

Position Paper

EU Commission proposal concerning batteries and waste batteries (COM(2020) 798)



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The TÜV-Association welcomes the EU Commissions' initiative to modernise EU legislation on batteries (regulating portable, automotive, EV and industrial batteries). Batteries are becoming more and more essential for key sectors of our economy and society such as mobility, energy and communications. Regulatory action setting out ambitious and binding requirements is clearly needed to realize the ambitious goals of the Circular Economy Action Plan and the EU Green Deal.

In order to fully tap the potential of batteries for environmental and climate protection, their own ecological and social footprint must be as low as possible. The Commissions' proposal to establish legally binding requirements on sustainability and safety for the entire lifecycle of batteries - amongst others the use of responsibly sourced materials, minimum share of recycled materials, carbon footprint declarations, performance indicators, durability and labelling requirements, as well as recycling targets - therefore deserves our full support. The inclusion of due diligence requirements for large batteries deserves our full support. It should be regarded as a starting point for the upcoming horizontal regulation on due diligence.

Apart from setting out ambitious requirements, it is vitally important to ensure their consistent and effective compliance. The TÜV-Association strongly welcomes the proposal of the European Commission to include Notified Bodies in the conformity assessment of batteries. Third-party conformity assessment bodies can ensure that batteries meet the relevant safety and sustainability criteria, thereby preventing non-compliant products from being placed on the EU market (precautionary principle). Early conformity assessment can even prevent non-compliant products being manufactured and thereby save resources. In addition, an independent assessment reinforces consumers' trust in product claims, for instance with regard to sustainable production and the lack of hazardous substances. Moreover, the work of market surveillance authorities is supported, allowing them to fully allocate their limited resources to the detection of counterfeit and significantly fewer non-compliant products.

In addition to the provisions on carbon footprint, recycled content and due diligence the use of Notified Bodies should equally be foreseen with regard to other essential safety, performance and durability requirements. In doing so, the application of testing and certification can be complemented by the newly introduced EN ISO/IEC 17029 standard on verification and validation.

Central demands

1. Conformity assessment and accreditation

- > Make use of Notified Bodies to assess the compliance of batteries with both safety and sustainability requirements
- > Maintain high quality standards through accreditation as the preferred means to demonstrate competence of Notified Bodies
- > Integrate the new EN ISO/IEC 17029 standard on validation and verification into existing conformity assessment procedures

2. Sustainability and safety requirements

- > Prescribe a mandatory independent assessment not only for sustainability requirements, but also for safety and durability requirements of large batteries
- > Require remanufactured batteries to undergo the same conformity assessment procedure as new batteries to ensure a high safety level
- > Take sustainability requirements covering the entire lifecycle as a starting point for other EU sectoral product legislation

3. Supply chain and due diligence

- > Ensure compliance with provisions through third-party conformity assessment
- > Expand the list of raw materials to include copper, iron and aluminium
- > Take the proposed batteries' due diligence obligations and enforcement mechanisms, in particular the involvement of third-parties, as a starting point for the upcoming horizontal due diligence regulation

4. Labelling and information requirements

- > Enable transparent and reliable information for consumers and operators
- > Incorporate the work of independent conformity assessment organisations as an enabler of transparency

1. Conformity assessment and accreditation

In order to ensure that batteries meet the ambitious and legally binding requirements foreseen in the Commission proposal, the stipulation of effective compliance mechanisms is crucial. The TÜV-Association welcomes the inclusion of independent conformity assessment bodies (so-called Notified Bodies) to assess the compliance with due diligence and durability requirements. As regards the compliance with safety and durability requirements, however, the European Commission proposes a mere self-declaration of the manufacturer for large batteries. This inconsistent approach is not conducive given that safety and sustainability requirements are intrinsically linked to each other and should be addressed as a whole. In light of the risk-based approach, which is the foundation of EU product legislation, safety and performance requirements of large batteries should be equally assessed by third-parties.

The value of third-party assessment

Notified Bodies can ensure that batteries meet the relevant safety and sustainability criteria before they are placed on the EU market. Through their testing, inspection and certification activities, they help to enforce the precautionary principle as a cornerstone of EU product legislation. The incorporation of Notified Bodies is a cornerstone of different EU product legislations such as for machinery, medical devices or lifts.

- > By detecting non-compliant products before they are shipped, often even produced, an ex-ante conformity assessment contributes to saving valuable material resources and reducing the carbon footprint of overseas shipment.
- > Conformity assessment bodies equally reduce the burden on market surveillance authorities, which can focus their limited resources on detecting other non-compliant and counterfeit products.
- > Third-party assessment helps to reinforce consumers' trust in product claims, for instance with regard to the sustainable production, the lack of hazardous substances and the durability of batteries. Greenwashing by manufacturers can be effectively disclosed.

Maintain high quality standards through accreditation

The European system of accreditation and notification ensures a high quality infrastructure. Notified Bodies have to consistently prove that they have both the necessary level of technical expertise to carry out such assessments and are independent from manufacturers and users alike. Only then, can they be recognized and publicly designated by the European Commission.

- > In order to further strengthen this quality infrastructure, the European Commission should oblige Member States and their competent bodies to accept accreditations as the preferred and adequate

means for demonstrating competence. To ensure a uniform level of competence, the same standardisation principles should be used in the accreditation process.

Integrate validation and verification into existing conformity assessment procedures

When it comes to the conformity assessment procedures, the Commission proposal relies on a self-assessment by the manufacturer (Module A) and - for certain requirements - the involvement of a Notified Body (Module A1). The EN ISO/IEC 17029 standard on validation and verification, which was introduced as a new conformity assessment procedure in 2020, offers a very suitable complementation for both modules. They are defined as to be a confirmation of information, which has been declared in claims (i.e. statements, declarations, assertions, reports).

- > Validation is applied to claims regarding an intended future use or projected outcome (confirmation of plausibility). Verification is applied to claims regarding events that have already occurred or results that have already been obtained (confirmation of truthfulness)
- > Validation/verification bodies can be internal bodies of the organization that provides the claim (first party), bodies that have a user interest in the claim (second party) or bodies that are independent of the person or organization that provides the claim and have no user interests in that claim (third party)
- > As many requirements of the new Battery Regulation apply to information and confirm the reliability of this declared information (e.g. carbon footprint declarations, performance declaration, reparability declarations), validation and verification should play a crucial role here.

2. Sustainability and safety requirements (Arts. 7-12)

The Commission's proposal to establish legally binding requirements on the sustainability of batteries covering their entire lifecycle deserves our full support. These provisions can be regarded as a starting point for other sectoral EU product legislation as well as the upcoming EU Sustainable Product Initiative. In addition to defining sustainability requirements, it is of utmost importance to lay down effective compliance mechanisms. The TÜV-Association welcomes that the proposal assigns a role to Notified Bodies with regard to the assessment of carbon footprint declarations and recycled content requirements. This will foster the trust of consumers, users and market surveillance agencies in the validity of these declarations.

In addition to sustainability requirements, Notified Bodies should equally assess the compliance with safety and durability requirements of large batteries with a high risk potential, namely EV and industrial

batteries as well as stationary battery energy storage systems.

Carbon footprint (Art. 7 & Annex II)

The TÜV-Association supports the Commission's proposal to establish mandatory carbon footprint reporting, indicating the carbon footprint performance class, and to introduce maximum thresholds for life cycle carbon footprint values. A carbon footprint declaration allows consumers to evaluate which battery has a lower impact on the environment thereby encouraging an environmental-friendly production choice. The TÜV-Association welcomes that the Commission acknowledges the role of Notified Bodies in this area. Reliable and specified requirements for carbon footprint calculations are needed for an effective conformity assessment. Measurement procedures and techniques already exist, but need to be further elaborated and specified.

Recycled content (Art. 8)

As batteries are becoming more and more essential for key sectors of our economy, it is crucial to define requirements driving their circularity. Recycled content can reduce the carbon footprint of batteries and will reduce environmental and social impacts related to extraction. Therefore, we strongly welcome the provisions stipulated in Article 8 and the requirement to involve conformity assessment bodies as part of the conformity assessment (Annex VIII).

- > The scope of the obligations should not be limited to EV and industrial batteries only, but also cover portable and primary batteries. Moreover, the objective for recycled content, which is one of the principles of a circular economy, must also apply to other product categories beyond batteries. Recycled content in high-end applications is crucial to extend the value of resources.
- > To verify and trace recycled contents, the "chain of custody" international standard (ISO 22095) can be applied. The standard creates a framework for traceability of products and materials in all sectors. Until recently, such standards have only existed for specific industries, such as the timber or cocoa industries. ISO 22095 is the first international standard to provide generally applicable definitions, overarching approaches for design, implementation and organisation, five models for the design of traceability in supply chains. The traceability of products and materials is not only important at the end of the supply chain for marketing, but also for processing companies.

Performance and durability requirements (Arts. 9-10 & Annex III, IV)

The proposal contains provisions on performance and durability for portable batteries of general use (Art. 9) and for rechargeable industrial and EV batteries (Art. 10). While the requirements themselves can be welcomed, stronger compliance mechanisms should be set up.

- > The provisions laid down in Article 9 should apply to all portable batteries, not only to the ones in general use, as well as to batteries for light means of transport.
- > The criteria listed in Annex III should be viewed as minimum criteria; amendments to them should be possible over time as technological and scientific progress advances.
- > The conformity assessment of rechargeable industrial batteries and electric vehicle batteries with electrochemical performance standards and durability requirements as laid down in Article 10 should not be left to the manufacturers themselves. Given that the electrochemical performance and durability parameters define the battery's functionality and power output, they should be part of the independent assessment by the Notified Body (be grouped into Annex VIII Module A1).
- > The new conformity assessment procedures of validation and verification (EN ISO/IEC 17029) are very suitable in this area as a way to confirm information, which have been declared in claims.

Replaceability, repairability and reusability requirements (Art. 11)

Ensuring that batteries are removable and replaceable in devices is a necessary requirement to reduce our overall environmental footprint.

- > The scope of the removability and replaceability requirement should be clarified. It should not be restricted to portable batteries, but instead apply to all products containing batteries - including both battery packs and cells.
- > At a minimum, battery removability and replaceability should also be required for light means of transport such as e-bikes. In these cases, this is to avoid the situation where the bicycle itself must be replaced after the battery fails - which is, on average, just 2-4 years.
- > Battery removability for industrial products and EVs must also be a requirement but, where necessary, may only be possible for professionals.
- > The new conformity assessment procedures of validation and verification (EN ISO/IEC 17029) should be used as a way to confirm information, which have been declared in claims.

Safety requirements (Art. 12, Annex V)

Batteries must be safe and shall not present any risk to human health and the environment. While this general requirement is stipulated in Article 4(2), specific safety parameters are only prescribed for stationary battery energy storage systems (Article 12). Manufacturers of these systems are obliged to demonstrate that their batteries have been successfully tested for the safety parameters laid down in Annex V. These provisions, however, are insufficient and must be strengthened.

- > The safety parameters prescribed in Annex V should equally apply to other industrial batteries, as well as EV batteries. A high level of protection must be ensured for all batteries with a substantial risk potential.
- > A mere self-assessment by the manufacturer does not correspond to the high risk potential of stationary battery energy storage systems as well as EV batteries. A Notified Body should assess the protection of the battery against potential risks such as sudden changes in temperature or overcharge situations. More comprehensive conformity assessment procedures must therefore be foreseen which include an independent control of both the design phase (type examination) and the production phase (quality assurance of the production process).

Remanufacturing (Art. 59)

In line with a circular economy, the concepts of “remanufacturing” and “repurposing” are necessary approaches to extend the life cycle and to enhance the resource efficiency of batteries. However, it should be ensured that remanufactured or repurposed batteries must be subject to the same safety, testing and product design requirements as new batteries. Thus, they should comply with the same strict regulations and standards.

- > A remanufactured battery or a device with a remanufactured battery must undergo the entire conformity assessment procedure (functionality, product certification, safety and transport tests) again. All guarantee and liability claims need to be transferred to the party undertaking the preparation for second-life as well as all requirements in regards to labelling, testing etc. set out in the draft regulation.

3. Supply chain and due diligence (Arts. 39, 72 & Annex X)

As demand for batteries grows, it is crucial that their own ecological and social footprint is as low as possible. That also means that the increasing use of batteries does not come at the expense of environmental, social and human rights abuses in countries where battery materials are sourced. The TÜV-Association welcomes the Commission’s proposal to make due diligence obligations for responsible supply chains mandatory for companies placing batteries on the EU market.

Ensure compliance through third-party conformity assessment

- > Whilst a horizontal EU due diligence legislation is needed, the inclusion of due diligence requirements in this sectoral product regulation is welcomed. It is important to ensure the coherence of both legal acts. With its requirements and effective enforcement mechanisms, the batteries regulation has the potential to serve as a starting point for the new horizontal regulation.

- > The European regulators are called upon to define mandatory specifications and requirements for compliance with social and environmental criteria along the entire supply chain. The risk categories that are mentioned in Article 39 (3) and Annex X (2) must be more specified. The clearer the requirements, the more reliable the assessment of compliance can be - and thus also the organisation of tracking and tracing along the supply chain.
- > Merely developing mandatory requirements is not enough. In addition to increased standardisation and the associated specification of requirements to comply with, independent confirmation of conformity with applicable laws, guidelines and standards is particularly crucial to ensure reliable compliance with human rights and environmental standards along the entire supply chain.
- > The TÜV-Association strongly welcomes the proposal of the European Commission to make use of Notified Bodies as part of Article 39. Through their testing, inspection and certification activities, Notified Bodies can reliably contribute to document the stages in the process chain of a product or material, from the raw material to the shop counter. Trust in the declarations of the individual links in the supply chain is created through confirmation and certification.

Expanding the list of raw materials

- > The list of raw materials covered under due diligence requirements in Annex X (1) should be expanded to include copper, iron and aluminium (bauxite). Copper and cobalt (the latter is included on the list) are often mined together, where cobalt is a by-product of copper (and nickel) mining, e.g. in the Copper-Cobalt belt in the Democratic Republic of the Congo (DRC). Since they are mined together/close to each other, the environmental impact is often similar. The demand for iron and aluminium (bauxite) for vehicles with electric engines is projected to increase by 13 to 14 times between 2019 and 2039. Future technologies could massively increase the demand for aluminium. Regarding the extraction of those metals, human rights violations and environmental destruction have been documented in-depth.

Recognising private certification schemes

- > Companies participating in voluntary supply chain certification schemes that have been recognised by the European Commission (Art. 72) should not be assumed to be automatically complying with the legislation. Voluntary industry schemes should only be recognised if they can prove to meet all the requirements established under Article 39, including third-party verification. This is important to ensure a level-playing field and to avoid a race to the bottom.
- > End of life batteries should only be exported to non-EU countries if it can be proven that the same environmental and occupational health and safety standards apply to waste treatment in the destination facilities as in the EU. For this purpose, a list of certified treatment facilities should be drawn up at the EU Commission.

4. Labelling and information requirements

The TÜV-Association supports the Commission's aim to enhance the transparency of information on batteries. Transparent and reliable information are an important prerequisite for consumers to make informed choices and for operators to have confidence in the battery's performance level and upgradability. Independent conformity assessment organisations are by their nature an enabler of transparency. Through their independent testing and certification, they assure consumers and users that the claims of the manufacturers are valid thereby preventing a false sense of safety. As regards the conformity assessment procedures, the incorporation of the new EN ISO/IEC 17029 standard on validation and verification should be considered as a very suitable tool to enhance transparency and legitimate trust.

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