complementarities). For the purposes of this point 'added value of Union involvement' is the value resulting from Union intervention which is additional to the value that would have been otherwise created by Member States alone.

Reasons for action at European level (ex-ante):

EU-wide legislation is necessary to ensure that manufacturers, importers and economic operators more broadly and subject to common requirements when placing a battery on the Union market and the information made available.

In addition, the evaluation of the Batteries Directive points to a need to modernise the legislative framework to further promote circular economy and low carbon policies as well as adapt to technological and economic developments in the battery market.

The batteries value chain is capital intensive and thus needs economies of scale. Achieving this requires harmonised requirements addressing the full life cycle and a well-functioning EU internal market.

1.5.3. *Lessons learned from similar experiences in the past*

1.5.4. *Compatibility with the Multiannual Financial Framework and possible synergies with other appropriate instruments*

The European Commission is proposing a major recovery plan based on a reinforced long term budget for the next Multiannual Financial Framework and a new recovery instrument, Next Generation EU.

The European Green Deal will be the basis of the EU's recovery strategy. This includes the objective of cleaner transport and logistics, including e-mobility, which are the main driver of the exponential growth in demand for batteries. In a post-COVID society, the current trends indicate that relevance of e-mobility will increase and endure.

The support and commitment of the European Commission in the research in the field of batteries are expressed by the number of projects funded under the H2020 programme (over to 100 projects) and the financial contribution to their implementation (in the region of 500 Million Euros). The projects cover the entire value chain of different types of batteries and are focused on solving current and future challenges: developments and improvement of materials (and their environmental impact), batteries recycling (that will promote the efficiency of materials recovery in Europe), new battery systems and even alternatives to the conventional batteries. The results of these projects will support and promote innovation for the batteries industry in Europe. New and improved materials and batteries' systems, improved characteristics in terms of capacity storage, lifetime, safety, sustainability and cost-effectiveness are anticipated. These aspects are covered and are relevant in the present regulation.

These will be essential to ensure the sustainable competitiveness of Europe in this field as well as to boost its economy, growth and well-being.

It is expected that the EU will continue to promote the research in this and in related fields in the next MFF.

The new Regulation will make it explicit that, in the future, the adoption of restriction measures for substances in batteries will be taken following assessments that will be carried out by ECHA, and no longer as individual activities part of DG ENV working programme. While ECHA has by large the needed experience for this task, these assessments constitute an additional work area for this Agency.

1.5.5. *Assessment of the different available financing options, including scope for redeployment*

The expertise of ECHA (risk assessments of substances) and JRC (development of methodologies and procedures) is the most appropriate to ensure a swift implementation of the proposed approach.

The estimated staff and resource needs we have received from ECHA for the List of Waste task, reflect the fact that ECHA needs to build knowledge on this task. Therefore DG ENV explored alternative options. JRC has provided an estimate which requires less resources (0.9 million euro versus 2.2 for ECHA). We therefore propose to add this to the list of JRC tasks.

For the development of the open dataspace for batteries, the staff and resource needs we have received from ECHA reflect the political ambition while benefiting from the existing structures and processes in ECHA. ECHA estimates the resources at around 10 million euro for the development of the dataspace in addition to nearly 10 million euro staff costs. The Commission services also contacted executive agencies but it is not legally possible for them to take-over the dataspace task from the Commission.

The Commission therefore proposes to proceed with a feasibility study to assess in detail the different options available for the different functionalities including who is the best placed to develop the system. The development of the open dataspace is led by DG GROW in collaboration with DG CONNECT and their initiative on the European Dataspace.

Another alternative is to develop the dataspace in house. DG ENV and DG GROW are in contact with DG TAXUD (which has undertaken similar work on VAT) and with DG CONNECT to explore potential synergies. The staff charged with these tasks in DG TAXUD is spread over 3 different units. DG GROW's IT unit has quantified a very first estimation of the development effort and budget needed for the implementation of a Battery Passport Open Data solution. An open data space based on a centralised data base architecture is estimated at around 10.5 million euro. This covers the IT infrastructure and the staff needs for the IT development. These costs are planned under the DG GROW budget line Operation and development of the internal market of goods and services. The exact modalities of the work to be carried out by the different services will have to be agreed as the feasibility study proceeds.

1.6. Duration and financial impact of the proposal/initiative

limited duration

- Proposal/initiative in effect from [DD/MM]YYYY to [DD/MM]YYYY
- Financial impact from YYYY to YYYY

unlimited duration

- Implementation with a start-up period from 2023 to 2028,
- followed by full-scale operation.

1.7. Management mode(s) planned

Direct management by the Commission through

- executive agencies

- Shared management** with the Member States
- Indirect management** by entrusting budget implementation tasks to:
 - international organisations and their agencies (to be specified);
 - the EIB and the European Investment Fund;
 - bodies referred to in Articles 70 and 71;
 - public law bodies;
 - bodies governed by private law with a public service mission to the extent that they provide adequate financial guarantees;
 - bodies governed by the private law of a Member State that are entrusted with the implementation of a public-private partnership and that provide adequate financial guarantees;
 - persons entrusted with the implementation of specific actions in the CFSP pursuant to Title V of the TEU, and identified in the relevant basic act.

2. MANAGEMENT MEASURES

2.1. Monitoring and reporting rules

Specify frequency and conditions.

Standard monitoring and reporting rules for EU subsidies to traditional agencies will apply.

2.2. Management and control system(s)

2.2.1. Justification of the management mode(s), the funding implementation mechanism(s), the payment modalities and the control strategy proposed

Standard monitoring and reporting rules for EU subsidies to traditional agencies will apply.

2.2.2. Information concerning the risks identified and the internal control system(s) set up to mitigate them

N/A

2.2.3. Estimation and justification of the cost-effectiveness of the controls (ratio of "control costs ÷ value of the related funds managed"), and assessment of the expected levels of risk of error (at payment & at closure)

N/A

2.3. Measures to prevent fraud and irregularities

Specify existing or envisaged prevention and protection measures, e.g. from the Anti-Fraud Strategy.

Standard modalities for EU subsidies to traditional agencies will apply

3. ESTIMATED FINANCIAL IMPACT OF THE PROPOSAL/INITIATIVE

3.1. Heading(s) of the multiannual financial framework and expenditure budget line(s) affected

- Existing budget lines - In order of multiannual financial framework headings and budget lines.

Heading of multiannual financial framework	Budget line	Type of expenditure	Contribution			
	Number	Diff./Non-diff. ¹	from EFTA countries ²	from candidate countries ³	from third countries	within the meaning of Article 21(2)(b) of the Financial Regulation
3	09.10.01 – European Chemicals Agency	Diff.	NO	NO	NO	NO
3	09.02.02 – Circular economy and quality of life	Diff.	NO	NO	NO	NO
1	03.020101 Operation and development of the internal market of goods and services	Diff.	NO	NO	NO	NO
7	20.01.02.01 –Remuneration and allowances	Non-diff.	NO	NO	NO	NO
7	20 02 01 01 - Contract staff	Non-diff.	NO	NO	NO	NO
7	20 02 01 03 - National civil servants temporarily assigned to the institution	Non-diff.	NO	NO	NO	NO

- New budget lines requested

N/A

¹ Diff. = Differentiated appropriations / Non-diff. = Non-differentiated appropriations.

² EFTA: European Free Trade Association.

³ Candidate countries and, where applicable, potential candidates from the Western Balkans.

3.2. Estimated impact on expenditure

3.2.1. Summary of estimated impact on expenditure

EUR million (to three decimal places)

Heading of multiannual financial framework	3	Natural Resources and Environment
---	---	-----------------------------------

European Chemicals Agency	09.10.01		Year 2023	Year 2024	Year 2025	Year 2026	Year 2027	Year 2028	Year 2029	Total
Title 1: Staff expenditure	Commitments	(1)	0.358	0.365	0.372	0.306	0.312	0.319	0.325	2.357
	Payments	(2)	0.358	0.365	0.372	0.306	0.312	0.319	0.325	2.357
Title 2: Infrastructure	Commitments	(1a)	0.086	0.088	0.089	0.074	0.075	0.076	0.078	0.566
	Payments	(2a)	0.086	0.088	0.089	0.074	0.075	0.076	0.078	0.566
Title 3: Operational expenditure	Commitments	(3a)	0.158	0.158	0.158	0.025	0.025	0.025	0.025	0.575
	Payments	(3b)	0.158	0.158	0.158	0.025	0.025	0.025	0.025	0.575
TOTAL appropriations for European Chemicals Agency	Commitments	=1+1a +3a	0.602	0.611	0.620	0.405	0.412	0.420	0.428	3.498
	Payments	=2+2a +3b	0.602	0.611	0.620	0.405	0.412	0.420	0.428	3.498

The required increase of the EU contribution to ECHA will be compensated by a corresponding reduction in the envelope of the LIFE programme.

Management of battery substances: A total of 2 new full-time equivalent temporary agent staff (AD 5-7) at ECHA (average cost EUR 144 000/year, during 7 years and beyond) will be needed to make sure that sufficient resources would be earmarked for regulating the necessary battery related substances without competing with REACH priorities. This covers an average of one additional restriction (or other risk management measure) yearly. In addition, 1 full-time equivalent contract agent staff (CA FG III, average cost EUR 69 000/year during 2 years), will be necessary to increase the knowledge base, facilitating an informed priority setting and work plan based. This will be based on a study to build ECHA's current knowledge on how the battery industry manages its hazardous chemicals to identify relevant substances for regulatory risk management in the future. The study is estimated at € 400.000 (over 2 years) to outsource part of such research needs. This study would also contribute to the Commission work on updating the battery entries in the List of Waste.

A sum of € 22.000 is also required to cover the cost of the rapporteurs (Member State experts guiding the dossiers through the opinion-making in the RAC and SEAC committees) for each restriction, as well as € 43.000 for covering a proportionate part of the full cost of organising the RAC and SEAC meetings (travel, accommodation and daily allowance costs: cost calculated based on the average time/effort needed for a restriction dossier in both committees).

The aforementioned resources have been estimated using a calculation model which takes account of relevant experience from tasks executed by ECHA under other regulatory frameworks (e.g. REACH, CLP, BPR) and from the implementation of the existing national approaches where relevant. It sets out the resources that will be needed by ECHA over 2021-2029, in order to handle the foreseen tasks.

The financial impact of this initiative will not increase programmed spending under Heading 1 and Heading 3. The necessary resources will be deducted by the LIFE budget and the GROW instrument according to a split of the tasks in the administrative agreement: around 4 million of costs for DG Environment and 1.6 million of costs for DG GROW. In addition DG GROW's instrument covers the costs of the open data space and both instruments cover some studies and data purchase needs of the Commission services to properly prepare some of the implementing and delegated acts.

Heading of multiannual financial framework	1	XXX
---	----------	-----

EUR million (to three decimal places)

		Year 2021	Year 2022	Year 2023	Year 2024	Year 2025	Year 2026	Year 2027	TOTAL 2021-2027
DG: GROW									
03.020101 Operation and development of the internal market of goods and services	Commitment appropriations	1.026	1.774	2.075	2.083	2.150	0.928	0.688	10.723
	Payment appropriations	1.026	1.774	2.075	2.083	2.150	0.928	0.688	10.723

The amount reported above in 03.020101 budget line will be needed to finance part of the administrative arrangements between DG ENV/DG GROW and the JRC and for the procurement of studies and data related to DG GROW provisions. The AA is expected to represent around a cost of EUR 2.669 million to DG GROW. The procurement represents EUR 50 000 in 2023 for DG GROW to request a technical opinion on the standardisation work in CEN/CENELEC.

It also includes the amount budgeted for the intramuros support for the feasibility study for the open dataspace. Following this initial development phase, possibly additional resources may be needed.

The IT development costs for the electronic information exchange for batteries are expected from DG GROW.

Heading of multiannual financial framework	3	Natural Resources and Environment
---	----------	-----------------------------------

EUR million (to three decimal places)

		Year 2021	Year 2022	Year 2023	Year 2024	Year 2025	Year 2026	Year 2027	TOTAL 2021-2027
DG: ENV									
09.02.02 Circular economy and quality of life	Commitment appropriations	1.053	0.982	1.835	1.286	0.948	0.622	0.530	7.256
	Payment appropriations	1.053	0.982	1.835	1.286	0.948	0.622	0.530	7.256

The amount reported above in 09.02.02 includes the required offsetting from the LIFE budget of the increase in resources for ECHA. This amount will be needed to increase the subsidy for ECHA and to finance administrative arrangements between DG ENV/DG GROW and the JRC and for the procurement of studies and data related to the DG ENV provisions.

The JRC will play a key role in supporting the Commission with some of the technical work required. The JRC provided their best estimate of resources needs based on their current knowledge and on the task list provided by DG ENV and DG GROW. These estimates might therefore be fine-tuned e.g. during negotiation of an AA. In particular with regards to the common specification on general purpose portable batteries, the scope was expanded in the latest version of the proposed regulation and the resources will have to be reviewed accordingly. The AA is expected to represent around EUR 3.935 million to DG ENV. There are several tasks where the JRC may support the Commission:

- Developing common specifications on performance and durability for general purpose batteries and rechargeable industrial/EV batteries;
- Defining harmonised calculation rules for the declaration of carbon footprint for rechargeable industrial/EV batteries;
- Defining harmonised calculation rules for recycled content in batteries, recycling efficiencies and recovered materials;
- Analysing GPP criteria (including consultation of public procurement stakeholders and legal check of the proposed public procurement rules);
- Supporting the guidance on removability and replaceability of portable batteries.

The procured activities include a data purchase for batteries in 2021 in order to revise the PEFCR for batteries, subcontracting the development of the PEFCR web-based tool in 2022, requesting a technical opinion on the standardisation work in CEN/CENELEC in 2023 and a market study on the availability of secondary materials in 2027. These expenses amount to EUR 300 000 in 2021, EUR 80 000 for 2022 and EUR 100,000 in 2027.

Heading of multiannual financial framework	7	European Public Administration
---	----------	--------------------------------

EUR million (to three decimal places)

		Year 2021	Year 2022	Year 2023	Year 2024	Year 2025	Year 2026	Year 2027	TOTAL 2021-2027
DG: ENV, DG GROW and EUROSTAT									
• Human Resources		0.475	0.515	0.515	0.555	0.555	0.230	0.230	3.075
• Other administrative expenditure									
TOTAL DG ENV and DG GROW and EUROSTAT		0.475	0.515	0.515	0.555	0.555	0.230	0.230	3.075

TOTAL appropriations under HEADING 7 of the multiannual financial framework	(Total commitments = Total payments)	0.475	0.515	0.515	0.555	0.555	0.230	0.230	3.075
--	--------------------------------------	-------	-------	-------	-------	-------	-------	-------	--------------

The appropriations required for human resources and other expenditure of an administrative nature will be met by appropriations from the DG that are already assigned to management of the action and/or have been redeployed within the DG, together if necessary with any additional allocation which may be granted to the managing DG under the annual allocation procedure and in the light of budgetary constraints.

EUR million (to three decimal places)

		<i>Year 2021</i>	<i>Year 2022</i>	<i>Year 2023</i>	<i>Year 2024</i>	<i>Year 2025</i>	<i>Year 2026</i>	<i>Year 2027</i>	<i>Year 2028</i>	<i>Year 2029</i>	<i>TOTAL 2021-2029</i>
TOTAL appropriations under HEADINGS 1 to 7 of the multiannual financial framework	Commitments	2.554	3.271	4.476	3.924	3.653	1.780	1.447	0.420	0.428	21.953
	Payments	2.554	3.271	4.476	3.924	3.653	1.780	1.447	0.420	0.428	21.953

3.2.2. *Estimated impact on ECHA's appropriations*

- The proposal/initiative does not require the use of operational appropriations
- The proposal/initiative requires the use of operational appropriations, as explained below:

Commitment appropriations in EUR million (to three decimal places)

Indicate objectives and outputs ↓			Year N		Year N+1		Year N+2		Year N+3		Enter as many years as necessary to show the duration of the impact (see point 1.6)						TOTAL	
	OUTPUTS																	
	Type ¹	Average cost	No	Cost	No	Cost	No	Cost	No	Cost	No	Cost	No	Cost	No	Cost	Total No	Total cost
SPECIFIC OBJECTIVE No 1 ² ...																		
- Output																		
- Output																		
- Output																		
Subtotal for specific objective No 1																		
SPECIFIC OBJECTIVE No 2 ...																		
- Output																		
Subtotal for specific objective No 2																		
TOTAL COST																		

¹ Outputs are products and services to be supplied (e.g.: number of student exchanges financed, number of km of roads built, etc.).

² As described in point 1.4.2. 'Specific objective(s)...'

3.2.3. Estimated impact on human resources

3.2.3.1. Summary

- The proposal/initiative does not require the use of appropriations of an administrative nature
- The proposal/initiative requires the use of appropriations of an administrative nature, as explained below:
- Staff requirements in ECHA (EUR million (to three decimal places))

	Year 2021	Year 2022	Year 2023	Year 2024	Year 2025	Year 2026	Year 2027	Year 2028	Year 2029	TOTAL
--	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	-------

–

Temporary agents (AD Grades)			0.289	0.294	0.300	0.306	0.312	0.319	0.325	2.145
Temporary agents (AST grades)										
Contract staff			0.069	0.070	0.072					0.211
Seconded National Experts										

–

TOTAL			0.358	0.365	0.372	0.306	0.312	0.319	0.325	2.357
--------------	--	--	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------

–

Staff requirements in ECHA (FTE):

	Year 2021	Year 2022	Year 2023	Year 2024	Year 2025	Year 2026	Year 2027	Year 2028	Year 2029
--	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------

Temporary agents (AD Grades)	0	0	2	2	2	2	2	2	2
Temporary agents (AST grades)									
Contract staff	0	0	1	1	1				
Seconded National Experts									

TOTAL	0	0	3	3	3	2	2	2	2
--------------	----------	----------	----------	----------	----------	----------	----------	----------	----------

3.2.3.2. Estimated requirements of human resources for DG ENV, DG GROW and EUROSTAT

- The proposal/initiative does not require the use of human resources.
- The proposal/initiative requires the use of human resources, as explained below:

Estimate to be expressed in full amounts (or at most to one decimal place)

	Year 2021	Year 2022	Year 2023	Year 2024	Year 2025	Year 2026	Year 2027
• Establishment plan posts (officials and temporary staff)							
20 01 01 01 (Headquarters and Commission's Representation Offices)	1	1	1	1	1	1	1
XX 01 01 02 (Delegations)							
XX 01 05 01 (Indirect research)							
10 01 05 01 (Direct research)							
• External staff (in Full Time Equivalent unit: FTE)¹							
20 02 02 01/03 (AC, END, INT from the 'global envelope')	4.0	4.5	4.5	5.0	5.0	1.0	1.0
XX 01 02 02 (AC, AL, END, INT and JPD in the Delegations)							
- at Headquarters ³							

¹ AC = Contract Staff; AL = Local Staff; END = Seconded National Expert; INT = agency staff; JPD = Junior Professionals in Delegations.

³ Mainly for the Structural Funds, the European Agricultural Fund for Rural Development (EAFRD) and the European Fisheries Fund (EFF).

	- in Delegations							
XX 01 05 02 (AC, END, INT – Indirect research)								
10 01 05 02 (AC, END, INT – Direct research)								
Other budget lines (specify)								
TOTAL		5.0	5.5	5.5	6.0	6.0	2.0	2.0

The human resources required will be met by staff from the DG who are already assigned to management of the action and/or have been redeployed within the DG, together if necessary with any additional allocation which may be granted to the managing DG under the annual allocation procedure and in the light of budgetary constraints.

Description of tasks to be carried out:

Officials and temporary staff	AD posts are needed for the negotiation and general implementation of the regulation. and the different preparatory work and drafting of secondary legislation according to the deadlines proposed in the Batteries Regulation.
External staff	<p>The END post and the CA are needed to perform the technical work, including:</p> <ul style="list-style-type: none"> • following standardisation work in CEN/CENELEC, • continuous review on material availability to keep the recycled content targets in line with market developments, • preparation of the delegated acts on performance and durability requirements of rechargeable and non- rechargeable batteries, on equivalent conditions for treatment outside the EU (including following JRC preparatory work), • preparation of implementing acts on producers’ registration form and on state on health parameters, • establish implementing acts establishing formats to report to competent authorities and the Commission, • develop the systems to receive the reported data and analyse for

² Sub-ceiling for external staff covered by operational appropriations (former ‘BA’ lines).

	<p>correctness and completeness and communication and IT staff to disseminate the data (Eurostat),</p> <ul style="list-style-type: none">• establish software and formats for submissions linked with the open dataspace,• the revision of the PEFCR category rules for batteries (including following JRC preparatory work),• develop guidance on removability, replaceability of portable batteries,• a possible review of the regulation to set separate collection targets
--	---

Description of the calculation of cost for FTE units should be included in the Annex V, section 3.

3.2.4. *Compatibility with the current multiannual financial framework*

- The proposal/initiative is compatible the current multiannual financial framework.
- The proposal/initiative will entail reprogramming of the relevant heading in the multiannual financial framework.

The additional tasks the Commission has to assume require an additional needs for resources as regards the amount of the Union's contribution and the establishment plan posts of the European Chemicals Agency.

- The proposal/initiative requires application of the flexibility instrument or revision of the multiannual financial framework⁴.

Explain what is required, specifying the headings and budget lines concerned and the corresponding amounts.

3.2.5. *Third-party contributions*

- The proposal/initiative does not provide for co-financing by third parties.

⁴ See Articles 11 and 17 of Council Regulation (EU, Euratom) No 1311/2013 laying down the multiannual financial framework for the years 2014-2020.

3.3. Estimated impact on revenue

- The proposal/initiative has no financial impact on revenue.
- The proposal/initiative has the following financial impact:
 - on own resources
 - on other revenue
 - please indicate, if the revenue is assigned to expenditure lines

EUR million (to three decimal places)

Budget revenue line:	Appropriations available for the current financial year	Impact of the proposal/initiative ⁵					Enter as many years as necessary to show the duration of the impact (see point 1.6)		
		Year N	Year N+1	Year N+2	Year N+3				
Article									

For miscellaneous 'assigned' revenue, specify the budget expenditure line(s) affected.

Specify the method for calculating the impact on revenue.

3.4. Estimated impact on revenue

- The proposal/initiative has no financial impact on revenue.
- The proposal/initiative has the following financial impact:
 - on own resources
 - on other revenue
 - please indicate, if the revenue is assigned to expenditure lines

EUR million (to three decimal places)

Budget revenue line:	Appropriations available for the current financial year	Impact of the proposal/initiative ⁶					Enter as many years as necessary to show the duration of the impact (see point 1.6)		
		Year N	Year N+1	Year N+2	Year N+3				
Article									

For miscellaneous 'assigned' revenue, specify the budget expenditure line(s) affected.

Specify the method for calculating the impact on revenue.

⁵ As regards traditional own resources (customs duties, sugar levies), the amounts indicated must be net amounts, i.e. gross amounts after deduction of 20 % for collection costs.

⁶ As regards traditional own resources (customs duties, sugar levies), the amounts indicated must be net amounts, i.e. gross amounts after deduction of 20 % for collection costs.



Brussels, 10.12.2020
COM(2020) 798 final

ANNEXES 1 to 14

ANNEXES

to the

**Proposal for a Regulation of the European Parliament and of the Council
concerning batteries and waste batteries, repealing Directive 2006/66/EC and amending
Regulation (EU) No 2019/1020**

{SEC(2020) 420 final} - {SWD(2020) 334 final} - {SWD(2020) 335 final}

ANNEX I Restrictions on hazardous substances	2
ANNEX II Carbon footprint	3
ANNEX III Electrochemical performance and durability parameters for portable batteries of general use.....	7
ANNEX IV Electrochemical performance and durability requirements for rechargeable industrial batteries and electric vehicle batteries	8
ANNEX V Safety parameters	9
ANNEX VI Labelling requirements.....	11
ANNEX VII Parameters for determining the state of health of batteries and expected lifetime of batteries	12
ANNEX VIII Conformity assessment procedures	13
ANNEX IX EU Declaration of conformity No	16
ANNEX X List of raw materials and risk categories	17
ANNEX XI Calculation of collection rates of waste portable batteries	18
ANNEX XII Treatment and recycling requirements	19
ANNEX XIII Information to be stored in the European Electronic Exchange System	21
ANNEX XIV Correlation table	23

ANNEX I
Restrictions on hazardous substances

Designation of the substance or group of substances	Conditions of restriction
<p>1. Mercury CAS No. 7439-97-6 EC No. 231-106-7 and its compounds</p>	<p>1. Batteries, whether or not incorporated into appliances, shall not contain more than 0,0005 % of mercury (expressed as mercury metal) by weight.</p> <p>2. Batteries used in vehicles to which Directive 2000/53/EC applies shall not contain more than 0,1% of mercury (expressed as mercury metal) by weight in homogeneous material.</p>
<p>2. Cadmium CAS No. 7440-43-9 EC No. 231-152-8 and its compounds</p>	<p>1. Portable batteries, whether or not incorporated into appliances, shall not contain more than 0,002% of cadmium (expressed as cadmium metal) by weight.</p> <p>2. The restriction set out in point 1 shall not apply to portable batteries intended for use in:</p> <p style="margin-left: 40px;">(a) emergency and alarm systems, including emergency lighting;</p> <p style="margin-left: 40px;">(b) medical equipment.</p> <p>3. Batteries used in vehicles to which Directive 2000/53/EC applies shall not contain more than 0,01% of cadmium (expressed as cadmium metal) by weight in homogeneous material.</p> <p>4. The restriction set out in point 3 does not apply to vehicles that benefit from an exemption on the basis of Annex II to Directive 2000/53/EC.</p>

ANNEX II **Carbon footprint**

1. Definitions

For the purposes of this Annex, the following definitions shall apply:

- (a) ‘Activity data’ means the information associated with processes while modelling Life Cycle Inventories (LCI). The aggregated LCI results of the process chains that represent the activities of a process are each multiplied by the corresponding activity data and then combined to derive the environmental footprint associated with that process;
- (b) ‘Bill of materials’ means list of the raw materials, sub-assemblies, intermediate assemblies, sub-components, parts and the quantities of each needed to manufacture the product in scope of the study;
- (c) ‘Company-specific data’ refers to directly measured or collected data from one or multiple facilities (site-specific data) that are representative for the activities of the company. It is synonymous to “primary data”;
- (d) ‘Functional unit’ means the qualitative and quantitative aspects of the function(s) and/or service(s) provided by the product being evaluated;
- (e) ‘Life cycle’ means the consecutive and interlinked stages of a product system, from raw material acquisition or generation from natural resources to final disposal (ISO 14040:2006);
- (f) ‘Life cycle inventory (LCI)’ means the combined set of exchanges of elementary, waste and product flows in a LCI dataset;
- (g) ‘Life cycle inventory (LCI) dataset’ means a document or file with life cycle information of a specified product or other reference (e.g., site, process), covering descriptive metadata and quantitative life cycle inventory. A LCI dataset could be a unit process dataset, partially aggregated or an aggregated dataset;
- (h) ‘Reference flow’ means the measure of the outputs from processes in a given product system required to fulfil the function expressed by the functional unit (based on ISO 14040:2006);
- (i) ‘Secondary data’ means data not from a specific process within the supply-chain of the company performing a carbon footprint study. This refers to data that is not directly collected, measured, or estimated by the company, but sourced from a third party LCI database or other sources. Secondary data includes industry average data (e.g., from published production data, government statistics, and industry associations), literature studies, engineering studies and patents, and may also be based on financial data, and contain proxy data, and other generic data. Primary data that go through a horizontal aggregation step are considered as secondary data;
- (j) ‘System boundary’ means the aspects included or excluded from the life cycle study.

Additionally, the harmonised rules for the calculation of the carbon footprint of batteries shall include any further definition necessary for their interpretation.

2. Scope

This Annex provides essential elements on how to calculate the carbon footprint.

The harmonised calculation rules referred to in Article 7 shall build on the essential elements included in this Annex, be in compliance with the latest version of the Commission Product

Environmental Footprint¹ (PEF) method and relevant Product Environmental Footprint Category Rules (PEFCRs)² and reflect the international agreements and technical/scientific progress in the area of life cycle assessment³.

The calculation of the life cycle carbon footprint shall be based on the bill of material, the energy, and auxiliary materials used in a specific plant to produce a specific battery model. In particular, the electronic components (e.g. battery management units, safety units) and the cathode materials have to be accurately identified, as they may become the main contributor for the battery carbon footprint.

3. Functional unit and reference flow

The functional unit is further defined as one kWh (kilowatt-hour) of the total energy provided over the service life by the battery system, measured in kWh. The total energy is obtained from the number of cycles multiplied by the amount of delivered energy over each cycle.

The reference flow is the amount of product needed to fulfil the defined function and shall be measured in kg of battery per kWh of the total energy required by the application over its service life. All quantitative input and output data collected by the manufacturer to quantify the carbon footprint shall be calculated in relation to this reference flow.

4. System boundary

The following life cycle stages and processes shall be included in the system boundary:

Life cycle stage	Short description of the processes included
Raw material acquisition and pre-processing	Includes mining and pre-processing, up to the manufacturing of battery cells and batteries components (active materials, separator, electrolyte, casings, active and passive battery components), and electric/electronics components.
Main product production	Assembly of battery cells and assembly of batteries with the battery cells and the electric/electronic components
Distribution	Transport to the point of sale
End of life and recycling	Collection, dismantling and recycling

The following processes shall be excluded:

- Manufacturing of equipment for batteries assembly and recycling, as impacts have been calculated as negligible in the PEFCRs for high specific energy rechargeable batteries for mobile applications;
- Battery assembly process with the original equipment manufacturer (OEM) system components. It mainly corresponds to mechanical assembly, and it is included inside the OEM equipment or vehicle assembly line. The specific energy or material consumption for this process are negligible when compared to the manufacturing process of OEM components.

The use phase should be excluded from the lifecycle carbon footprint calculations, as not being under the direct influence of manufacturers unless it is demonstrated that choices made

¹ <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32013H0179&from=EN>

² https://ec.europa.eu/environment/eussd/smgp/pdf/PEFCR_guidance_v6.3.pdf

³ See https://ec.europa.eu/environment/eussd/smgp/dev_methods.htm

by battery manufacturers at the design stage can make a non-negligible contribution to this impact.

5. Use of company specific and secondary datasets

Due to the high number of battery components and the complexity of the processes, the economic operator shall limit, where justified, the use of company specific data to process and component analysis to the battery-specific parts.

In particular, all activity data related to the battery's anode, cathode, electrolyte, separator and cell-casing shall refer to a specific battery model produced in a specific production plant (i.e., no default activity data shall be used). The battery-specific activity data shall be used in combination with the relevant Product Environmental Footprint compliant secondary datasets.

As the carbon footprint declaration shall be specific to a model battery produced in a defined production site, sampling of data collected from different plants producing the same battery model should not be allowed.

A change in the bill of materials or energy mix used to produce a battery model requires a new calculation of the carbon footprint for that battery model.

The harmonised rules to be elaborated via a delegated act shall include detailed modelling of the following lifecycle stages:

- Raw material acquisition and pre-processing stage
- Production stage
- Distribution
- Own electricity production
- End of life stage

6. Carbon footprint impact assessment

The carbon footprint of the battery shall be calculated using the “climate change” life cycle impact assessment method recommended in the 2019 Joint Research Centre (JRC) report available at https://eplca.jrc.ec.europa.eu/permalink/PEF_method.pdf.

The results shall be provided as characterised results (without normalisation and weighting). The list of characterization factors to be used is available at <https://eplca.jrc.ec.europa.eu/EnvironmentalFootprint.html>.

7. Offsets

Offsets are calculated relative to a baseline that represents a hypothetical scenario for what emissions would have been in the absence of the mitigation project that generates the offsets.

Offsets shall not be included in the carbon footprint declaration, but may be reported separately as additional environmental information and used for communication purposes.

8. Carbon footprint performance classes

Depending on the distribution of the values of the batteries' carbon footprint declarations placed in the EU internal market, a meaningful number of classes of performance will be identified, with category A being the best class with the lowest carbon footprint life cycle impact, to allow for market differentiation.

The identification of the threshold for each class of performance, as well as their width, will be based on the distribution of performances of the batteries placed on the market in the

previous 3 years, the expected technological improvements, and other technical factors to be identified.

The Commission shall review the number of performance classes and the thresholds between them every three years in order to keep them representative of the market reality and its expected development.

9. Maximum carbon thresholds

Based on the information collected through the carbon footprint declarations and the relative distribution of the carbon footprint performance classes of battery models placed on the market, and taking into account the scientific and technical progress in the field, the Commission will identify maximum lifecycle carbon footprint thresholds for rechargeable industrial and electric vehicle batteries, further to a dedicated impact assessment to determine those values.

In proposing maximum carbon footprint thresholds, the Commission will take into account the relative distribution of the carbon footprint values in batteries on the market, the extent of progress in the reduction of carbon footprint of batteries placed on the Union market and the effective and potential contribution of this measure to the Union's objectives on sustainable mobility and climate neutrality by 2050.

ANNEX III

Electrochemical performance and durability parameters for portable batteries of general use

1. Battery capacity, electric charge which a battery can deliver under a specific set of conditions.
2. Minimum average duration, minimum average time on discharge when used in specific applications, depending on the type of battery.
3. Shelf life (delayed discharge performance), the relative decrease of the minimum average duration after a defined period of time and specific conditions.
4. Endurance in cycles (for rechargeable batteries), the capacity of the battery after a pre-established number of charge and discharge cycles.
5. Resistance to leakage, i.e. resistance to unplanned escape of electrolyte, gas or other material (poor, good or excellent).

ANNEX IV
Electrochemical performance and durability requirements for rechargeable industrial batteries and electric vehicle batteries

Part A

Parameters related to the electrochemical performance and durability

1. Rated capacity (in Ah) and capacity fade (in %).
2. Power (in W) and power fade (in %).
3. Internal resistance (in \square) and internal resistance increase (in %).
4. Energy round trip efficiency and its fade (in %).
5. An indication of their expected life-time under the conditions for which they have been designed.

'Rated capacity' means the total number of ampere-hours (Ah) that can be withdrawn from a fully charged battery under specific conditions.

'Capacity fade' means the decrease over time and upon usage in the amount of charge that a battery can deliver at the rated voltage, with respect to the original rated capacity declared by the manufacturer.

'Power' means the amount of energy that a battery is capable to provide over a given period of time.

'Power fade' means the decrease over time and upon usage in the amount of power that a battery can deliver at the rated voltage.

'Internal resistance' means the opposition to the flow of current within a cell or a battery, that is, the sum of electronic resistance and ionic resistance to the contribution to total effective resistance including inductive/capacitive properties.

'Energy round trip efficiency' means the ratio of the net energy delivered by a battery during a discharge test to the total energy required to restore the initial State of Charge by a standard charge.

Part B

Elements for explanation of the measurements made for parameters listed in Part A

1. Applied discharge rate and charge rate.
2. Ratio between maximum allowed battery power (W) and battery energy (Wh).
3. Depth of discharge in the cycle-life test.
4. Power capability at 80% and 20% state of charge.
5. Any calculations performed with the measured parameters, if applicable.

ANNEX V

Safety parameters

1. Thermal shock and cycling

This test shall be designed to evaluate changes in the integrity of the battery arising from expansion and contraction of cell components upon exposure to extreme and sudden changes in temperature and potential consequences of such changes. During a thermal shock the battery shall be exposed to two temperature limits and held at each temperature limit for a specified period of time.

2. External short circuit protection

This test shall evaluate the safety performance of a battery when applying an external short circuit. The test can evaluate the activation of the overcurrent protection device or the ability of cells to withstand the current without reaching a hazardous situation (e.g. thermal runaway, explosion, fire). The main risk factors are heat generation at cell level and electrical arcing which may damage circuitry or may lead to reduced isolation resistance.

3. Overcharge protection

This test shall evaluate the safety performance of a battery in overcharge situations. The main safety risks during overcharge are the decomposition of the electrolyte, cathode and anode breakdown, exothermic decomposition of the solid electrolyte interphase (SEI) layer, separator degradation, and the Li plating, which can lead to self-heating of the battery and thermal runaway. The factors affecting the outcome of the test shall include, at least, the charging rate and the finally reached state-of-charge (SOC). The protection can be ensured by either voltage control (interruption after reaching the limit charging voltage) or current control (interruption after exceeding maximum charging current).

4. Over-discharge protection

This test shall evaluate the safety performance of a battery in over-discharge situations. Safety risks during over-discharge include polarity reversal leading to oxidation of the anode current collector (Copper) and to plating on the cathode side. Even minor over-discharge may cause dendrite formation and finally short circuit.

5. Over-temperature protection

This test shall evaluate the effect of temperature control failure or failure of other protection features against internal overheating during operation.

6. Thermal propagation

This test shall evaluate the safety performance of a battery in thermal propagation situations. A thermal runaway in one cell can cause a cascading reaction through the entire battery which can be composed of numerous cells. It can lead to severe consequences including a significant gas release. The test shall take into account the tests under development for transport applications by ISO and UN GTR.

7. Mechanical damage by external forces (drop and impact)

These tests shall simulate one or more situations in which a battery accidentally drops or is impacted by a heavy load and remains operational for the purpose for which it was designed. The criteria to simulate these situations should reflect real life uses.

8. Internal short circuit

This test shall evaluate the safety performance of a battery in internal short-circuit situations. The occurrence of internal short circuits, one of the main concerns for battery manufacturers, potentially leads to venting, thermal runaway, along with sparking which can ignite the electrolyte vapours escaping from the cell. The generation of these internal shorts can be triggered by manufacturing imperfections, presence of impurities in the cells or dendritic growth of lithium, and leads to most of in-field safety incidents. Multiple internal short circuits scenarios are possible (e.g. electrical contact of cathode/anode, aluminium current collector/copper current collector, aluminium current collector /anode) each with a different contact resistance.

9. Thermal abuse

During this test, the battery shall be exposed to elevated temperatures (in IEC 62619 this is 85 °C) which can trigger exothermal decomposition reactions and lead to a thermal runaway of the cell.

Proper considerations to the risk of toxic gases emitted from non-aqueous electrolytes should be made for all safety parameters listed in points 1 to 9.

ANNEX VI
Labelling requirements

Part A
General information about batteries

Information on the label of batteries:

1. the manufacturer's name, registered trade name or trade mark;
2. the battery type, batch or serial number of the battery or other element allowing its unequivocal identification;
3. battery model identifier;
4. date of manufacture;
5. date of placing on the market;
6. chemistry;
7. hazardous substances contained in the battery other than mercury, cadmium or lead;
8. critical raw materials contained in the battery.

Part B
Symbol for separate collection of batteries



Part C
QR code

The QR code shall be 100% black and of a size that is easily readable by a commonly available QR reader, such as those integrated in hand-held communication devices.

ANNEX VII

Parameters for determining the state of health of batteries and expected lifetime of batteries

Parameters for determining the state of health of batteries:

1. Remaining capacity;
2. Overall capacity fade;
3. Remaining power capability and power fade;
4. Remaining round trip efficiency;
5. Actual cooling demand;
6. Evolution of self-discharging rates;
7. Ohmic resistance and/or electrochemical impedance.

Parameters for determining the expected lifetime of batteries:

1. The dates of manufacturing of the battery and putting into service;
2. Energy throughput;
3. Capacity throughput.

ANNEX VIII
Conformity assessment procedures

Part A

MODULE A - INTERNAL PRODUCTION CONTROL

1. Description of the module

Internal production control is the conformity assessment procedure whereby the manufacturer fulfils the obligations laid down in points 2, 3 and 4, and ensures and declares that the battery satisfies the requirements set out in Articles 6, 9, 10, 11, 12, 13 and 14 that apply to them.

2. Technical documentation

The manufacturer shall draw up the technical documentation. The documentation shall make it possible to assess the battery's conformity with the relevant requirements referred to in point 1.

The technical documentation shall specify the applicable requirements and cover, as far as relevant for the assessment, the design, manufacture and intended use of the battery. The technical documentation shall contain, where applicable, at least the following elements:

- (a) a general description of the battery and its intended use;
- (b) conceptual design and manufacturing drawings and schemes of components, sub-assemblies, circuits;
- (c) descriptions and explanations necessary for the understanding of the drawings and schemes referred to in point (b) and the operation of the battery;
- (d) a list which includes:
 - (i) the harmonised standards referred to in Article 15, applied in full or in part;
 - (ii) the common specifications referred to in Article 16, applied in full or in part;
 - (iii) other relevant technical specifications used for measurement or calculation purposes;
 - (iv) an indication of which parts of the harmonised standards referred to in point (i) and the common specifications referred to in point (ii) that have been applied;
 - (v) where the harmonised standards referred to in point (i) and the common specifications referred to in point (ii) have not been applied, a description of the solutions adopted to meet the requirements referred to in point 1.
- (e) test reports.

3. Manufacturing

The manufacturer shall take all measures necessary so that the manufacturing process and its monitoring ensure compliance of the battery with the technical documentation referred to in point 2 and with the requirements referred to in point 1.

4. CE marking and EU declaration of conformity

The manufacturer shall affix the CE marking to each individual packaging of the battery model that satisfies the requirements referred to in point 1, or, where it is supplied without packaging, in a document accompanying the battery model.

The manufacturer shall draw up an EU declaration of conformity for each battery model in accordance with Article 18 and keep it together with the technical documentation at the

disposal of the national authorities for ten years after the last battery belonging to the respective battery model has been placed on the market.

A copy of the EU declaration of conformity shall be made available to the relevant authorities of the Member States upon request.

5. Authorised representative

The manufacturer's obligations set out in point 4 may be fulfilled by his or her authorised representative, on his or her behalf and under his or her responsibility, provided that they are specified in the mandate.

Part B

MODULE A1 - INTERNAL PRODUCTION CONTROL PLUS SUPERVISED VERIFICATION

1. Description of the module

Internal production control plus supervised verification is the conformity assessment procedure whereby the manufacturer fulfils the obligations laid down in points 2, 3, 4, and 5, and ensures and declares that the battery satisfy the requirements set out in Articles 7, 8 and 39 that are applicable.

2. Technical documentation

The manufacturer shall draw up the technical documentation. The documentation shall make it possible to assess the battery's conformity with the requirements referred to in point 1, and shall include an adequate analysis and assessment of the risk(s).

The technical documentation shall specify the applicable requirements referred to in point 1 and cover, as far as relevant for the assessment, the design, manufacture and operation of the battery. The technical documentation shall contain, wherever applicable, at least the following elements:

- (a) a general description of the battery;
- (b) conceptual design and manufacturing drawings and schemes of components, sub-assemblies, circuits.;
- (c) descriptions and explanations necessary for the understanding of the drawings and schemes referred to in point (b) and the operation of the battery; test reports.

3. Manufacturing

The manufacturer or the importer that places the battery on the Union market shall take all measures necessary so that the manufacturing process and its monitoring ensure compliance of the manufactured products with the technical documentation referred to in point 2 and with the applicable requirements referred to in point 1.

4. Product and information checks

For each battery model, and where applicable, for each batch that the manufacturer or the importer places on the Union market, the mentioned economic operator shall carry out one or more tests on one or more specific aspects of the battery model or batch of batteries in order to verify conformity with the corresponding requirements referred to in point 1. For large battery batches, the manufacturer, the authorised representative or the importer shall choose a statistically representative sample of batteries.

The manufacturer, or the importer that places the battery model on the Union market, shall submit the information and documents referred to in Articles 7, 8 and 39 of this Regulation to

the notified body for verification of compliance with the applicable requirements and obligations in those Articles, as well as in applicable implementing measures.

5. CE marking and EU declaration of conformity

The manufacturer shall affix the CE marking and, under the responsibility of the notified body referred to in point 4, the latter's identification number to each battery, or to the packaging thereof, that satisfies the applicable requirements of this Regulation.

The manufacturer shall draw up an EU declaration of conformity for each battery model in accordance with Article 18 and keep it together with the technical documentation at the disposal of the national authorities for ten years after the last battery belonging to the respective model has been placed on the market.

A copy of the EU declaration of conformity shall be made available to the relevant authorities of Member States upon request.

6. Authorised representative

The manufacturer's obligations set out in points 4 and 5 may be fulfilled by the manufacturer's authorised representative, on the manufacturer's behalf and under the manufacturer's responsibility, provided that they are specified in the mandate.

ANNEX IX
EU Declaration of conformity No ...

1. Battery model (product, type, batch or serial number):
2. Name and address of the manufacturer and, where applicable, his authorised representative
3. This declaration of conformity is issued under the sole responsibility of the manufacturer
4. Object of the declaration (identification of the battery allowing traceability): description of the battery.
5. The object of the declaration described in point 4 is in conformity with the relevant Union harmonisation legislation: ... (reference to the other Union acts applied).
6. References to the relevant harmonised standards or the common specifications used or references to the other technical specifications in relation to which conformity is declared:
7. The notified body ... (name, address, number) ... performed ... (description of intervention) ... and issued the certificate(s): ... (details, including its date, and, where appropriate, information on the duration and conditions of its validity).
8. Additional information

Signed for and on behalf of:

(place and date of issue):

(name, function) (signature)

ANNEX X

List of raw materials and risk categories

1. Raw materials:
 - (a) cobalt;
 - (b) natural graphite;
 - (c) lithium;
 - (d) nickel;
 - (e) chemical compounds based on the raw materials listed in points (a) to (f) which are necessary for the manufacturing of the active materials of batteries.
2. Social and environmental risk categories:
 - (a) air;
 - (b) water;
 - (c) soil;
 - (d) biodiversity;
 - (e) human health;
 - (f) occupational health and safety;
 - (g) labour rights, including child labour;
 - (h) human rights;
 - (i) community life.
3. The international instruments covering the risks referred to in point 2 include:
 - (a) Ten Principles of the United Nations Global Compact;
 - (b) UNEP Guidelines for Social Life Cycle Assessment of Products;
 - (c) Convention on Biological Diversity Decision COP VIII/28- Voluntary guidelines on Biodiversity-Inclusive impact assessment;
 - (d) ILO Tripartite Declaration of Principles concerning Multinational Enterprises and Social Policy;
 - (e) OECD Due Diligence Guidance for Responsible Business Conduct; and
 - (f) OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas.

ANNEX XI

Calculation of collection rates of waste portable batteries

1. Producers or, where appointed in accordance with Article 47(2), producer responsibility organisations acting on their behalf, and Member States shall calculate the collection rate as the percentage obtained by dividing the weight of waste portable batteries excluding waste batteries from light means of transport, collected in accordance with Article 48 and Article 55, respectively, in a given calendar year in a Member State by the average weight of such batteries that producers either sell directly to end-users or deliver to third parties in order to sell them to end-users in that Member State during that year and the preceding two calendar years.
2. Producers or, where appointed in accordance with Article 47(2), producer responsibility organisations acting on their behalf, and Member States shall calculate the annual sales of portable batteries, excluding batteries from light means of transport, to end-users in a given year, as the weight of such batteries made available on the market for the first time within the territory of the Member State in the year concerned, excluding any portable batteries that have left the territory of that Member State in that year before being sold to the end users.
3. For each battery, only the first time it is made available on the market in a Member State shall be counted.
4. The calculation provided for in points 2 and 3 shall be based on collected data or statistically significant estimates based on collected data.

ANNEX XII

Treatment and recycling requirements

Part A

Treatment requirements

1. Treatment shall, as a minimum, include removal of all fluids and acids.
2. Treatment and any storage, including temporary storage, at treatment facilities shall take place in sites with impermeable surfaces and suitable weatherproof covering or in suitable containers.
3. Waste batteries in treatment facilities shall be stored in such a way that waste batteries are not mixed with waste from conductive or combustible materials.
4. Special precautions and safety measures shall be in place for the treatment of waste lithium based batteries that shall be protected from exposure to excessive heat, water, or any crushing or physical damage during handling, sorting and storage.

Part B

Recycling efficiencies

1. No later than 1 January 2025, recycling processes shall achieve the following minimum recycling efficiencies:
 - (a) recycling of 75 % by average weight of lead-acid batteries;
 - (b) recycling of 65 % by average weight of lithium-based batteries;
 - (c) recycling of 50 % by average weight of other waste batteries.
2. No later than 1 January 2030, recycling processes shall achieve the following minimum recycling efficiencies:
 - (a) recycling of 80 % by average weight of lead-acid batteries;
 - (b) recycling of 70 % by average weight of lithium-based batteries.

Part C

Levels of recovered materials

1. No later than 1 January 2026, all recycling processes shall achieve the following levels of materials recovery:
 - (a) 90 % for cobalt;
 - (b) 90 % for copper;
 - (c) 90 % for lead;
 - (d) 35 % for lithium;
 - (e) 90 % for nickel.
2. No later than 1 January 2030, all recycling processes shall achieve the following levels of materials recovery:
 - (a) 95 % for cobalt;
 - (b) 95 % for copper;
 - (c) 95 % for lead;
 - (d) 70 % for lithium;

(e) 95 % for nickel.

ANNEX XIII

Information to be stored in the European Electronic Exchange System

Information and data shall be treated in accordance with Commission Decision (EU, Euratom) 2015/443⁴. The specific cyber-security arrangements of Commission Decision (EU, Euratom) 2017/46⁵ and its implementing rules shall apply. The confidentiality level shall reflect the consequential harm that may result from disclosure of the data to unauthorised persons.

1. PUBLICLY ACCESSIBLE PART OF THE SYSTEM

Information to be stored and made available in the publicly accessible part of the system by the economic operator that places a battery on the market:

- (a) Battery manufacturer;
- (b) Battery type;
- (c) General description of the model, sufficient for it to be unequivocally and easily identified, including the date of placing in the market;
- (d) Manufacturing place and date;
- (e) Battery composition, including critical raw materials;
- (f) Carbon footprint information in the units indicated in the relevant implementing measure(s);
- (g) Information on responsible sourcing as indicated in the relevant implementing measure(s);
- (h) Recycled content information as indicated in the relevant implementing measure(s);
- (i) Rated capacity (in Ah);
- (j) Minimal, nominal and maximum voltage, with temperature ranges when relevant;
- (k) Original power capability (in Watts) and limits, with temperature range when relevant ;
- (l) Expected battery lifetime expressed in cycles, and reference test used ;
- (m) Capacity threshold for exhaustion (only for EV batteries);
- (n) Temperature range the battery can withstand when not in use (reference test);
- (o) Period for which the commercial warranty for the calendar life applies;
- (p) Initial round trip energy efficiency and at 50% of cycle-life;
- (q) Internal battery cell and pack resistance;
- (r) C-rate of relevant cycle-life test.

⁴ Commission Decision (EU, Euratom) 2015/443 of 13 March 2015 on Security in the Commission (OJ L 72, 17.3.2015, p. 41)

⁵ Commission Decision (EU, Euratom) 2017/46 of 10 January 2017 on the security of communication and information systems in the European Commission (OJ L 6, 11.1.2017, p. 40)

2. REQUIREMENTS FOR THE PART OF THE SYSTEM ACCESSIBLE ONLY TO ACCREDITED ECONOMIC OPERATORS AND THE COMMISSION

The part of the system that shall be accessible only to accredited remanufacturers, second-life operators and recyclers shall contain:

- (a) Detailed composition, including materials used in the cathode, anode and electrolyte;
- (b) Part numbers for components and contact details of sources for replacement spares;
- (c) Dismantling information, including at least:
 - Exploded diagrams of the battery system/pack showing the location of battery cells,
 - Disassembly sequences,
 - Type and number of fastening techniques to be unlocked,
 - Tools required for disassembly,
 - Warnings if risk of damaging parts exist,
 - Amount of cells used and layout;
- (d) Safety measures.

3. REQUIREMENTS FOR THE PART OF THE SYSTEM ACCESSIBLE ONLY TO NOTIFIED BODIES, MARKET SURVEILLANCE AUTHORITIES AND THE COMMISSION

- (a) Results of tests reports proving compliance with the requirements laid out in this Regulation, and its implementing or delegated measures.

ANNEX XIV
Correlation table

Directive 2006/66/EC	This Regulation
Article 1	Article 1
Article 1 first subparagraph point 1	Article 1(1)
Article 1 subparagraph 1 point 2	Article 1(1)
Article 1, second subparagraph	---
Article 2	Article 1(2) and (3)
Article 2(1)	Article 1(2)
Article 2(2)	Article 1(3)
Article 2(2)(a)	Article 1(3)(a)
Article 2(2)(b)	Article 1(3)(b)
Article 3	Article 2
Article 3 point 1	Article 2 point 1
Article 3 point 2	---
Article 3 point 3	Article 2 point 7
Article 3 point 4	---
Article 3 point 5	Article 2 point 10
Article 3 point 6	Article 2 point 11
Article 3 point 7	Article 2 point 39
Article 3 point 8	Article 2 point 49
Article 3 point 9	---
Article 3 point 10	Article 2 point 42
Article 3 point 11	Article 2 point 23
Article 3 point 12	Article 2 point 37
Article 3 point 13	Article 2 point 55
Article 3 point 14	Article 2 point 14
Article 3 point 15	Article 2 point 19
Article 3 point 16	---
Article 3 point 17	---
Article 4	Article 6
Article 4(1)	Annex I
Article 4(1)(a)	Annex I first entry point 1
Article 4(1)(b)	Annex I second entry points 1 to 3

Directive 2006/66/EC	This Regulation
Article 4(2)	---
Article 4(3)	Annex I second entry point 2
Article 4(3)(a)	Annex I second entry point 2 (a)
Article 4(3)(b)	Annex I second entry point 2 (b)
Article 4(3)(c)	---
Article 4(4)	---
Article 5	---
Article 6	Article 3
Article 6(1)	Article 3(1)
Article 6(2)	---
Article 7	---
Article 8	Article 48, Article 49, Article 50, Article 51, Article 52, Article 53, Article 54
Article 8(1)	Article 48
Article 8(1)(a)	Article 48(1)(a) Article 48(1)(b)
Article 8(1)(b)	Article 50
Article 8(1)(c)	Article 49(1) Article 50(1)
Article 8(1)(d)	Article 48(2)(a)(ii) Article 49(1)(b)
Article 8(1), second subparagraph	Article 48(5)
Article 8(2)	Article 48(1) Article 48 (2)
Article 8(2)(a)	Article 48(1) Article 48(2)
Article 8(2)(b)	Article 48(2)
Article 8(2)(c)	---
Article 8(3)	Article 49
Article 8(4)	Article 49
Article 9	---
Article 10	Article 55
Article 10(1)	---
Article 10(1) second subparagraph	Article 61 (3)

Directive 2006/66/EC	This Regulation
Article 10(2)	Article 55(1)
Article 10(2)(a)	---
Article 10(2)(b)	Article 55(1)(a)
Article 10(3)	Article 55(2), Article 62(1) second subparagraph
Article 10(4)	---
Article 11	Article 11
Article 11, first subparagraph	Article 11(1)
Article 11, second subparagraph	Article 11(2)
Article 12	Article 56
Article 12(1)	Article 56(2)
Article 12(1)(a)	Article 48 (1)(e) , Article 49(3)(c)
Article 12(1)(b)	Article 57(1)
Article 12(1), second subparagraph	---
Article 12(1), third subparagraph	---
Article 12(2)	Article 57(2)
Article 12(3)	Article 51(3) ; Article 56(3)
Article 12(4)	Article 57(2) ; Article 57(3)
Article 12(5)	Article 61(4)(c) ; 62(1)(c)
Article 12(6)	Article 57(4)
Article 13	---
Article 13(1)	---
Article 13(2)	Recital 78
Article 14	Article 56(1)
Article 15	Article 58
Article 15(1)	Article 58(1)
Article 15(2)	Article 58(2)
Article 15(3)	Article 58(3)
Article 16	Article 47
Article 16(1)	Article 47(1)
Article 16(1)(a)	Article 47(1)(a)
Article 16(1)(b)	Article 47 (1)(a)
Article 16(2)	---

Directive 2006/66/EC	This Regulation
Article 16(3)	Article 47(1)(d) and (e)
Article 16(4)	Article 60(5)
Article 16(5)	---
Article 16(6)	---
Article 17	Article 46
Article 18	Article 47(4) (c)
Article 18(1)	---
Article 18(2)	---
Article 18(3)	---
Article 19	Article 48(1), 49(1), 50-54
Article 19(1)	Article 48(2), 49(1), 50, 52-54
Article 19(2)	Article 47(4) (c)
Article 20	Article 60
Article 20(1)	Article 60(1)
Article 20(1)(a)	Article 60(1)(f)
Article 20(1)(b)	Article 60(1)(b)
Article 20(1)(c)	Article 60(1)(c)
Article 20(1)(d)	Article 60(1)(b)
Article 20(1)(e)	Article 60(1)(e)
Article 20(2)	Article 60
Article 20(3)	Article 60(4)
Article 21	Article 20 Rules and conditions for affixing the CE marking; Article 13, Annex VI Part A, B, C
Article 21(1)	Article 13(3)
Article 21(2)	Article 13(2)
Article 21(3)	Article 13(4)
Article 21(4)	Article 13(3)
Article 21(5)	Article 13(3)
Article 21(6)	---
Article 21(7)	---
Article 22a	---
Article 23 Review	Article 55(3), Article 77
Article 23(1)	Article 77(1)

Directive 2006/66/EC	This Regulation
Article 23(2)	Article 77(2)
Article 23(2)(a)	---
Article 23(2)(b)	Article 55(3) ; Article 77 2(d)
Article 23(2)(c)	Article 56(4)
Article 23(3)	Article 77(2) second subparagraph
Article 23a	Article 73
Article 23a(1)	Article 73(1)
Article 23a(2)	Article 73(2)
Article 23a(3)	Article 73(3)
Article 23a(4)	Article 73(5)
Article 23a(5)	Article 73(6)
Article 24	Article 74
Article 24(1)	Article 74(1)
Article 24(2)	Article 74(3)
Article 24(2), second subparagraph	Article 74(3) second subparagraph
Article 25	Article 76
Article 26	---
Article 27	---
Article 28	Article 78
Article 29	Article 79
Article 30	--
Annex I	Annex XI
Annex II	Annex VI Part B
Annex III	Annex XII
Annex III Part A	Annex XII Part A
Annex III Part B	Annex XII Part B
Annex IV Procedural requirements for registration	---