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## **Battery Industry Coalition Common Position Paper on Batteries In the light of the revision of European battery legislation**

**April 2003**

This Position Paper is common to the three associations representing the battery industry in the EU.

EPBA is the European Portable Battery Association. It is the trade association representing the interests of the portable battery industry (manufacturers and importers of both rechargeable and primary batteries) active in the European market.

Eurobat is the European Storage Battery Manufacturers' Association formed by industrial batteries manufacturers and automotive batteries manufacturers. It represents the interests of those battery manufacturers.

CollectNiCad is the European Association formed by portable and industrial nickel cadmium battery manufacturers and by Original Equipment Manufacturers incorporating those batteries in their equipment. CollectNiCad represents the interests of nickel cadmium battery manufacturers, users and collectors.

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## **1 - SCOPE**

1.1. The scope of the Directive, covers all battery types, sizes and categories. Batteries for national security, space and military applications are exempted.

N.B. A Table indicative of the main categories of batteries concerned by the Directive is supplied in *Annex 1*.

1.2. Depending on the battery type, size and category, specific requirements e.g. collection rates, recycling, marking can be set.

1.3. Considering the scope of the Waste Electrical and Electronic Equipment (WEEE) Directive and specifically its Annex 2 (1), all batteries must be removed from the separately collected waste EEE. Once removed, they are subject to the specific provisions of the Batteries Directive 91/157/EEC.

1.4. Considering the scope of the Restriction of the Use of certain Hazardous Substances (ROHS) Directive, batteries are excluded, as per Article 2 (2).

## **2 - LEGAL BASIS**

All battery legislation should be based on the harmonised approach of Article 95 of the EU treaty. End-of-life management should be governed by a single legal framework across the EU. Non- harmonised standards based on Article 175 of the EU Treaty should not be applicable since end of life requirements impact the design and commercialisation of the product.

## **3 – PRODUCER RESPONSIBILITY**

### 3.1. Definition of “producer”:

Producers means any person who, irrespective of the selling technique used (similar to adopted legislation such as the WEEE directive):

- (i). manufactures and sells batteries under his own brand,
- (ii). resells under his own brand batteries produced by other suppliers (private label),
- (iii). imports or exports batteries on a professional basis into a Member State,

(iv). manufactures and sells, imports or exports equipment incorporating batteries on a professional basis into a Member state

3.2. Producer field of responsibility:

(i). Each producer is responsible for the products he puts on the market (individual producer responsibility principle).

(ii). Member States should provide a mechanism to ensure the compliance of each producer with its obligation on the basis of national registers (similar to adopted legislation such as WEEE).

(iii). Each actor in the collection chain (municipality, retailer, consumer, battery and equipment producers/importers, public authorities) should be fully responsible for his own action and financing. (shared responsibility principle).

**4 – COLLECTION**

4.1. Definition of Collection:

Collection means the take back of spent batteries collected by municipalities, retailers, industrial end users and/or others.

4.2. Collection Responsibility:

The Battery Industry agrees to collect all batteries taking into account the following issues:

(i). The main purpose is resource recovery and prevention of uncontrolled disposal of spent batteries.

(ii). The legal framework should enable the collection systems to operate at reasonable costs and with appropriate financing mechanism.

(iii). Collection of batteries together with other waste streams (integrated waste management e.g. WEEE) should be allowed and encouraged.

(iv). Producers should have the freedom to choose between the participation in an individual or a collective collection system.

4.3. Collection target:

(i). Collected battery quantities are always measured in weight in the Member States. Collection targets could be further expressed as a ratio:  
 - in weight per inhabitant per year  
 - in percentage of batteries available for collection per year,  
 but should not be linked to sales.

(ii) The quantity available for collection depends on the battery systems and applications (see below).

(iii). The battery collection target should be measurable and achievable and has therefore to be based on the experience of existing National Collection Organizations in the Member States.

Note: Long-term public awareness programmes funded by the relevant public authority can achieve a major and enduring change in consumer behavior leading to an increase in collection of spent consumer and other portable batteries. Producers are willing to contribute with their technical expertise to such awareness programmes.

**Specific Collection Targets Requirements:**

<p><u>EPBA</u> EPBA proposes the following for <u>spent portable batteries</u>: Indicative collection targets of between 50-130 g/inhabitant per year in total are achievable after 5 years, depending on the existing infrastructure and collection experience in the Member States.</p>	<p><u>CollectNiCad</u> The Directive should set collection targets. They should be set in each Member State taking into account the level of collection efficiency reached at the time of the Directive's entry into force.  CollectNiCad proposes to achieve the following targets in all Member States within 5 to 10 years after entry into force:</p>	<p><u>Eurobat:</u> <u>Automotive Batteries (SLI):</u> The quantity of batteries sold in relation to batteries recollected can vary significantly, as the collection rate is influenced by the:  - lifespan of Automotive Batteries, which can range from 3 to 7 years, - percentage of cars with batteries in use that is exported, and - variation of metal prices (in times of low Lead prices, scrap metal dealers will keep spent batteries on stock)</p>
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	<ul style="list-style-type: none"> <li>➤ Spent sealed/portable rechargeable Ni-Cd batteries: a minimum of 75 % by weight collection efficiency.</li> <li>➤ The take back of industrial nickel cadmium batteries is regulated by supplier customer contracts. Spent industrial rechargeable Ni-Cd batteries: 95 % by weight collection efficiency.</li> </ul> <p>Collection efficiency should be calculated according to the quantity of spent batteries available for collection (batteries collected for recycling and batteries present in the waste stream and not recycled) on a yearly basis.</p>	<p>Prior to establish targets for collection, the infrastructure has to be installed in certain countries. In consequence, the implementation of the collection targets has to consider an appropriate transition period. The collection rates should be defined with:</p> <ul style="list-style-type: none"> <li>- 80% of the total batteries available for collection after 5 years,</li> <li>- 90% of the total of batteries available for collection after 10 years.</li> </ul> <p>Due to the import and export streams, the verification of the target should be on European level, considering the data to be provided by the single Member States.</p> $\text{Collection Rate} = \frac{L_R \text{ (Batteries recycled)}}{L_A \text{ (Batteries available)}}$ <p><math>L_R</math> Weight of Batteries input from domestic sources + Exports to all countries</p> <p>-----</p> <p><math>L_A</math> <i>AM (= Volume x Average Weight acc. to life-span) + batteries from demolished cars in the country</i></p> <p><u>Industrial lead acid batteries:</u></p> <p>The collection and recycling of Industrial Batteries is to be regulated by established industry practices and supplier-customer regimes. Though the collection regimes vary from country to country within the EU, the efficiency rate for these Lead Acid Batteries is currently quite high. In addition these spent batteries have a positive market value, so they are in the scope of existing collection regimes (Scrap Industry – End User) beyond the influence and responsibility of the producer.</p>
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## **5 – RECYCLING**

### 5.1. Definition:

Recycling means the reprocessing in a production process of the waste materials for the original purpose or for other purposes, but excluding energy recovery which means the use of combustible waste as a means of generating energy through direct incineration with or without other waste but with recovery of the heat.

### 5.2. Principle:

All batteries collected will be recycled except those batteries that are not in a condition to be recycled which should be allowed to be considered as hazardous waste.

### Note:

The ban on land filling of batteries containing hazardous substances and in condition to be recycled should be strictly enforced in all Member States.

### 5.3. Technology:

All collected batteries, should be recycled by best available recycling technology not entailing excessive cost – BATNEEC.  
A list of BATs should be defined, while the market competition between those technologies will ensure the most economic costs.

### 5.4. Target:

The reprocessing of spent batteries should lead to the recovery of 55 % average by weight of the battery, across all battery systems.

**Specific Recycling Targets requirements:**

<u>EPBA:</u>	<u>Eurobat:</u>	<u>CollectNiCad.</u>
<p>The recycling target of 55% by weight should not be legally binding but indicative across all battery systems in order to allow for sound competition between recycling technologies.</p>	<p>EUROBAT recommends defining a recovery target of an average of 55% (recognizing the high level of recovery of lead content in the batteries, as well as the recovery of steel, plastic components etc.) by weight of the automotive and industrial batteries available after collection.</p>	<p>The 55% target by weight should be legally binding for NiCd batteries only.  <u>Recovery:</u> the recycling process should lead to the recovery of all the cadmium content of processed spent rechargeable Ni-Cd batteries.  <u>Reuse:</u> the Cadmium metal thereby recovered (in metallic form 99.99% pure) is destined for reuse in Ni-Cd batteries and other cadmium applications.</p>

**6 – MARKING OF PRODUCTS**

6.1. With the European-wide approach of collecting all batteries, any further marking system (than the 1991/157 Directive) on batteries becomes unnecessary.

In particular, the marking is not relevant for industrial applications (Stand By Batteries, Motive Power, etc.) because of the size and the professional use.

6.2. For consumer applications, sound consumer information at points of collection allows for informing the consumer in a more efficient way.

## **7 – FINANCING**

7.1. Market actors (retailer, producer) should have the opportunity to make their cost visible to their customers in the same way as public actors make their cost visible to the citizen by waste taxes.

7.2. Producers should take back “free of charge” collected consumer and other portable batteries from municipalities and retailers and/or dismantling centers without any payment to the previous actors.

7.3. For professional and industrial applications, producers and importers (suppliers) may conclude specific agreements with end users (customers) stipulating appropriate financing methods.

7.4. Producers should have the freedom to choose between the participation in an individual or collective collection and recycling organization/system.

## **8 – ECONOMIC INSTRUMENTS**

8.1. Deposit systems considerably reduce the number of collection opportunities (collection points) due to the re-imburement operation. A refundable deposit system is not economically feasible and is impractical: there are many difficulties linked to the control of the system through the sales outlets and it will add huge burden to the retailers. Furthermore it does not act as an incentive to collect batteries due to their long lifetime in the economic sphere (from 3 to 20 years and longer). Finally, the system is very open to fraudulent use.

8.2. Other economic instruments used as a punitive measure and not to finance the collection requirements - such as ecotaxes – must be avoided.

*Annex 1. Indicative List of battery types.*

**TABLE 1** Indicative main categories of batteries covered by the Directive.

Battery Categories	Battery Types  Main application : →	Portable  (Consumer, professional or general purpose batteries)	Industrial  (stand-by, motive power and transportation)	Automotive  (starter, lighting and ignition)
<b>Primary</b>	Zinc-Carbon	Y		
	Zinc-Alkaline	Y		
	Silver Oxide,	Y		
	Lithium Primary	Y	Y	
	Zinc-Air	Y	Y	
<b>Rechargeable (accumulator)</b>	Lead-Acid	Y	Y	Y
	Nickel-Cadmium	Y	Y	
	Nickel-Metal H	Y	Y	
	Lithium Rechargeable	Y	Y	

Key: Y = yes