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EPBA Consumer Batteries Europe Position on Removability and Replaceability of Portable Batteries in Powerbanks

Article 11 of the EU Battery Regulation 2023/1542 (EUBR) seeks to ensure that batteries integrated into appliances are easily removable for separate waste treatment and replaceable to prevent premature disposal of otherwise functional devices. The objective is clear: enable reuse and proper recycling, thereby reducing electronic waste.

Powerbanks, however, differ fundamentally from typical appliances. Their primary function, structure, and materials revolve entirely around the battery. Unlike smartphones or laptops, there is no secondary device involved. When a Powerbank's battery degrades, end-users cannot realistically replace it themselves or through independent technicians. Instead, they naturally purchase a new unit.

Consumers are unlikely to replace the cells within a Powerbank when the cost of the cells approaches that of purchasing a new device. Furthermore, this practice would not effectively reduce waste, as manufacturers would be required to maintain inventories of replacement batteries that may never be utilized. Ultimately, these unused components would enter the waste stream after prolonged storage.

Applying Article 11 to Powerbanks would require complex disassembly or even impossible pathways for end-user battery replacement, an impractical and costly approach with no meaningful waste diversion benefit. Improper battery replacement could compromise product integrity, functionality, and durability. More critically, end-user safety would be at risk, including hazards such as incorrect installation, short-circuiting, or accidental puncture of battery cells.

Current Powerbank designs prevent battery removal and replacement, yet significant incidents of fire, explosions, and leakages still occur, highlighting the inherent instability of the technology. Allowing end-users direct access to batteries for removal or replacement could reasonably increase the likelihood of such incidents.

Article 3(26) of the EUBR defines an "appliance" as any electrical or electronic device powered, fully or partly, by a battery. By this definition, Powerbanks are essentially batteries themselves. Interpreting them as appliances contradicts both their design and environmental lifecycle. Treating Powerbanks as standalone batteries places them outside Article 11's scope, aligning legal interpretation with realistic user behavior and existing safety considerations.

Upon examination of the definitions set forth in Article 3, it is submitted that a Powerbank satisfies the criteria of a battery pack as defined under paragraph 1(b).
Accordingly, it constitutes a battery pursuant to paragraph 1(a) and not merely an electrical device incorporating a battery.

A Powerbank:
1. Comprises one or more battery cells or modules encapsulated within a housing;
2. Is designed as a complete unit, not to be dismantled by the end-user; and
3. Stores and supplies electrical energy to external electrical devices, such as multiple consumer electronics across brands.

Hence, a Powerbank operates functionally and structurally in a manner equivalent to a battery pack and must be classified and regulated as such under the EUBR.

Mandating replaceability of batteries for inherently non-repairable units leads to inefficient regulation. Regulators would benefit from a predictable, rational framework where devices are categorized based on their core function, not arbitrary thresholds. A functional identification test should apply: if an item's primary resource use and design center on the battery, it is classified as such. In that respect, Powerbanks should be explicitly excluded from Article 11 obligations.

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By adopting this interpretation, regulators uphold the spirit of environmental protection while simplifying compliance, avoiding unnecessary burdens, ensuring the safety of end-users and effective recycling of end-of-life devices.

About EPBA – Consumer Batteries Europe

We are the leading organisation of quality manufacturers of portable batteries and power solutions in Europe. It comprises of a total of seven member companies, along with several associated members.

In 2023, our members sold 5.5 billion batteries i.e. Alkaline, Zinc Carbon, Lithium coin and other button cells, and rechargeable batteries, along with two million chargers in Europe. The sector employs around 4,000 people in Europe, and the VAT contribution amounts to approximately EUR 260 million. We are dedicated to advancing the sustainable, safe, and efficient use of portable batteries across Europe.

Our mission is to advocate for innovation and environmental stewardship in the battery industry, promote best practices in manufacturing and recycling, and ensure compliance with stringent safety and environmental standards. We work closely with stakeholders, including the EU institutions, policymakers, and consumers, to safeguard and enhance our positive contribution to the EU economy, the environment, and the communities in which we operate.