

Manual of European Environmental Policy

The following pages are a section from the Manual of European Environmental Policy written by the Institute for European Environmental Policy.

The Manual was published by Earthscan/Routledge from 2010 to 2012. It was designed as an on-line interactive reference work and annual printed versions were also produced.

This section is the text of the Manual as published in 2012. It is therefore important to note the following:

- The contents have not been updated since 2012 and no guarantee is given of the accuracy of the contents given potential subsequent developments.
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Batteries and accumulators

Formal references	
2006/66/EC (OJ L266 26.09.06)	Directive on batteries and accumulators and waste batteries and accumulators
Proposed 21.11.03 – COM(2003)723	
Legal base	Article 192 TFEU (originally Article 175 TEC) and Article 114 TFEU (originally Article 95 TEC)
Amended by	
2008/12/EC (OJ L76 19.03.08)	Amending Directive 2006/66/EC on batteries and accumulators and waste batteries and accumulators, as regards the implementing powers conferred on the Commission
2008/103/EC (OJ327 5.12.2008)	Amending Directive 2006/66/EC on batteries and accumulators and waste batteries and accumulators as regards placing batteries and accumulators on the market
Regulation (EU) No 1103/2010 (OJ L313 30.11.2010)	Regulation establishing rules on capacity labelling of portable secondary (rechargeable) and automotive batteries and accumulators
Binding dates	
Common methodology for calculating annual portable battery/accumulator sales	26 September 2007
Formal compliance (Directive 2006/66/EC)	26 September 2008
Member States to notify Commission of rules on penalties applicable to infringements of national provisions	26 September 2008
Formal compliance (Directive 2008/103/EC)	5 January 2009
Member States to ensure that portable and automotive batteries clearly indicate their capacity	26 September 2009 (detailed rules to be laid out by 26 March 2009)
Member States to ensure that: producer/third-party schemes are set up for treatment and recycling of waste batteries/accumulators; batteries and accumulators collected in accordance with Article 8 (or Directive 2002/96/EC) are treated/recycled through schemes that comply with Community legislation on health, safety and waste management	26 September 2009

Detailed rules on calculation of recycling efficiencies to be added to Annex III	26 March 2010
Recycling processes to meet specified recycling efficiencies (Annex III, Part B)	26 September 2011 (NB following corrigendum OJ L311 10.11.06)
Collection rate of 25 per cent	26 September 2012
First Member State implementation reports	26 June 2013 (every 3 years thereafter)
First Commission implementation report	26 March 2014 (every 3 years thereafter; second report to make any necessary proposals for revision of the Directive)
Collection rate of 45 per cent	26 September 2016
Formal references	
91/157/EEC (OJ L78 26.3.91)	Directive on batteries and accumulators containing certain dangerous substances
Proposed 1.12.88 – COM(88)672	
Legal base	Article 114 TFEU (originally Article 100a EEC Treaty)
Amended by	
93/86/EEC	Adaptation (marking)
98/101/EC (OJ L1 05.01.99)	Adaptation (prohibiting certain batteries)
Binding dates	
Formal compliance (91/157)	18 September 1992
Formal compliance (93/86)	31 December 1993
Formal compliance (98/101)	1 January 2000
National programmes	17 September 1992Note: Directive 91/157/EEC which preceded Directive 2006/66/EC was repealed on the date of adoption of Directive 2006/66/EC . Note: Directive 91/157/EEC was repealed by Directive 2006/66/EC .

Purpose of the Directive

Directive 2006/66/EC, commonly known as the Batteries Directive, is intended to improve the environmental performance of batteries and accumulators and of the activities of economic operators involved in the life cycle of batteries and accumulators, in particular those directly involved in the treatment and recycling of waste batteries and accumulators. It also promotes improved collection and recycling of waste batteries and accumulators.

Summary of the Directive

The Directive prohibits the placing on the market of certain batteries and accumulators with mercury or cadmium content above a fixed threshold. It also promotes a high rate of collection and recycling of waste batteries and accumulators and improvement in the environmental performance of all involved in the life cycle of batteries and accumulators, including their recycling and disposal.

The aim is to cut the amount of hazardous substances in the environment, in particular mercury, cadmium and lead, by reducing the use of these substances in batteries and accumulators and by treating and re-using the amounts that are used.

Scope

The Directive applies to all types of batteries and accumulators, although those used in security, military or space equipment are exempt from its provisions. It therefore covers a wider range of products than its predecessor Directive 91/157/EEC, which applied only to batteries containing mercury, lead or cadmium and excluded 'button cells'.

The following are prohibited:

- Batteries and accumulators, whether or not incorporated in appliances, containing more than 0.0005 per cent by weight of mercury (or 2 per cent by weight for button cells).
- Portable batteries and accumulators, including those incorporated in appliances, containing more than 0.002 per cent by weight of cadmium (except for portable batteries and accumulators for use in emergency and alarm systems, medical equipment or cordless power tools).

Batteries or accumulators which do not meet the requirements of the Directive may not be placed on the market after 26 September 2008.

Collection and treatment

To ensure that a high proportion of spent batteries and accumulators are recycled, Member States must take measures (including economic instruments) to promote and maximize separate waste collections for batteries and accumulators. They must make arrangements enabling end-users to discard spent batteries and accumulators at collection points in their vicinity and have them taken back at no charge by the producers. Collection rates of at least 25 per cent and 45 per cent have to be reached by 26 September 2012 and 26 September 2016, respectively.

In principle, it must be possible for batteries and accumulators to be removed from appliances readily and safely; Member States should ensure that manufacturers design their appliances accordingly.

Member States must also ensure that, from 26 September 2009, collected batteries and accumulators are treated and recycled using the best available techniques. Recycling must exclude energy recovery. As a minimum, treatment must include removal of all fluids and

acids. Batteries and accumulators must be treated and stored (even if only temporarily) in sites with impermeable surfaces and weatherproof covering, or in suitable containers.

Battery and accumulator recycling must reach the following levels by 26 September 2011:

- At least 65 per cent by average weight of lead-acid batteries and accumulators, including the recycling of lead content to the highest degree technically feasible.
- 75 per cent by average weight of nickel–cadmium batteries and accumulators, including the recycling of lead content to the highest degree technically feasible.
- At least 50 per cent by average weight of other battery and accumulator waste.

Landfilling or underground storage of batteries and accumulators containing cadmium, mercury or lead is allowed if there is no viable end market, or if recycling is not the best solution environmentally, economically and socially. Otherwise it is prohibited to landfill or incinerate waste from industrial and automotive batteries and accumulators; residues from treating and recycling them may, however, be disposed of in these ways. Batteries and accumulators may be treated or recycled outside the Member State concerned or outside the EU as long as EU legislation on waste shipment is respected.

Producer responsibility

All producers of batteries and accumulators must be registered. Producers must bear the cost of collecting, treating and recycling industrial, automotive and portable batteries and accumulators, and the costs of related campaigns to inform the public about these arrangements. Small producers may be exempted from this obligation provided the proper functioning of collection and recycling schemes is not impeded.

End-users may be informed through: campaigns (e.g. on environmental and health impacts of the substances used in batteries and accumulators, and collection and recycling arrangements available for end-users); direct information from distributors that waste batteries and accumulators may be discarded at sales points; and visible, legible and indelible markings on batteries, accumulators and battery packs (or packaging if the battery itself is too small). The latter must include: the symbol of the crossed-out wheeled bin (in Annex II to the Directive); the capacity of the accumulator or the portable battery; the chemical symbols Hg, Cd and Pb if the batteries, accumulators or button cells contain over 0.0005 per cent mercury, over 0.002 per cent cadmium or over 0.004 per cent lead.

Reporting and review

Member States must report to the Commission on implementation of the Directive and measures being taken to encourage developments affecting the environmental impact of batteries and accumulators (including new recycling and treatment techniques). The first report will cover the period to 26 September 2012 and reports must be produced every three years after that. Based on the Member State reports, the Commission must publish a report on the implementation of the Directive, its environmental impact and any impact on the functioning of the internal market. In November 2009, the Commission adopted a Decision (2009/851/EC) establishing a questionnaire for Member States' implementation reports.

The Directive will be reviewed after the second round of Member State reports; the Commission will examine the appropriateness of further risk management measures,

minimum collection targets and minimum recycling obligations, and if necessary propose amendments to the Directive.

Commission Decisions

The Commission has adopted three Decisions concerning the finalization of specific provisions or methodologies provided for, but not finalized within, the Directive 2006/66/EC:

- Commission Decision 2008/763/EC establishing a common methodology for the calculation of annual sales of portable batteries and accumulators to end-users.
- Commission Decision 2009/603/EC establishing requirements for registration of producers of batteries and accumulators.
- Commission Decision 2009/851/EC establishing a questionnaire for Member States' reports on the implementation of Directive 2006/66/EC.

Capacity labelling of batteries and accumulators

Pursuant to the requirement of Directive 2006/66/EC for all portable and automotive batteries and accumulators to be provided with a capacity label, Regulation (EU) No 1103/2010 entered into force on 29 November 2010, establishing rules as regards capacity labelling of portable secondary (rechargeable) and automotive batteries and accumulators. The Regulation will apply to such batteries placed on the market for the first time from the end of May 2012. Article 2 states that the capacity shall be considered as the electric charge that a battery or accumulator can deliver, and specifies the international standards to be used to determine this capacity. Article 3 states that the capacity of portable secondary (rechargeable) batteries shall be expressed in 'milliampere-hour(s)' (mAh) or 'ampere-hour(s)' (Ah), and that of automotive batteries in 'ampere-hour(s)' (Ah) and 'Cold Cranking Amperes' (A). Article 4 (in conjunction with Annex III and Annex IV) specifies the information that should be contained in the label and the minimum size of the label.

Development of the Directive

Directive 2006/66/EC repealed the previous Batteries Directive 91/157/EEC. The new Directive was initially proposed by the Commission on 21 November 2003, in response to objectives set by the Sixth Environment Action Programme and Directive 2002/96/EC on waste electrical and electronic equipment (the WEEE Directive [2002/96/EC](#)), which called for the existing EU legislation on batteries and accumulators to be revised as soon as possible.

Directive 91/157/EEC was deemed to be failing to realize the desired objectives of environmental protection and proper functioning of the internal market. In particular:

- Its limited scope was confusing for consumers, which had had negative impacts on levels of participation in collection schemes, and problems with implementation in Member States.
- It failed to acknowledge that incinerated and landfilled batteries and accumulators are an important source of emissions of heavy metals (mercury, lead and cadmium).
- There was much variation in how the Directive was implemented within the Member States.

Measures introduced in the proposal for a revised Directive included: extension of the Directive's scope to cover the majority of batteries and accumulators, including 'button cells'; the objective of diverting all spent batteries and accumulators from final disposal operations (landfill and incineration, including a prohibition on landfill and incineration of industrial and automotive batteries); encouraging efficient collection and recycling of spent batteries; an additional collection target of 80 per cent for portable nickel–cadmium (NiCd) batteries; tighter limits on mercury, cadmium and lead content; take-back obligations for manufacturers; separate collection for automotive batteries and accumulators; minimum recycling efficiency levels for batteries (75 per cent by weight for NiCd batteries and 55 per cent by weight for other batteries and accumulators); and measures towards creating an internal market for the recycling of collected batteries.

The proposed Directive was subject to substantial disagreements between the Parliament and Council. Agreement on the Directive was eventually brought about by a Conciliation Committee. Notable elements of the conciliation agreement related to:

- Registration requirements and exemptions for small producers: all producers must be registered with the competent national authorities.
- Removability of batteries: manufacturers must design appliances to ensure that spent batteries and accumulators can be readily removed (except where safety, performance, medical or data integrity reasons require continuity of power supply).
- Take-back obligations: distributor take-back will be the normal collection method for portable batteries, and distributors must inform end-users about the possibility of discarding waste portable batteries at their sales points. Existing alternative schemes may be maintained if shown to be at least as effective in environmental terms as distributor take-back.
- Historical waste: producers must finance net costs arising from the collection, treatment and recycling of all waste batteries and accumulators, regardless of when they were placed on the market.
- Financing of public information campaigns: producers must finance net costs of information on collection, treatment and recycling.
- Capacity labelling: all portable and automotive batteries and accumulators must show their capacity no later than 12 months after the Directive is transposed.
- Research: Member States shall promote research to make batteries less environmentally harmful and to encourage the development of new recycling technologies.
- Treatment and recycling techniques: producers must use the best available techniques; schemes must comply with Community health, safety and waste management legislation; cadmium, mercury or lead batteries or accumulators may be disposed of in landfills or by underground storage under certain conditions.
- Recycling targets: MEPs accepted the Council's proposed recycling target of 50 per cent (as opposed to their own proposed target of 55 per cent) for recycling of batteries other than NiCd and lead-acid batteries given other improvements secured in the Directive.

Implementation of the Directive

A list of measures transposing the Directive in the Member States can be found in their national [execution measures](#).

Implementation of Directive 2006/66/EC is still ongoing and no implementation reports have yet been published. The first set of Member State reports, covering the period to 26 September 2012, are due to be sent to the Commission by 26 June 2013 and the first Commission implementation report should follow by 26 March 2014. Further implementation reports will follow every three years.

Enforcement and court cases

A number of cases were decided concerning the previous Directive (91/157/EEC) and associated Directives (93/86/EEC and 98/101/EC):

- [C-303/95](#) 11.7.1996. This was a judgement against Italy for failure to adopt within the prescribed period the necessary measures to comply with Directive 91/157/EEC.
- [C-218/96, C-219/96, C-220/96, C-221/96 and C-222/96](#) 12.12.1996. This judgement in a series of cases against Belgium for failure to transpose various Directives included one for failure to transpose Directive 93/86/EEC. Belgium did not dispute this, but stated that transposition of Directive 93/86 required adoption of a royal decree and that relevant draft legislation was still awaiting ministerial signature before submission to the King. As the Directive had not been transposed within the required time limit, the Court ruled against Belgium.
- [C-282/96 and C-283/96](#) 29.5.1997. This was a judgement against France for failure to adopt within the prescribed periods the necessary measures to comply with Directives 91/157/EEC and 93/86/EEC.
- [C-236/96](#) 13.11.1997. This was a judgement against Germany for failure to adopt within the prescribed periods measures necessary to comply with Directives 91/157/EEC and 93/86/EEC.
- [C-298/97](#) 28.5.1998. This was a judgement against Spain for failing to adopt the measures necessary to comply with the Directive; Spain contended that the obligations of the Directive were being carried out, but the Court concluded that the relevant measures were incomplete and the relevant legislation fragmentary, and therefore insufficient.
- [C-347/97](#) 21.1.1999. This was a judgement against Belgium for failure to adopt the measures necessary to comply with the Directive; Belgium argued that all the requirements of the Directive had been met by existing legislation, but the Court ruled that the relevant agreements did not provide that they must be reviewed and updated regularly, at least every four years, and communicated to the Commission, and therefore did not comply with Article 6.
- [C-215/98](#) 8.7.1999. This was a judgement against Greece for failure to draw up within the prescribed period the programmes provided for in Article 6 of the Directive (i.e. programmes to: reduce heavy-metal content of batteries, promote batteries containing smaller quantities of dangerous substances; gradually reduce spent batteries and accumulators in household waste; promote research into reducing dangerous substance content and methods of recycling; and bring about separate disposal of spent batteries and accumulators covered by Annex I).
- [C-178/98](#) 8.7.1999. This was a judgement against France for failure to adopt programmes to bring about the measures necessary to comply with the Directive; the Court ruled that the French measures were not in the form of programmes and were not to be completed according to a precise timetable as required by Article 6.

Related legislation

Several other EU Directives have interactions with Directive 2006/66/EC. These include:

- Directive on Waste ([2008/98/EC](#)).
- Directive on Waste Electrical and Electronic Equipment (WEEE) ([2002/96/EC](#)).
- Directive on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS) ([2002/95/EC](#)).

Directive 2008/98/EC sets the basic concepts and definitions related to waste management and lays down waste management principles such as producer responsibility and the ‘waste hierarchy’. Directive 2002/96/EC lays down rules related to the management of waste electrical and electronic equipment, much of which contains batteries. The relationship between the two Directives is recognized within the preambles of Directive 2002/96/EC; Annex II requires that batteries be removed from any separately collected WEEE; and Annex III sets out technical requirements for treatment sites for WEEE, including appropriate containers for storage of batteries. Directive 2002/95/EC includes provisions related to mercury, cadmium, lead, substances that may be contained in batteries.