European Materials Handling Federation

Position Paper

FEM comments on the European Commission proposal for a Regulation on batteries and waste batteries

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FEM represents European manufacturers of materials handling, lifting and storage equipment. Our members manufacture equipment that enables the movement, storage, control and protection of materials, goods, and products. Our industry delivers organisational and technical solutions for efficient and sustainable materials flow throughout the supply chain.

The materials handling industry covers various types of equipment, both stationary and mobile, powered by different types of energy sources, including batteries. Besides the equipment, our industry also manufactures battery packs for mobile applications, such as shuttles, cranes and industrial trucks. Consequently, several types of FEM equipment will be impacted by the proposed requirements for batteries and waste batteries.

FEM acknowledges the need to modernise the EU legislation on batteries. Our industry supports the objectives of the European Commission proposal, which aims at strengthening the Internal Market through a common set of rules, promoting circular economy, and reducing environmental and social impacts of batteries.

In addition, FEM strongly believes that the future regulation should aim to accelerate innovation and strengthen European competitiveness. Our manufacturers are world leader for most of materials handling equipment and integrated systems, and industrial mobile battery applications in our sector are mainly developed in Europe.

To ensure a future regulation of high quality, the European Commission proposal should be revised according to the better regulation principles. In short, the legislation must strengthen the competitiveness and sustainability of the Union's economy, in the simplest, most efficient, and effective way possible, whilst avoiding overregulation and unnecessary administrative burdens, and finally be designed to facilitate its transposition and practical application.

FEM identified necessary improvements in the European Commission proposal to achieve a legislative framework meeting the better regulation principles, contributing to the Single Market and enhancing innovation - essential elements for the EU competitiveness and sustainable growth agenda. Indeed, as highlighted in the EU industrial strategy, supporting innovation is essential to maintain the global leadership position of the European materials handling industry.

To shape a balanced and supportive legislative framework, FEM identified the following improvements in the European Commission proposal:

1. **Establish clear definitions to ensure a common understanding for the implementation and enforcement of the future legislation**

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2. **Differentiate the manufacturing of cells from other manufacturing activities to apply sustainability requirements where they have the biggest potential impact**
3. **Remove the systematic use of third-party verifications for sustainability aspects since it is neither necessary, nor proportionate or a booster for the circular economy**
4. **Impose a battery management system only to industrial batteries suitable for second life and exclude industrial batteries that do not have integrated management system**
5. **Take into consideration specificities of the applications when setting performance and durability requirements to protect innovation**
6. **Prevent unqualified persons to alter a battery to maintain safety as a top priority**
7. **Limit the take back obligation of waste industrial batteries**
8. **Revise information requirements and systems by providing clarity to manufacturers, avoid duplication and simplify implementation in accordance with international standards**
9. **Remove Article 16 to ensure that standards are developed by standardisation committees**
10. **Address due diligence in one single piece of EU legislation that provides a clear and unique framework: the upcoming European horizontal legislation on due diligence**

1. Establish clear definitions to ensure a common understanding for the implementation and enforcement of the future legislation

First, it should be specified that batteries used in industrial applications for traction purposes will fall under the 'industrial' battery category (Article 2.11) and not the electric vehicle category (Article 2.12). In line with the current battery classification, traction batteries included in electric industrial trucks[1], such as forklift trucks, should continue to fall in the 'industrial' category. Keeping the same classification will avoid confusion for manufacturers, consumers, collection schemes and recyclers, and ultimately ensure a smooth collection of those batteries.

In addition, the scope of 'automotive batteries' (Article 2.10) should be clarified, in order to know whether or not this definition is applicable to other mobile machines, such as shuttles and forklift trucks for which the battery has the same function. In our view, the definition of 'automotive batteries' should also apply to starter, lighting and ignition power batteries integrated in self-propelled machines since the application and technology are identical. Sometimes, ignition and lighting batteries used in cars and mobile machines are the very same products.

2. Differentiate the manufacturing of cells from other manufacturing activities to apply sustainability requirements where they have the biggest potential impact

In order to be the most efficient and effective, the sustainability requirements (Chapter II) must apply at a level where they will have the biggest benefits for the environment. Consequently, sustainability requirements must be differentiated for the manufacturing of cells and other manufacturing activities, notably the assembly. For industrial batteries, requirements on carbon footprint (Article 7), recycled content (Article 8), performance and durability (Article 10) should apply to the manufacturing of cells only, instead of other manufacturing activities.

The assembly of cells and other components, such as connectors and management system, in the final battery pack has a very low impact on the overall footprint of the battery. This is due to the fact that batteries are primarily composed of cells. Furthermore, the materials handling industry does not have any control, nor any influence, on cell manufacturing.

[1] Examples of materials handling equipment covered under the "industrial trucks" category are available on the FEM website: https://www.fem-eur.com/product-groups/industrial-trucks

Therefore, applying such sustainability requirements at the level of equipment manufacturing, or assembly of cells and components into battery packs, will lead to heavy requirements for our industry, while environmental and social benefits will be very limited. It would be disproportionate and burdensome.

Moreover, it should be recognised that for some battery types, for example lead acid traction batteries used in industrial trucks, there is already a very high level of circularity and recycling, making improvement margins very limited. Consequently, there is no ground for introducing regulatory burdens where there will be no environmental or safety benefit. Additional requirements would be counterproductive by undermining the economic drivers supporting the current high level of sustainability.

In addition, we do not support the proposed split of rechargeable industrial batteries below and above 2 kWh capacity. Such a threshold creates an arbitrary split of the product portfolio of materials handling equipment manufacturers, which will inevitably lead to confusion. Should these sustainability requirements have a positive impact in specific applications, the segmentation should not be applied on basis of battery capacity.

Finally, the proposed development of a new calculation methodology for carbon footprint of the battery will lead to duplication of methodologies. Instead, the regulation should refer to standards that are already existing.

3. **Requiring systematic use of third-party verifications for sustainability aspects is neither necessary, nor proportionate or a booster for the circular economy**

The proposed Regulation requires the use of third-party verification for several requirements related to sustainability aspects, such as carbon footprint, recycled content, and supply chain due diligence. This is a disproportionate measure that goes against the current practices in our industry.

Putting manufacturers under the supervision of certifiers by mandating their intervention will not result in additional benefits for the environment or foster the circular economy. For manufacturers, this means more costs and delays without any kind of gain over self-assessment which has been successfully used for many years. The expansion of third-party certification is also effectively against the flexibility provided by the New Legislative Framework (NLF), which lies at the core of the EU Internal Market legislation.

In line with our proposal to differentiate sustainability requirements for the manufacturing of cells and other manufacturing activities, certification processes should also be differentiated. We believe that no mandatory third-party certification should be required for manufacturers assembling cells and components into the final battery pack. Compliance with sustainability requirements should be self-certified by equipment manufacturers.

4. **Impose a battery management system only to industrial batteries suitable for second life and exclude industrial batteries that do not have integrated management system**

The access to usage data history of batteries is relevant. However, several technical and timing aspects should be taken into consideration.

First, in some cases, the battery management system (BMS) is integrated in the machine, and not part of the battery. Article 14 should clearly exclude industrial batteries that do not have a battery management system, such as lead-acid and nickel-based batteries.

Those batteries are not suitable for second life and a “State of Health information” provision would not be meaningful. Although the traceability has a positive impact on supply chains in general, it is currently not possible to measure the State of Health and expected lifetime for the sub-components of batteries (i.e. cells) due to technological limitations. Thus, data in the battery management system would not be of high value

and such requirements would result in costs and higher administrative burdens for equipment manufacturers without substantial benefits for the environment.

In addition, we believe that the legislation should not impose a given technical solution to share information on the state of health and expected lifetime of batteries as it may be a technological blockage. The proposed parameters to determine the state of health, except the cooling demand and the evolution of discharging rates, can be easily measured with a test cycle. In addition, proposed parameters to determine the expected lifetime, such as the depth of discharge, are useless because they are not related to the state of health.

Therefore, we propose to amend Article 14.1 to "exclude chemistries other than lithium batteries" and to limit the scope to batteries for large energy storage systems and electric vehicles. Procedures to determine the state of health should be clearer and be defined by standard committees.

Furthermore, the Article 14 raises several questions related to the access of information in the BMS: is there a need to develop a standardised interface or common protocol? Developing harmonised methodologies and standards take times.

The future Regulation should set a clear and realistic implementation date. The Regulation's general implementation date is technically not feasible: we need at least 5 years.

5. **Applying performance and durability requirements without considering specificities of applications will stifle innovation**

The proposed requirements on performance and durability will stifle innovation. Imposing horizontal requirements, without considering specificities of the different application will hamper the development of new battery applications. This may have even worse consequences: eroding performances of equipment. We firmly believe that the future regulation should accelerate innovation and strengthen European competitiveness.

The materials handling industry covers a very wide range of equipment and technologies offering different characteristics and needs. Considering this diversity, the relevance of proposed performance parameters differs from one application to another.

Today, manufacturers of industrial mobile battery applications need full flexibility to meet users' needs to develop better performing battery powered machinery. The battery is a central component of the equipment, subject to fierce competition, driving innovation and resulting in more efficient machines.

6. **Safety should remain a top priority: unqualified persons should not alter a battery**

The proposed Regulation introduces different concepts, such as removability, remanufacturing, repair, and repurposing, to further extend the life of batteries, a principle we support.

While it is important for the Batteries Regulation to define the legal basis for repair and second life, the general language of Articles 14, 59.1 and 60.1a needs to be amended. They should clearly mention that the safety information provided for handling and testing does not guarantee the safety of the battery in case of repurposing. It is essential to prevent alterations to a battery by persons lacking the necessary competence, and to avert potential safety risks. Operating an electrochemical device, such as batteries, requires adequate technical expertise.

Moreover, we believe the second life should be managed by persons having the necessary qualifications and experience.

7. **Limit the take back obligation of waste industrial batteries**

Producers should take back only waste batteries that they have made available on the market. Right now, Article 49.1 suggests that the producer will have the responsibility of taking back batteries of the "respective type" that they have made available on the market.

Article 49 should instead state that producers should take back only waste batteries that they have introduced into the market. The producer cannot expand its responsibility to third actors, so should only be responsible for the product that it has made available on the market. This clarification is essential to limit the liability of equipment manufacturers while implementing the future legislation.

8. **Revise information requirements and systems by providing clarity to manufacturers, avoid duplication and simplify implementation in accordance with international standards**

Through Articles 13, 18, 60, 64 and 65, the proposed regulation refers to an exaggerated long list of labelling systems and information requirements that will have to be provided together with the battery, in different forms: printed or engraved on the battery, through a QR code, with a battery passport and electronically in a database.

This system will result in at least a duplication of sources and work: manufacturers will have to provide the same information under different formats. Concrete consequences will be consequent unnecessary administrative burden to maintain and operate several labelling systems. In addition, the proposal does not provide any clarity on the purpose of the different information provisions and how the different systems shall interoperate.

These processes must be streamlined and unified. To achieve effective, efficient, and simple requirements, a prerequisite is to clearly define the purpose of gathering each piece of information. In addition, we suggest aligning labelling requirements with international standards in order to facilitate the free movement of batteries (for example, using standards like IEC 62620 or IEC 62902).

9. **Remove Article 16 to ensure that standards are developed by standardisation committees**

We strongly believe that European standards must be developed by European standardisation committees, and not by the European Commission. It is of the utmost importance that the standards are developed under the standardisation processes which have worked as a successful model under the New Legislative Framework for many years, with the right balance of participation in the process from the European Commission, Member States, European standardisation organisations and stakeholders.

It is totally unacceptable that the European Commission could task the development of standards to the Joint Research Centre if the relevant harmonised standards developed by CEN CENELEC "are not sufficient" (Article 16.b). This essentially means taking over the standardisation process on the basis of a vague and subjective criterion which can be interpreted at will. Standardisation should not be allocated to EU civil servants. Standards must be elaborated by standardisation bodies, such as the International Electrotechnical Commission (IEC), to ensure it remains an industry-driven process that supports regulatory compliance but also export. We therefore strongly recommend removing Article 16 in its entirety.

10. **Address due diligence in one single piece of EU legislation that provides a clear and unique framework: the upcoming European horizontal legislation on due diligence**

In general, we support ethical sourcing of raw materials and better protection of workers at global level. However, we believe that the very presence of the due diligence obligations (laid down in Article 39 and

Annex X) in the proposal is debatable considering the upcoming European horizontal legislation on due diligence.

The multiplication, in different pieces of legislation, of regulatory requirements addressing the same issue is a source of fragmentation resulting in confusion, additional costs and potential duplication if not inconsistencies. Policy coherence would command addressing due diligence in one single piece of EU legislation that provides a clear and unique framework.

Although they should certainly not substitute the states' responsibilities, economic operators have a role to play in minimising social and environmental risks in their supply chains. Requirements should however be:

- *Fair*: economic operators' role should not be extended to impacts that are completely out of their control.
- *Proportional*: the focus should be on tier-one suppliers with whom there is an established relationship, and on the most severe risks. Moreover, economic operators must be under a 'best effort' obligation and not a result obligation.
- *Predictable*: the possibility for the European Commission to adopt delegated acts to adapt the list of raw materials and risks means that due diligence policy and measures can be regularly subject to a complete overhaul and new certification.
- *Realistic*: it is simply unrealistic to expect that economic operators will be able to document "*the market transactions from the raw material's extraction to the immediate supplier to the economic operator*" (article 39, paragraph d, point iii).
- *Cost-effective*: requiring mandatory third-party certification will place economic operators under unnecessary and very costly indeed supervision of notified bodies. Economic operators must have the possibility of self-certifying.