

Batteries and accumulators and waste batteries and accumulators

2003/0282(COD) - 24/11/2003 - Document attached to the procedure

COMMISSION'S IMPACT ASSESSMENT

For further information regarding the context of this issue, please refer to the summary of the Commission's initial proposal (COM(2003)0723) for a Directive on batteries and accumulators.

1-- POLICY OPTIONS AND IMPACTS : There are three possible policy and regulatory options to reach the objectives pursued by this proposal.

1.1- Option 1 - No policy change scenario: Here, the current Battery Directives would remain in place without any change. This would mean that Member States would be required to organise efficient collection schemes for batteries and accumulators containing more than 0.0005% of mercury, more than 0.025% of cadmium and more than 0.4% of lead by weight. Moreover, batteries and accumulators used in vehicles (automotive batteries and industrial batteries used in electrical vehicles), which fall under the scope of Directive 2000/53/EC, would have to meet the obligations of this Directive. Batteries and accumulators in end-of life vehicles would be collected together with the end-of life vehicle on the basis of the collection systems set up in accordance with this Directive.

1.2- Option 2 - Policy change - policy instruments: Policy instruments range from legislative instruments to voluntary instruments.

- Legislative instruments: the various policy instruments in the form of binding legislative acts at Community level are provided for in Article 249 of the EC Treaty. These are namely a Regulation (which has a general application and is binding in its entirety and directly applicable in all Member States); a Directive (which is binding as to the result to be achieved and Member States are free to choose the form and methods to achieve this result) and a Decision (which is binding in its entirety upon those to whom it is addressed). The option of a Regulation or a Decision was discarded because neither was considered appropriate for reaching the policy objective in mind. The option chosen by the Commission was that of a Directive.

- Voluntary agreements: these could be concluded either at national level to implement a piece of Community legislation or at Community level. The conclusion of voluntary agreements with industry at Community level was discarded at an early stage since such agreements would not be appropriate in order to reach the policy objectives.

1.3- Option 3 - Policy change - prescriptive measures:

- Collection requirements for all spent batteries and accumulators: Directive 91/157/EEC requires Member States to set up efficient collection schemes for batteries with a certain mercury, cadmium and lead content. As experience with the current Directive has shown that consumers have difficulties distinguishing between portable batteries containing cadmium, mercury and lead covered by this Directive and other portable batteries (e.g. alkaline manganese and zinc-carbon batteries), it is considered necessary to extend the scope of the proposed policy/proposal to all portable batteries.

- Recycling requirements for all spent batteries and accumulators: in order to meet the environmental objective of avoiding batteries ending up in the waste stream, all the batteries collected should in principle

enter recycling processes. In other words, the collection requirements should be complemented with recycling requirements.

- Phase-out of the use of cadmium in batteries where substitutes are available: a specific policy option related to cadmium in batteries would be to restrict the use of cadmium in batteries and require a phase-out of the use of this substance if substitutes are available. This specific policy option should avoid that cadmium from batteries ends up in the environment.

- Complementary policy options including: the introduction of the producer responsibility principle; a ban on landfill and incineration of spent industrial and automotive batteries and accumulators; monitoring the amount of spent portable NiCd batteries in the waste stream; and market-based instruments (deposits).

The options of setting voluntary targets and a deposit scheme at Community level were analysed and discarded at an early stage. Voluntary targets would not create any additional incentives for Member States to set up efficient collections systems compared to the current Community legislation, since voluntary targets would not be enforceable. As regards recycling, the current Battery Directive does not have any specific recycling requirements.

The policy option of a deposit scheme at Community level was analysed and discarded at an early stage. Even though the setting up of an EU-wide deposit system could guarantee the return of spent batteries, this policy option was discarded mainly for economic reasons.

Both the policy option of a phase out of the use of cadmium in batteries where substitutes are available and the policy option of establishing collection and recycling requirements for cadmium batteries have the advantage that no or less virgin cadmium will be used in the batteries' production.

CONCLUSION: the chosen option (a new Directive) sets minimum key elements and provides the legal obligations to introduce a Community-harmonised strategy for batteries and accumulators while leaving the Member States free to choose the most appropriate national measures to reach those objectives.

IMPACTS

Economic: The proposed Community legislation establishes principles at the Community level to avoid distortions of the internal market. Due to economies of scale, battery recycling becomes more efficient if large volumes of batteries and accumulators are processed. The main economic benefits of collecting and recycling all types of spent batteries and accumulators are:

- production and energy costs savings for the virgin materials used in batteries, which can be replaced by recycled materials;
- disposal cost savings due to higher levels of recycling, in particular costs related to landfill;
- lower recycling costs because of higher collection rates and economies of scale; and
- avoidance of costs for retrieving the damage caused by landfilled batteries containing hazardous substances disposed by mistake with other types of batteries.

Social: As regards the social effects, new collection and recycling companies are likely to appear. Bearing in mind that the current rate of collection and recycling of spent portable batteries is low, the potential, as regards job creation and competitiveness in this sector, could be considerable.

Environmental: From an environmental point of view, collection and recycling of spent batteries generates environmental benefits of various types:

- fewer batteries (used, hoarded and new ones) are sent to landfill and incineration.
- the reduction in the use of virgin metals in the battery production and the increased use of recycled metals also have positive environmental impacts, e.g. less energy consumption, and help to close the material loop.
- emissions to the environment at early stages of the batteries' life cycle occur through water contamination and air emissions. These emissions are avoided when materials are recycled.

The introduction of the producer responsibility principle, in line with Article 174 of the EC Treaty, would encourage producers to design and manufacture their products in an improved way thereby ensuring the longest possible product life, and if it is scrapped, the best methods for recovery and disposal. Negative environmental impacts could be related to the transportation involved in the collection and recycling of batteries. The transportation involved in the collection depends mainly on the collection system chosen.

2- FOLLOW-UP: An implementation report will have to be submitted by member States to the Commission every three years. The Commission will publish a final report on implementation of the Directive, as well as the collection and recycling targets in the Official Journal.

To monitor the specific environmental concerns related to the portable NiCd batteries, which risk of ending up in the municipal solid waste stream, Member States will monitor the municipal solid waste stream on the amount of spent portable NiCd batteries found. To avoid free riders on the market, Member States will set up a register of producers who put their products on the Community market.

The Commission will evaluate the impacts of the Directive on the basis of the Member States' reports and may propose amendments to the Directive particularly to adjust the collection and recycling requirements and the use of hazardous substances in batteries and accumulators.