# Directive 2012/19/EU of the European Parliament and of the Council of 4 July 2012 on waste electrical and electronic equipment (WEEE) (recast) (Text with EEA relevance)

## DIRECTIVE 2012/19/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL

# of 4 July 2012

## on waste electrical and electronic equipment (WEEE)

(recast)

# (Text with EEA relevance)

## THE EUROPEAN PARLIAMENT AND THE COUNCIL OF THE EUROPEAN UNION,

Having regard to the Treaty on the Functioning of the European Union, and in particular Article 192(1) thereof,

Having regard to the proposal from the European Commission,

Having regard to the opinion of the European Economic and Social Committee<sup>(1)</sup>,

Having regard to the opinion of the Committee of the Regions<sup>(2)</sup>,

Acting in accordance with the ordinary legislative procedure<sup>(3)</sup>,

Whereas:

- (1) A number of substantial changes are to be made to Directive 2002/96/EC of the European Parliament and of the Council of 27 January 2003 on waste electrical and electronic equipment (WEEE)<sup>(4)</sup>. In the interests of clarity, that Directive should be recast.
- (2) The objectives of the Union's environment policy are, in particular, to preserve, protect and improve the quality of the environment, to protect human health and to utilise natural resources prudently and rationally. That policy is based on the precautionary principle and the principles that preventive action should be taken, that environmental damage should, as a priority, be rectified at source and that the polluter should pay.
- (3) The Community programme of policy and action in relation to the environment and sustainable development (Fifth Environmental Action Programme)<sup>(5)</sup> stated that the achievement of sustainable development calls for significant changes in current patterns of development, production, consumption and behaviour and advocates, inter alia, the reduction of wasteful consumption of natural resources and the prevention of pollution. It mentioned waste electrical and electronic equipment (WEEE) as one of the target areas to be regulated, in view of the application of the principles of prevention, recovery and safe disposal of waste.

- (4)This Directive supplements the general waste management legislation of the Union, such as Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste<sup>(6)</sup>. It refers to the definitions in that Directive, including the definitions of waste and general waste management operations. The definition of collection in Directive 2008/98/EC includes the preliminary sorting and preliminary storage of waste for the purposes of transport to a waste treatment facility. Directive 2009/125/EC of the European Parliament and of the Council<sup>(7)</sup> establishes a framework for setting ecodesign requirements for energy-related products and enables the adoption of specific ecodesign requirements for energy-related products which may also be covered by this Directive. Directive 2009/125/EC and the implementing measures adopted pursuant thereto are without prejudice to the waste management legislation of the Union. Directive 2002/95/EC of the European Parliament and of the Council of 27 January 2003 on the restriction of the use of certain hazardous substances in electrical and electronic equipment<sup>(8)</sup> requires the substitution of banned substances in respect of all electrical and electronic equipment (EEE) within its scope.
- (5) As the market continues to expand and innovation cycles become even shorter, the replacement of equipment accelerates, making EEE a fast-growing source of waste. While Directive 2002/95/EC has contributed effectively to reducing hazardous substances contained in new EEE, hazardous substances such as mercury, cadmium, lead, hexavalent chromium and polychlorinated biphenyls (PCBs) and ozone-depleting substances will still be present in WEEE for many years. The content of hazardous components in EEE is a major concern during the waste management phase, and recycling of WEEE is not undertaken to a sufficient extent. A lack of recycling results in the loss of valuable resources.
- (6) The purpose of this Directive is to contribute to sustainable production and consumption by, as a first priority, the prevention of WEEE and, in addition, by the re-use, recycling and other forms of recovery of such wastes so as to reduce the disposal of waste and to contribute to the efficient use of resources and the retrieval of valuable secondary raw materials. It also seeks to improve the environmental performance of all operators involved in the life cycle of EEE, e.g. producers, distributors and consumers and, in particular, those operators directly involved in the collection and treatment of WEEE. In particular, different national applications of the 'producer responsibility' principle may lead to substantial disparities in the financial burden on economic operators. Having different national policies on the management of WEEE hampers the effectiveness of recycling policies. For that reason, the essential criteria should be laid down at the level of the Union and minimum standards for the treatment of WEEE should be developed.
- (7) The provisions of this Directive should apply to products and producers irrespective of selling technique, including distance and electronic selling. In this connection, the obligations of producers and distributors using distance and electronic selling channels should, as far as is practicable, take the same form, and should be enforced in the same way, as for other distribution channels, in order to avoid those other distribution channels having to bear the costs resulting from this Directive arising from WEEE for which the equipment was sold by distance or electronic selling.

- (8) In order to fulfil the obligations pursuant to this Directive in a given Member State, a producer should be established in that Member State. By exception, to reduce existing barriers to the proper functioning of the internal market and administrative burdens, Member States should allow producers that are not established on their territory, but that are established in another Member State, to appoint an authorised representative to be responsible for fulfilling the obligations of that producer under this Directive. In addition, administrative burdens should be reduced by simplifying registration and reporting procedures and by ensuring that duplicate charges are not levied for registrations within individual Member States.
- (9) This Directive should cover all EEE used by consumers and EEE intended for professional use. This Directive should apply without prejudice to Union legislation on safety and health requirements protecting all actors in contact with WEEE, as well as specific Union waste management legislation, in particular Directive 2006/66/EC of the European Parliament and of the Council of 6 September 2006 on batteries and accumulators and waste batteries and accumulators<sup>(9)</sup>, and Union product design legislation, in particular Directive 2009/125/EC. The preparing for re-use, recovery and recycling of waste cooling equipment and the substances, mixtures or components thereof should be in accordance with the relevant legislation of the Union, in particular Regulation (EC) No 1005/2009 of the European Parliament and of the Council of 16 September 2009 on substances that deplete the ozone layer<sup>(10)</sup> and Regulation (EC) No 842/2006 of the European Parliament and of the Council of 17 May 2006 on certain fluorinated greenhouse gases<sup>(11)</sup>. The objectives of this Directive can be achieved without including large-scale fixed installations such as oil platforms, airport luggage transport systems or elevators within its scope. However, any equipment which is not specifically designed and installed as part of those installations, and which can fulfil its function even if it is not part of those installations, should be included in the scope of this Directive. This refers for instance to equipment such as lighting equipment or photovoltaic panels.
- (10) A number of definitions should be included in this Directive in order to specify its scope. However, in the framework of a revision of the scope, the definition of EEE should be further clarified in order to bring Member States' relevant national measures and current, applied and established practices closer together.
- (11) Ecodesign requirements facilitating the re-use, dismantling and recovery of WEEE should be laid down in the framework of measures implementing Directive 2009/125/ EC. In order to optimise re-use and recovery through product design, the whole life cycle of the product should be taken into account.
- (12) The establishment, by this Directive, of producer responsibility is one of the means of encouraging design and production of EEE which take into full account and facilitate its repair, possible upgrading, re-use, disassembly and recycling.
- (13) In order to guarantee the safety and health of distributors' personnel involved in the take-back and handling of WEEE, Member States should, in accordance with national and Union legislation on safety and health requirements, determine the conditions under which take-back may be refused by distributors.

(14) Separate collection is a precondition for ensuring specific treatment and recycling of WEEE and is necessary to achieve the chosen level of protection of human health and the environment in the Union. Consumers have to actively contribute to the success of such collection and should be encouraged to return WEEE. For this purpose, convenient facilities should be set up for the return of WEEE, including public collection points, where private households should be able to return their waste at least free of charge. Distributors have an important role in contributing to the success of WEEE collection. Therefore, collection points set up at retail shops for very small WEEE should not be subject to the registration or permit requirements of Directive 2008/98/EC.

- (15)In order to attain the chosen level of protection and the harmonised environmental objectives of the Union, Member States should adopt appropriate measures to minimise the disposal of WEEE as unsorted municipal waste and to achieve a high level of separate collection of WEEE. In order to ensure that Member States strive to set up efficient collection schemes, they should be required to achieve a high level of collection of WEEE, particularly for cooling and freezing equipment containing ozonedepleting substances and fluorinated greenhouse gases, given their high environmental impact and in view of the obligations contained in Regulation (EC) No 842/2006 and Regulation (EC) No 1005/2009. Data included in the impact assessment carried out by the Commission in 2008 show that 65 % of the EEE placed on the market was already separately collected then, but more than half of this was potentially the object of improper treatment and illegal exports, and, even when properly treated, this was not reported. This leads to losses of valuable secondary raw materials, environmental degradation, and provision of inconsistent data. To avoid this, it is necessary to set an ambitious collection target and to ensure that WEEE collected is treated in an environmentally sound way and is correctly reported. It is appropriate to lay down minimum requirements for shipments of used EEE suspected to be WEEE, in the application of which Member States may have regard to any relevant Correspondents' Guidelines elaborated in the context of the implementation of Regulation (EC) No 1013/2006 of the European Parliament and of the Council of 14 June 2006 on shipments of waste<sup>(12)</sup>. Such minimum requirements should in any case have the purpose of avoiding unwanted shipments of non-functional EEE to developing countries.
- (16) The setting of ambitious collection targets should be based on the amount of WEEE generated where due account is taken of the differing life cycles of products in the Member States, of non-saturated markets and of EEE with a long life cycle. Therefore, a methodology for calculating collection rates based on WEEE generated should be developed in the near future. According to current estimates, a collection rate of 85 % of WEEE generated is broadly equivalent to a collection rate of 65 % of the average weight of EEE placed on the market in the three preceding years.
- (17) Specific treatment for WEEE is indispensable in order to avoid the dispersion of pollutants in recycled material or the waste stream. Such treatment is the most effective means of ensuring compliance with the chosen level of protection of the environment of the Union. Any establishment or undertaking carrying out collection, recycling and treatment operations should comply with minimum standards to prevent negative

environmental impacts associated with the treatment of WEEE. The best available treatment, recovery and recycling techniques should be used, provided that they ensure human health and a high level of environmental protection. Best available treatment, recovery and recycling techniques may be further defined in accordance with the procedures of Directive 2008/1/EC of the European Parliament and of the Council of 15 January 2008 concerning integrated pollution prevention and control<sup>(13)</sup>.

- (18) The Scientific Committee on Emerging and Newly Identified Health Risks, in its opinion on 'Risk Assessment of Products of Nanotechnology' of 19 January 2009, stated that exposure to nanomaterials that are firmly embedded in large structures, for example in electronic circuits, may occur in the waste phase and during recycling. To control possible risks to human health and the environment from the treatment of WEEE that contains nanomaterials, it is appropriate for the Commission to assess whether specific treatment may be necessary.
- (19) The collection, storage, transport, treatment and recycling of WEEE as well as its preparation for re-use shall be conducted with an approach geared to protecting the environment and human health and preserving raw materials and shall aim at recycling valuable resources contained in EEE with a view to ensuring a better supply of commodities within the Union.
- (20) Where appropriate, priority should be given to preparing for re-use of WEEE and its components, sub-assemblies and consumables. Where this is not preferable, all WEEE collected separately should be sent for recovery, in the course of which a high level of recycling and recovery should be achieved. In addition, producers should be encouraged to integrate recycled material in new equipment.
- (21) The recovery, preparation for re-use and recycling of WEEE should be counted towards the achievement of the targets laid down in this Directive only if that recovery, preparation for re-use or recycling does not conflict with other Union or national legislation applicable to the equipment. Ensuring proper preparation for re-use, recycling and recovery of WEEE is important for sound resource management and will optimise supply of resources.
- (22) Basic principles with regard to the financing of WEEE management have to be set at the level of the Union, and financing schemes have to contribute to high collection rates, as well as to the implementation of the principle of producer responsibility.
- (23) Users of EEE from private households should have the possibility of returning WEEE at least free of charge. Producers should finance at least the collection from collection facilities, and the treatment, recovery and disposal of WEEE. Member States should encourage producers to take full responsibility for the WEEE collection, in particular by financing the collection of WEEE throughout the entire waste chain, including from private households, in order to avoid separately collected WEEE becoming the object of suboptimal treatment and illegal exports, to create a level playing field by harmonising producer financing across the Union and to shift payment for the collection of this waste from general tax payers to the consumers of EEE, in line with the 'polluter pays' principle. In order to give maximum effect to the concept of producer responsibility, each producer should be responsible for financing the management of

the waste from his own products. The producer should be able to choose to fulfil this obligation either individually or by joining a collective scheme. Each producer should, when placing a product on the market, provide a financial guarantee to prevent costs for the management of WEEE from orphan products from falling on society or the remaining producers. The responsibility for the financing of the management of historical waste should be shared by all existing producers through collective financing schemes to which all producers that exist on the market when the costs occur contribute proportionately. Collective financing schemes should not have the effect of excluding niche and low-volume producers, importers and new entrants. Collective schemes could provide for differentiated fees based on how easily products and the valuable secondary raw materials that they contain could be recycled. In the case of products which have a long life cycle and which are now covered by this Directive, such as photovoltaic panels, the best possible use should be made of existing collection and recovery systems, provided that they meet the requirements laid down in this Directive.

- (24) Producers could be allowed to show purchasers, on a voluntary basis at the time of sale of new products, the costs of collecting, treating and disposing of WEEE in an environmentally sound way. This is in line with the Commission Communication on Sustainable Consumption and Production and Sustainable Industrial Policy Action Plan, in particular with regard to smarter consumption and green public procurement.
- (25) Information to users about the requirement not to dispose of WEEE as unsorted municipal waste and to collect WEEE separately and about the collection systems and their role in the management of WEEE is indispensable for the success of WEEE collection. Such information necessitates the proper marking of EEE which could end up in rubbish bins or similar means of municipal waste collection.
- (26) Information on component and material identification to be provided by producers is important to facilitate the management, and in particular the treatment and recovery or recycling, of WEEE.
- (27) Member States should ensure that inspection and monitoring infrastructure enables the proper implementation of this Directive to be verified, having regard, inter alia, to Recommendation 2001/331/EC of the European Parliament and of the Council of 4 April 2001 providing for minimum criteria for environmental inspections in the Member States<sup>(14)</sup>.
- (28) Member States should provide for effective, proportionate and dissuasive penalties to be imposed on natural and legal persons responsible for waste management, where they infringe the provisions of this Directive. Member States should also be able to take action to recover the costs of non-compliance and remedial measures, without prejudice to Directive 2004/35/EC of the European Parliament and of the Council of 21 April 2004 on environmental liability with regard to the prevention and remedying of environmental damage<sup>(15)</sup>.
- (29) Information about the weight of EEE placed on the market in the Union and the rates of collection, preparation for re-use, including as far as possible preparation for re-use of whole appliances, recovery or recycling and export of WEEE collected in accordance with this Directive is necessary to monitor the achievement of the objectives of this

Directive. For the purposes of calculating collection rates, a common methodology for the calculation of weight of EEE should be developed to ascertain, inter alia, whether this term includes the actual weight of the entire equipment in the form in which it is marketed, including all components, sub-assemblies, accessories and consumables but excluding packaging, batteries, instructions for use and manuals.

- (30) It is appropriate to allow Member States to choose to implement certain provisions of this Directive by means of agreements between the competent authorities and the economic sectors concerned, provided that particular requirements are met.
- (31) In order to address difficulties faced by Member States in achieving the collection rates, to take into account technical and scientific progress and to supplement the provisions on fulfilment of recovery targets, the power to adopt acts in accordance with Article 290 of the Treaty on the Functioning of the European Union (TFEU) should be delegated to the Commission in respect of transitional adjustments for certain Member States, adaptation to technical and scientific progress and the adoption of detailed rules on WEEE exported out of the Union counting towards the fulfilment of recovery targets. It is of particular importance that the Commission carry out appropriate consultations during its preparatory work, including at expert level. The Commission, when preparing and drawing up delegated acts, should ensure a simultaneous, timely and appropriate transmission of relevant documents to the European Parliament and to the Council.
- (32) In order to ensure uniform conditions for the implementation of this Directive, implementing powers should be conferred on the Commission. Those powers should be exercised in accordance with Regulation (EU) No 182/2011 of the European Parliament and of the Council of 16 February 2011 laying down the rules and general principles concerning mechanisms for control by Member States of the Commission's exercise of implementing powers<sup>(16)</sup>.
- (33) The obligation to transpose this Directive into national law should be confined to those provisions which represent a substantive change as compared with the earlier Directives. The obligation to transpose the provisions which are unchanged arises under the earlier Directives.
- (34) In accordance with the Joint Political Declaration of 28 September 2011 of Member States and the Commission on explanatory documents<sup>(17)</sup>, Member States have undertaken to accompany, in justified cases, the notification of their transposition measures with one or more documents explaining the relationship between the components of a directive and the corresponding parts of national transposition instruments. With regard to this Directive, the legislator considers the transmission of such documents to be justified.
- (35) This Directive should be without prejudice to the obligations of the Member States relating to the time limits for transposition into national law and application of the Directives set out in Annex XI, Part B.
- (36) Since the objective of this Directive cannot be sufficiently achieved by the Member States and can therefore, by reason of the scale of the problem, be better achieved at the level of the Union, the Union may adopt measures, in accordance with the principle

of subsidiarity as set out in Article 5 of the Treaty on European Union. In accordance with the principle of proportionality, as set out in that Article, this Directive does not go beyond what is necessary in order to achieve that objective,

## HAVE ADOPTED THIS DIRECTIVE:

## Article 1

## Subject matter

This Directive lays down measures to protect the environment and human health by preventing or reducing the adverse impacts of the generation and management of waste from electrical and electronic equipment (WEEE) and by reducing overall impacts of resource use and improving the efficiency of such use in accordance with Articles 1 and 4 of Directive 2008/98/EC, thereby contributing to sustainable development.

### Article 2

### Scope

- 1 This Directive shall apply to electrical and electronic equipment (EEE) as follows:
  - a from 13 August 2012 to 14 August 2018 (transitional period), subject to paragraph 3, to EEE falling within the categories set out in Annex I. Annex II contains an indicative list of EEE which falls within the categories set out in Annex I;
  - b from 15 August 2018, subject to paragraphs 3 and 4, to all EEE. All EEE shall be classified within the categories set out in Annex III. Annex IV contains a non-exhaustive list of EEE which falls within the categories set out in Annex III (open scope).

2 This Directive shall apply without prejudice to the requirements of Union legislation on safety and health, on chemicals, in particular Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency<sup>(18)</sup>, as well as of specific Union waste management or product design legislation.

- 3 This Directive shall not apply to any of the following EEE:
  - a equipment which is necessary for the protection of the essential interests of the security of Member States, including arms, munitions and war material intended for specifically military purposes;
  - b equipment which is specifically designed and installed as part of another type of equipment that is excluded from or does not fall within the scope of this Directive, which can fulfil its function only if it is part of that equipment;
  - c filament bulbs.

4 In addition to the equipment specified in paragraph 3, from 15 August 2018, this Directive shall not apply to the following EEE:

- a equipment designed to be sent into space;
- b large-scale stationary industrial tools;
- c large-scale fixed installations, except any equipment which is not specifically designed and installed as part of those installations;
- d means of transport for persons or goods, excluding electric two-wheel vehicles which are not type-approved;

- e non-road mobile machinery made available exclusively for professional use;
- f equipment specifically designed solely for the purposes of research and development that is only made available on a business-to-business basis;
- g medical devices and in vitro diagnostic medical devices, where such devices are expected to be infective prior to end of life, and active implantable medical devices.

5 No later than 14 August 2015, the Commission shall review the scope of this Directive set out in point (b) of paragraph 1, including the parameters to distinguish between large and small equipment in Annex III, and shall present a report thereon to the European Parliament and to the Council. The report shall be accompanied by a legislative proposal, if appropriate.

### Article 3

#### Definitions

- 1 For the purposes of this Directive, the following definitions shall apply:
  - a 'electrical and electronic equipment' or 'EEE' means equipment which is dependent on electric currents or electromagnetic fields in order to work properly and equipment for the generation, transfer and measurement of such currents and fields and designed for use with a voltage rating not exceeding 1 000 volts for alternating current and 1 500 volts for direct current;
  - b 'large-scale stationary industrial tools' means a large size assembly of machines, equipment, and/or components, functioning together for a specific application, permanently installed and de-installed by professionals at a given place, and used and maintained by professionals in an industrial manufacturing facility or research and development facility;
  - c 'large-scale fixed installation' means a large-size combination of several types of apparatus and, where applicable, other devices, which:
    - (i) are assembled, installed and de-installed by professionals;
    - (ii) are intended to be used permanently as part of a building or a structure at a pre-defined and dedicated location; and
    - (iii) can only be replaced by the same specifically designed equipment;
  - d 'non-road mobile machinery' means machinery, with on-board power source, the operation of which requires either mobility or continuous or semi-continuous movement between a succession of fixed working locations while working;
  - e 'waste electrical and electronic equipment' or 'WEEE' means electrical or electronic equipment which is waste within the meaning of Article 3(1) of Directive 2008/98/ EC, including all components, sub-assemblies and consumables which are part of the product at the time of discarding;
  - f 'producer' means any natural or legal person who, irrespective of the selling technique used, including distance communication within the meaning of Directive 97/7/EC of the European Parliament and of the Council of 20 May 1997 on the protection of consumers in respect of distance contracts<sup>(19)</sup>:
    - (i) is established in a Member State and manufactures EEE under his own name or trademark, or has EEE designed or manufactured and markets it under his name or trademark within the territory of that Member State;
    - (ii) is established in a Member State and resells within the territory of that Member State, under his own name or trademark, equipment produced by

other suppliers, a reseller not being regarded as the 'producer' if the brand of the producer appears on the equipment, as provided for in point (i);

- (iii) is established in a Member State and places on the market of that Member State, on a professional basis, EEE from a third country or from another Member State; or
- (iv) sells EEE by means of distance communication directly to private households or to users other than private households in a Member State, and is established in another Member State or in a third country.

Whoever exclusively provides financing under or pursuant to any finance agreement shall not be deemed to be a 'producer' unless he also acts as a producer within the meaning of points (i) to (iv);

- g 'distributor' means any natural or legal person in the supply chain, who makes an EEE available on the market. This definition does not prevent a distributor from being, at the same time, a producer within the meaning of point (f);
- h 'WEEE from private households' means WEEE which comes from private households and WEEE which comes from commercial, industrial, institutional and other sources which, because of its nature and quantity, is similar to that from private households. Waste from EEE likely to be used by both private households and users other than private households shall in any event be considered to be WEEE from private households;
- i 'finance agreement' means any loan, lease, hiring or deferred sale agreement or arrangement relating to any equipment whether or not the terms of that agreement or arrangement or any collateral agreement or arrangement provide that a transfer of ownership of that equipment will or may take place;
- j 'making available on the market' means any supply of a product for distribution, consumption or use on the market of a Member State in the course of a commercial activity, whether in return for payment or free of charge;
- k 'placing on the market' means the first making available of a product on the market within the territory of a Member State on a professional basis;
- 1 'removal' means manual, mechanical, chemical or metallurgic handling with the result that hazardous substances, mixtures and components are contained in an identifiable stream or are an identifiable part of a stream within the treatment process. A substance, mixture or component is identifiable if it can be monitored to verify environmentally safe treatment;
- m 'medical device' means a medical device or accessory within the meaning of, respectively, point (a) or (b) of Article 1(2) of Council Directive 93/42/EEC of 14 June 1993 concerning medical devices<sup>(20)</sup> which is EEE;
- n 'in vitro diagnostic medical device' means an in vitro diagnostic device or accessory within the meaning of, respectively, point (b) or (c) of Article 1(2) of Directive 98/79/ EC of the European Parliament and of the Council of 27 October 1998 on in vitro diagnostic medical devices<sup>(21)</sup> which is EEE;
- o 'active implantable medical device' means an active implantable medical device within the meaning of point (c) of Article 1(2) of Council Directive 90/385/EEC of 20 June 1990 on the approximation of the laws of the Member States relating to active implantable medical devices<sup>(22)</sup> which is EEE.

2 In addition, the definitions of 'hazardous waste', 'collection', 'separate collection', 'prevention', 're-use', 'treatment', 'recovery', 'preparing for re-use', 'recycling' and 'disposal' laid down in Article 3 of Directive 2008/98/EC shall apply.

## Article 4

### **Product design**

Member States shall, without prejudice to the requirements of Union legislation on the proper functioning of the internal market and on product design, including Directive 2009/125/EC, encourage cooperation between producers and recyclers and measures to promote the design and production of EEE, notably in view of facilitating re-use, dismantling and recovery of WEEE, its components and materials. In this context, Member States shall take appropriate measures so that the ecodesign requirements facilitating re-use and treatment of WEEE established in the framework of Directive 2009/125/EC are applied and producers do not prevent, through specific design features or manufacturing processes, WEEE from being re-used, unless such specific design features or manufacturing processes present overriding advantages, for example, with regard to the protection of the environment and/or safety requirements.

#### Article 5

#### Separate collection

1 Member States shall adopt appropriate measures to minimise the disposal of WEEE in the form of unsorted municipal waste, to ensure the correct treatment of all collected WEEE and to achieve a high level of separate collection of WEEE, notably, and as a matter of priority, for temperature exchange equipment containing ozone-depleting substances and fluorinated greenhouse gases, fluorescent lamps containing mercury, photovoltaic panels and small equipment as referred to in categories 5 and 6 of Annex III.

- 2 For WEEE from private households, Member States shall ensure that:
  - a systems are set up allowing final holders and distributors to return such waste at least free of charge. Member States shall ensure the availability and accessibility of the necessary collection facilities, taking into account, in particular, the population density;
  - b when supplying a new product, distributors are responsible for ensuring that such waste can be returned to the distributor at least free of charge on a one-to-one basis as long as the equipment is of equivalent type and has fulfilled the same functions as the supplied equipment. Member States may derogate from this provision provided that they ensure that returning the WEEE is not thereby made more difficult for the final holder and that it remains free of charge for the final holder. Member States making use of this derogation shall inform the Commission thereof;
  - c distributors provide for the collection, at retail shops with sales areas relating to EEE of at least 400 m<sup>2</sup>, or in their immediate proximity, of very small WEEE (no external dimension more than 25 cm) free of charge to end-users and with no obligation to buy EEE of an equivalent type, unless an assessment shows that alternative existing collection schemes are likely to be at least as effective. Such assessments shall be available to the public. WEEE collected shall be properly treated in accordance with Article 8;
  - d without prejudice to points (a), (b) and (c), producers are allowed to set up and to operate individual and/or collective take-back systems for WEEE from private households provided that these are in line with the objectives of this Directive;
  - e having regard to national and Union health and safety standards, WEEE that presents a health and safety risk to personnel because of contamination may be refused for return

under points (a), (b) and (c). Member States shall make specific arrangements for such WEEE.

Member States may provide for specific arrangements for the return of WEEE pursuant to points (a), (b) and (c) for cases in which the equipment does not contain its essential components or if the equipment contains waste other than WEEE.

3 Member States may designate the operators that are allowed to collect WEEE from private households as referred to in paragraph 2.

4 Member States may require that the WEEE deposited at collection facilities referred to in paragraphs 2 and 3 is handed over to producers or third parties acting on their behalf or is handed over, for purposes of preparing for re-use, to designated establishments or undertakings.

5 In the case of WEEE other than WEEE from private households, and without prejudice to Article 13, Member States shall ensure that producers or third parties acting on their behalf provide for the collection of such waste.

## Article 6

#### **Disposal and transport of collected WEEE**

1 Member States shall prohibit the disposal of separately collected WEEE which has not yet undergone the treatment specified in Article 8.

2 Member States shall ensure that the collection and transport of separately collected WEEE is carried out in a way which allows optimal conditions for preparing for re-use, recycling and the confinement of hazardous substances.

In order to maximise preparing for re-use, Member States shall promote that, prior to any further transfer, collection schemes or facilities provide, where appropriate, for the separation at the collection points of WEEE that is to be prepared for re-use from other separately collected WEEE, in particular by granting access for personnel from re-use centres.

## Article 7

## **Collection rate**

1 Without prejudice to Article 5(1), each Member State shall ensure the implementation of the 'producer responsibility' principle and, on that basis, that a minimum collection rate is achieved annually. From 2016, the minimum collection rate shall be 45 % calculated on the basis of the total weight of WEEE collected in accordance with Articles 5 and 6 in a given year in the Member State concerned, expressed as a percentage of the average weight of EEE placed on the market in the three preceding years in that Member State. Member States shall ensure that the volume of WEEE collected evolves gradually during the period from 2016 to 2019, unless the collection rate laid down in the second subparagraph has already been achieved.

From 2019, the minimum collection rate to be achieved annually shall be 65 % of the average weight of EEE placed on the market in the three preceding years in the Member State concerned, or alternatively 85 % of WEEE generated on the territory of that Member State.

Until 31 December 2015, a rate of separate collection of at least 4 kilograms on average per inhabitant per year of WEEE from private households or the same amount of weight of WEEE as was collected in that Member State on average in the three preceding years, whichever is greater, shall continue to apply.

Member States may set more ambitious rates for separate collection of WEEE and shall in such a case report this to the Commission.

2 In order to establish whether the minimum collection rate has been achieved, Member States shall ensure that information concerning the WEEE that is separately collected in accordance with Article 5 is transmitted to the Member States free of charge, including at least information on WEEE that has been:

- a received by collection and treatment facilities;
- b received by distributors;
- c separately collected by producers or third parties acting on their behalf.

3 By way of derogation from paragraph 1, Bulgaria, the Czech Republic, Latvia, Lithuania, Hungary, Malta, Poland, Romania, Slovenia and Slovakia may, because of their lack of the necessary infrastructure and their low level of EEE consumption, decide to:

- a achieve, from 14 August 2016, a collection rate that is lower than 45 % but higher than 40 % of the average weight of EEE placed on the market in the three preceding years; and
- b postpone the achievement of the collection rate referred to in the second subparagraph of paragraph 1 until a date of their own choice which shall not be later than 14 August 2021.

4 The Commission shall be empowered to adopt delegated acts in accordance with Article 20 laying down the necessary transitional adjustments in order to address difficulties faced by Member States in adhering to the requirements laid down in paragraph 1.

5 In order to ensure uniform conditions for the implementation of this Article, the Commission shall, by 14 August 2015, adopt implementing acts establishing a common methodology for the calculation of the weight of EEE placed on the national market and a common methodology for the calculation of the quantity of WEEE generated by weight in each Member State. Those implementing acts shall be adopted in accordance with the examination procedure referred to in Article 21(2).

6 The Commission shall, by 14 August 2015, present a report to the European Parliament and to the Council on the re-examination of the deadlines relating to the collection rates referred to in paragraph 1 and on possibly setting individual collection rates for one or more categories set out in Annex III, particularly for temperature exchange equipment, photovoltaic panels, small equipment, small IT and telecommunication equipment and lamps containing mercury. The report shall, if appropriate, be accompanied by a legislative proposal.

7 If the Commission considers, on the basis of an impact study, that the collection rate based on WEEE generated requires revision, it shall submit a legislative proposal to the European Parliament and the Council.

## Article 8

## **Proper treatment**

1 Member States shall ensure that all separately collected WEEE undergoes proper treatment.

2 Proper treatment, other than preparing for re-use, and recovery or recycling operations shall, as a minimum, include the removal of all fluids and a selective treatment in accordance with Annex VII.

3 Member States shall ensure that producers or third parties acting on their behalf set up systems to provide for the recovery of WEEE using best available techniques. The systems may be set up by producers individually or collectively. Member States shall ensure that any establishment or undertaking carrying out collection or treatment operations stores and treats WEEE in compliance with the technical requirements set out in Annex VIII.

4 The Commission shall be empowered to adopt delegated acts in accordance with Article 20 concerning the amendment of Annex VII in order to introduce other treatment technologies that ensure at least the same level of protection for human health and the environment.

The Commission shall evaluate, as a matter of priority, whether the entries regarding printed circuit boards for mobile phones and liquid crystal displays need to be amended. The Commission is invited to evaluate whether amendments to Annex VII are necessary to address nanomaterials contained in EEE.

5 For the purposes of environmental protection, Member States may set up minimum quality standards for the treatment of the WEEE that has been collected.

Member States which opt for such quality standards shall inform the Commission thereof, which shall publish these standards.

The Commission shall, not later than 14 February 2013, request the European standardisation organisations to develop European standards for the treatment, including recovery, recycling and preparing for re-use, of WEEE. Those standards shall reflect the state of the art.

In order to ensure uniform conditions for the implementation of this Article, the Commission may adopt implementing acts laying down minimum quality standards based in particular on the standards developed by the European standardisation organisations. Those implementing acts shall be adopted in accordance with the examination procedure referred to in Article 21(2).

A reference to the standards adopted by the Commission shall be published.

6 Member States shall encourage establishments or undertakings which carry out treatment operations to introduce certified environmental management systems in accordance with Regulation (EC) No 1221/2009 of the European Parliament and of the Council of 25 November 2009 on the voluntary participation by organisations in a Community ecomanagement and audit scheme (EMAS)<sup>(23)</sup>.

#### Article 9

#### Permits

1 Member States shall ensure that any establishment or undertaking carrying out treatment operations obtains a permit from the competent authorities in compliance with Article 23 of Directive 2008/98/EC.

2 Exemptions from permit requirements, conditions for exemptions and registration shall be in compliance, respectively, with Articles 24, 25 and 26 of Directive 2008/98/EC.

3 Member States shall ensure that the permit or the registration referred to in paragraphs 1 and 2 includes all the conditions that are necessary for compliance with the requirements of Article 8(2), (3) and (5) and for the achievement of the recovery targets set out in Article 11.

#### Article 10

### **Shipments of WEEE**

1 The treatment operation may also be undertaken outside the respective Member State or the Union provided that the shipment of WEEE is in compliance with Regulation (EC) No 1013/2006 and Commission Regulation (EC) No 1418/2007 of 29 November 2007 concerning the export for recovery of certain waste listed in Annex III or IIIA to Regulation (EC) No 1013/2006 of the European Parliament and of the Council to certain countries to which the OECD Decision on the control of transboundary movements of wastes does not apply<sup>(24)</sup>.

2 WEEE exported out of the Union shall only count towards the fulfilment of obligations and targets set out in Article 11 of this Directive if, in compliance with Regulations (EC) No 1013/2006 and (EC) No 1418/2007, the exporter can prove that the treatment took place in conditions that are equivalent to the requirements of this Directive.

3 The Commission shall, not later than 14 February 2014, adopt delegated acts, in accordance with Article 20, laying down detailed rules supplementing those in paragraph 2 of this Article, in particular the criteria for the assessment of equivalent conditions.

#### Article 11

#### **Recovery targets**

1 Regarding all WEEE separately collected in accordance with Article 5 and sent for treatment in accordance with Articles 8, 9 and 10, Member States shall ensure that producers meet the minimum targets set out in Annex V.

2 The achievement of the targets shall be calculated, for each category, by dividing the weight of the WEEE that enters the recovery or recycling/preparing for re-use facility, after proper treatment in accordance with Article 8(2) with regard to recovery or recycling, by the weight of all separately collected WEEE for each category, expressed as a percentage.

Preliminary activities including sorting and storage prior to recovery shall not count towards the achievement of these targets.

3 In order to ensure uniform conditions for the implementation of this Article, the Commission may adopt implementing acts establishing additional rules on the calculation methods for the application of the minimum targets. Those implementing acts shall be adopted in accordance with the examination procedure referred to in Article 21(2).

4 Member States shall ensure that, for the purpose of calculating these targets, producers or third parties acting on their behalf keep records on the weight of WEEE, its components, materials or substances when leaving (output) the collection facility, entering (input) and leaving (output) the treatment facilities and when entering (input) the recovery or recycling/preparing for re-use facility.

Member States shall also ensure that, for the purposes of paragraph 6, records on the weight of products and materials when leaving (output) the recovery or recycling/ preparing for re-use facility are kept.

5 Member States shall encourage the development of new recovery, recycling and treatment technologies.

6 On the basis of a report of the Commission accompanied, if appropriate, by a legislative proposal, the European Parliament and the Council shall, by 14 August 2016, re-examine the recovery targets referred to in Annex V, Part 3, examine the possibility of setting separate targets for WEEE to be prepared for re-use and re-examine the calculation method referred to in paragraph 2 with a view to analysing the feasibility of setting targets on the basis of products and materials resulting (output) from the recovery, recycling and preparation for re-use processes.

## Article 12

## Financing in respect of WEEE from private households

1 Member States shall ensure that producers provide at least for the financing of the collection, treatment, recovery and environmentally sound disposal of WEEE from private households that has been deposited at collection facilities set up under Article 5(2).

2 Member States may, where appropriate, encourage producers to finance also the costs occurring for collection of WEEE from private households to collection facilities.

3 For products placed on the market later than 13 August 2005, each producer shall be responsible for financing the operations referred to in paragraph 1 relating to the waste from his own products. The producer may choose to fulfil this obligation either individually or by joining a collective scheme.

Member States shall ensure that each producer provides a guarantee when placing a product on the market showing that the management of all WEEE will be financed and shall ensure that producers clearly mark their products in accordance with Article 15(2). This guarantee shall ensure that the operations referred to in paragraph 1 relating to this product will be financed. The guarantee may take the form of participation by the producer in appropriate schemes for the financing of the management of WEEE, a recycling insurance or a blocked bank account.

4 The responsibility for the financing of the costs of the management of WEEE from products placed on the market on or before 13 August 2005 ('historical waste') shall be borne by one or more systems to which all producers existing on the market when the respective costs occur contribute proportionately, e.g. in proportion to their respective share of the market by type of equipment.

5 Member States shall take the necessary measures to ensure that appropriate mechanisms or refund procedures are developed for the reimbursement of contributions to the producers where EEE is transferred for placing on the market outside the territory of the Member State concerned. Such mechanisms or procedures may be developed by producers or third parties acting on their behalf.

6 The Commission is invited to report, by 14 August 2015, on the possibility of developing criteria to incorporate the real end-of-life costs into the financing of WEEE by producers, and to submit a legislative proposal to the European Parliament and the Council if appropriate.

## Article 13

## Financing in respect of WEEE from users other than private households

1 Member States shall ensure that the financing of the costs for the collection, treatment, recovery and environmentally sound disposal of WEEE from users other than private households resulting from products placed on the market after 13 August 2005 is to be provided for by producers.

For historical waste being replaced by new equivalent products or by new products fulfilling the same function, the financing of the costs shall be provided for by producers of those products when supplying them. Member States may, as an alternative, provide that users other than private households also be made, partly or totally, responsible for this financing.

For other historical waste, the financing of the costs shall be provided for by the users other than private households.

2 Producers and users other than private households may, without prejudice to this Directive, conclude agreements stipulating other financing methods.

## Article 14

## Information for users

1 Member States may require producers to show purchasers, at the time of sale of new products, the costs of collection, treatment and disposal in an environmentally sound way. The costs mentioned shall not exceed the best estimate of the actual costs incurred.

2 Member States shall ensure that users of EEE in private households are given the necessary information about:

- a the requirement not to dispose of WEEE as unsorted municipal waste and to collect such WEEE separately;
- b the return and collection systems available to them, encouraging the coordination of information on the available collection points irrespective of the producers or other operators which have set them up;
- c their role in contributing to re-use, recycling and other forms of recovery of WEEE;
- d the potential effects on the environment and human health as a result of the presence of hazardous substances in EEE;
- e the meaning of the symbol shown in Annex IX.

3 Member States shall adopt appropriate measures so that consumers participate in the collection of WEEE and to encourage them to facilitate the process of re-use, treatment and recovery.

4 With a view to minimising the disposal of WEEE as unsorted municipal waste and to facilitating its separate collection, Member States shall ensure that producers appropriately mark — preferably in accordance with the European standard EN  $50419^{(25)}$  — EEE placed on the market with the symbol shown in Annex IX. In exceptional cases, where this is necessary because of the size or the function of the product, the symbol shall be printed on the packaging, on the instructions for use and on the warranty of the EEE.

5 Member States may require that some or all of the information referred to in paragraphs 2, 3 and 4 shall be provided by producers and/or distributors, e.g. in the instructions for use, at the point of sale and through public awareness campaigns.

## Article 15

## **Information for treatment facilities**

1 In order to facilitate the preparation for re-use and the correct and environmentally sound treatment of WEEE, including maintenance, upgrade, refurbishment and recycling, Member States shall take the necessary measures to ensure that producers provide information free of charge about preparation for re-use and treatment in respect of each type of new EEE placed for the first time on the Union market within one year after the equipment is placed on the market. This information shall identify, as far as it is needed by centres which prepare for re-use and treatment and recycling facilities in order to comply with the provisions of this Directive, the different EEE components and materials, as well as the location of dangerous substances and mixtures in EEE. It shall be made available to centres which prepare for re-use and treatment and recycling facilities by producers of EEE in the form of manuals or by means of electronic media (e.g. CD-ROM, online services).

2 In order to enable the date upon which the EEE was placed on the market to be determined unequivocally, Member States shall ensure that a mark on the EEE specifies that the latter was placed on the market after 13 August 2005. Preferably, the European Standard EN 50419 shall be applied for this purpose.

#### Article 16

#### **Registration, information and reporting**

1 Member States shall, in accordance with paragraph 2, draw up a register of producers, including producers supplying EEE by means of distance communication. That register shall serve to monitor compliance with the requirements of this Directive.

Producers supplying EEE by means of distance communication as defined in Article 3(1)(f)(iv) shall be registered in the Member State that they sell to. Where such producers are not registered in the Member State that they are selling to, they shall be registered through their authorised representatives as referred to in Article 17(2).

- 2 Member States shall ensure that:
  - a each producer, or each authorised representative where appointed under Article 17, is registered as required and has the possibility of entering online in their national register all relevant information reflecting that producer's activities in that Member State;
  - b upon registering, each producer, or each authorised representative where appointed under Article 17, provides the information set out in Annex X, Part A, undertaking to update it as appropriate;
  - c each producer, or each authorised representative where appointed under Article 17, provides the information set out in Annex X, Part B;
  - d national registers provide links to other national registers on their website to facilitate, in all Member States, registration of producers or, where appointed under Article 17, authorised representatives.

3 In order to ensure uniform conditions for the implementation of this Article, the Commission shall adopt implementing acts establishing the format for registration and reporting and the frequency of reporting to the register. Those implementing acts shall be adopted in accordance with the examination procedure referred to in Article 21(2).

4 Member States shall collect information, including substantiated estimates, on an annual basis, on the quantities and categories of EEE placed on their markets, collected through all routes, prepared for re-use, recycled and recovered within the Member State, and on separately collected WEEE exported, by weight.

5 Member States shall, at three-year intervals, send a report to the Commission on the implementation of this Directive and on the information set out in paragraph 4. The implementation report shall be drawn up on the basis of a questionnaire laid down in Commission Decisions  $2004/249/EC^{(26)}$  and  $2005/369/EC^{(27)}$ . The report shall be made available to the Commission within nine months of the end of the three-year period covered by it.

The first report shall cover the period from 14 February 2014 to 31 December 2015.

The Commission shall publish a report on the implementation of this Directive within nine months after receiving the reports from the Member States.

## Article 17

## Authorised representative

1 Each Member State shall ensure that a producer as defined in Article 3(1)(f)(i) to (iii) established in another Member State is allowed, by way of exception to Article 3(1)(f)(i) to (iii), to appoint a legal or natural person established on its territory as the authorised representative that is responsible for fulfilling the obligations of that producer, pursuant to this Directive, on its territory.

2 Each Member State shall ensure that a producer as defined in Article 3(1)(f)(iv)and established on its territory, which sells EEE to another Member State in which it is not established, appoints an authorised representative in that Member State as the person responsible for fulfilling the obligations of that producer, pursuant to this Directive, on the territory of that Member State.

3 Appointment of an authorised representative shall be by written mandate.

## Article 18

## Administrative cooperation and exchange of information

Member States shall ensure that authorities responsible for implementing this Directive cooperate with each other, in particular to establish an adequate flow of information to ensure that producers comply with the provisions of this Directive and, where appropriate, provide each other and the Commission with information in order to facilitate the proper implementation of this Directive. The administrative cooperation and exchange of information, in particular between national registers, shall include electronic means of communication.

Cooperation shall include, inter alia, granting access to the relevant documents and information including the results of any inspections, subject to the provisions of the

data protection law in force in the Member State of the authority which is requested to cooperate.

### Article 19

## Adaptation to scientific and technical progress

The Commission shall be empowered to adopt delegated acts in accordance with Article 20 concerning the amendments necessary in order to adapt Article 16(5) and Annexes IV, VII, VIII and IX to scientific and technical progress. When amending Annex VII, the exemptions granted under Directive 2011/65/EU of the European Parliament and of the Council of 8 June 2011 on the restriction of the use of certain hazardous substances in electrical and electronic equipment<sup>(28)</sup> shall be taken into consideration.

Before the Annexes are amended, the Commission shall, inter alia, consult producers of EEE, recyclers, treatment operators and environmental organisations and employees' and consumer associations.

## Article 20

## Exercise of the delegation

1 The power to adopt delegated acts is conferred on the Commission subject to the conditions laid down in this Article.

2 The power to adopt delegated acts referred to in Article 7(4), Article 8(4), Article 10(3) and Article 19 shall be conferred on the Commission for a period of five years from 13 August 2012. The Commission shall draw up a report in respect of the delegation of power not later than nine months before the end of the five-year period. The delegation of power shall be tacitly extended for periods of an identical duration, unless the European Parliament or the Council opposes such extension not later than three months before the end of each period.

3 The delegation of power referred to in Article 7(4), Article 8(4), Article 10(3) and Article 19 may be revoked at any time by the European Parliament or by the Council. A decision to revoke shall put an end to the delegation of the power specified in that decision. It shall take effect the day following the publication of the decision in the *Official Journal of the European Union* or at a later date specified therein. It shall not affect the validity of any delegated acts already in force.

4 As soon as it adopts a delegated act, the Commission shall notify it simultaneously to the European Parliament and to the Council.

5 A delegated act adopted pursuant to Article 7(4), Article 8(4), Article 10(3) and Article 19 shall enter into force only if no objection has been expressed either by the European Parliament or the Council within a period of two months of notification of that act to the European Parliament and to the Council or if, before the expiry of that period, the European Parliament and the Council have both informed the Commission that they will not object. That period shall be extended by two months at the initiative of the European Parliament or of the Council.

#### Article 21

## **Committee procedure**

1 The Commission shall be assisted by the Committee established by Article 39 of Directive 2008/98/EC. That committee shall be a committee within the meaning of Regulation (EU) No 182/2011.

2 Where reference is made to this paragraph, Article 5 of Regulation (EU) No 182/2011 shall apply.

Where the committee delivers no opinion, the Commission shall not adopt the draft implementing act and the third subparagraph of Article 5(4) of Regulation (EU) No 182/2011 shall apply.

### Article 22

#### Penalties

The Member States shall lay down the rules on penalties applicable to infringements of the national provisions adopted pursuant to this Directive and shall take all measures necessary to ensure that they are implemented. The penalties provided for must be effective, proportionate and dissuasive. The Member States shall notify those provisions to the Commission by 14 February 2014 at the latest and shall notify it without delay of any subsequent amendment affecting them.

#### Article 23

## **Inspection and monitoring**

1 Member States shall carry out appropriate inspections and monitoring to verify the proper implementation of this Directive.

Those inspections shall at least cover:

- a information reported in the framework of the register of producers;
- b shipments, in particular exports of WEEE outside the Union in compliance with Regulation (EC) No 1013/2006 and Regulation (EC) No 1418/2007; and
- c the operations at treatment facilities in accordance with Directive 2008/98/EC and Annex VII of this Directive.

2 Member States shall ensure that shipments of used EEE suspected to be WEEE are carried out in accordance with the minimum requirements in Annex VI and shall monitor such shipments accordingly.

3 The costs of appropriate analyses and inspections, including storage costs, of used EEE suspected to be WEEE may be charged to the producers, to third parties acting on their behalf or to other persons arranging the shipment of used EEE suspected to be WEEE.

4 In order to ensure uniform conditions for the implementation of this Article and of Annex VI, the Commission may adopt implementing acts establishing additional rules on inspections and monitoring and in particular uniform conditions for the implementation

of Annex VI, point 2. Those implementing acts shall be adopted in accordance with the examination procedure referred to in Article 21(2).

#### Article 24

#### Transposition

1 Member States shall bring into force the laws, regulations and administrative provisions necessary to comply with this Directive by 14 February 2014. They shall immediately communicate to the Commission the text of those provisions.

When Member States adopt those provisions, they shall contain a reference to this Directive or shall be accompanied by such reference on the occasion of their official publication. They shall also include a statement that references in existing laws, regulations and administrative provisions to the directives repealed by this Directive shall be construed as references to this Directive. Member States shall determine how such reference is to be made and how that statement is to be formulated.

2 Member States shall communicate to the Commission the text of the main provisions of national law which they adopt in the field covered by this Directive.

3 Provided that the objectives set out in this Directive are achieved, Member States may transpose the provisions set out in Article 8(6), Article 14(2) and Article 15 by means of agreements between the competent authorities and the economic sectors concerned. Such agreements shall meet the following requirements:

- a agreements shall be enforceable;
- b agreements shall specify objectives with the corresponding deadlines;
- c agreements shall be published in the national official journal or an official document equally accessible to the public and transmitted to the Commission;
- d the results achieved shall be monitored regularly, reported to the competent authorities and the Commission and made available to the public under the conditions set out in the agreement;
- e the competent authorities shall ensure that the progress achieved under the agreement is examined;
- f in the case of non-compliance with the agreement, Member States must implement the relevant provisions of this Directive by legislative, regulatory or administrative measures.

### Article 25

#### Repeal

Directive 2002/96/EC as amended by the Directives listed in Annex XI, Part A is repealed with effect from 15 February 2014, without prejudice to the obligations of the Member States relating to the time limits for transposition into national law and application of the Directives set out in Annex XI, Part B.

References to the repealed Directives shall be construed as references to this Directive and shall be read in accordance with the correlation table in Annex XII.

#### Article 26

## **Entry into force**

This Directive shall enter into force on the twentieth day following that of its publication in the *Official Journal of the European Union*.

#### Article 27

## Addressees

This Directive is addressed to the Member States.

Done at Strasbourg, 4 July 2012.

For the European Parliament The President M. SCHULZ For the Council The President A. D. MAVROYIANNIS

## ANNEX I

# Categories of EEE covered by this Directive during the transitional period as provided for in Article 2(1)(a)

- 1. Large household appliances
- 2. Small household appliances
- 3. IT and telecommunications equipment
- 4. Consumer equipment and photovoltaic panels
- 5. Lighting equipment
- 6. Electrical and electronic tools (with the exception of large-scale stationary industrial tools)
- 7. Toys, leisure and sports equipment
- 8. Medical devices (with the exception of all implanted and infected products)
- 9. Monitoring and control instruments
- 10. Automatic dispensers

## ANNEX II

## Indicative list of EEE which falls within the categories of Annex I

### 1. LARGE HOUSEHOLD APPLIANCES

- Large cooling appliances Refrigerators Freezers Other large appliances used for refrigeration, conservation and storage of food Washing machines Clothes dryers Dish washing machines Cookers Electric stoves Electric hot plates Microwaves Other large appliances used for cooking and other processing of food Electric heating appliances Electric radiators Other large appliances for heating rooms, beds, seating furniture Electric fans Air conditioner appliances Other fanning, exhaust ventilation and conditioning equipment
- 2. SMALL HOUSEHOLD APPLIANCES Vacuum cleaners

3.

Carpet sweepers Other appliances for cleaning Appliances used for sewing, knitting, weaving and other processing for textiles Irons and other appliances for ironing, mangling and other care of clothing Toasters Fryers Grinders, coffee machines and equipment for opening or sealing containers or packages Electric knives Appliances for hair cutting, hair drying, tooth brushing, shaving, massage and other body care appliances Clocks, watches and equipment for the purpose of measuring, indicating or registering time Scales IT AND TELECOMMUNICATIONS EQUIPMENT Centralised data processing: Mainframes Minicomputers Printer units Personal computing: Personal computers (CPU, mouse, screen and keyboard included) Laptop computers (CPU, mouse, screen and keyboard included) Notebook computers Notepad computers Printers Copying equipment Electrical and electronic typewriters Pocket and desk calculators and other products and equipment for the collection, storage, processing, presentation or communication of information by electronic means User terminals and systems Facsimile machine (fax) Telex Telephones Pay telephones Cordless telephones Cellular telephones Answering systems

and other products or equipment of transmitting sound, images or other information by telecommunications

4. CONSUMER EQUIPMENT AND PHOTOVOLTAIC PANELS Radio sets Television sets Video cameras

Video recorders Hi-fi recorders Audio amplifiers Musical instruments

and other products or equipment for the purpose of recording or reproducing sound or images, including signals or other technologies for the distribution of sound and image than by telecommunications Photovoltaic panels

5. LIGHTING EQUIPMENT

Luminaires for fluorescent lamps with the exception of luminaires in households Straight fluorescent lamps Compact fluorescent lamps

High intensity discharge lamps, including pressure sodium lamps and metal halide lamps

Low pressure sodium lamps

Other lighting or equipment for the purpose of spreading or controlling light with the exception of filament bulbs

## 6. ELECTRICAL AND ELECTRONIC TOOLS (WITH THE EXCEPTION OF LARGE-SCALE STATIONARY INDUSTRIAL TOOLS) Drills

Saws

Sewing machines

Equipment for turning, milling, sanding, grinding, sawing, cutting, shearing, drilling, making holes, punching, folding, bending or similar processing of wood, metal and other materials

Tools for riveting, nailing or screwing or removing rivets, nails, screws or similar uses Tools for welding, soldering or similar use

Equipment for spraying, spreading, dispersing or other treatment of liquid or gaseous substances by other means

Tools for mowing or other gardening activities

# 7. TOYS, LEISURE AND SPORTS EQUIPMENT

Electric trains or car racing sets Hand-held video game consoles Video games Computers for biking, diving, running, rowing, etc. Sports equipment with electric or electronic components Coin slot machines

 MEDICAL DEVICES (WITH THE EXCEPTION OF ALL IMPLANTED AND INFECTED PRODUCTS)
 Radiotherapy equipment
 Cardiology equipment
 Dialysis equipment
 Pulmonary ventilators
 Nuclear medicine equipment Laboratory equipment for in vitro diagnosis Analysers Freezers Fertilization tests Other appliances for detecting, preventing, monitoring, treating, alleviating illness, injury or disability

9. MONITORING AND CONTROL INSTRUMENTS

Smoke detector Heating regulators Thermostats Measuring, weighing or adjusting appliances for household or as laboratory equipment Other monitoring and control instruments used in industrial installations (e.g. in control panels)

AUTOMATIC DISPENSERS

 Automatic dispensers for hot drinks
 Automatic dispensers for hot or cold bottles or cans
 Automatic dispensers for solid products
 Automatic dispensers for money
 All appliances which deliver automatically all kinds of products

# ANNEX III

# CATEGORIES OF EEE COVERED BY THIS DIRECTIVE

- 1. Temperature exchange equipment
- 2. Screens, monitors, and equipment containing screens having a surface greater than 100 cm<sup>2</sup>
- 3. Lamps
- 4. Large equipment (any external dimension more than 50 cm) including, but not limited to:

Household appliances; IT and telecommunication equipment; consumer equipment; luminaires; equipment reproducing sound or images, musical equipment; electrical and electronic tools; toys, leisure and sports equipment; medical devices; monitoring and control instruments; automatic dispensers; equipment for the generation of electric currents. This category does not include equipment included in categories 1 to 3.

5. Small equipment (no external dimension more than 50 cm) including, but not limited to:

Household appliances; consumer equipment; luminaires; equipment reproducing sound or images, musical equipment; electrical and electronic tools; toys, leisure and sports equipment; medical devices; monitoring and control instruments; automatic dispensers; equipment for the generation of electric currents. This category does not include equipment included in categories 1 to 3 and 6.

6. Small IT and telecommunication equipment (no external dimension more than 50 cm)

## ANNEX IV

## Non-exhaustive list of EEE which falls within the categories listed in Annex III

## 1. Temperature exchange equipment

Refrigerators, Freezers, Equipment which automatically delivers cold products, Air conditioning equipment, Dehumidifying equipment, Heat pumps, Radiators containing oil and other temperature exchange equipment using fluids other than water for the temperature exchange.

2. Screens, monitors, and equipment containing screens having a surface greater than  $100 \text{ cm}^2$ 

Screens, Televisions, LCD photo frames, Monitors, Laptops, Notebooks.

3. Lamps

Straight fluorescent lamps, Compact fluorescent lamps, Fluorescent lamps, High intensity discharge lamps - including pressure sodium lamps and metal halide lamps, Low pressure sodium lamps, LED.

## 4. Large equipment

Washing machines, Clothes dryers, Dish washing machines, Cookers, Electric stoves, Electric hot plates, Luminaires, Equipment reproducing sound or images, Musical equipment (excluding pipe organs installed in churches), Appliances for knitting and weaving, Large computer-mainframes, Large printing machines, Copying equipment, Large coin slot machines, Large medical devices, Large monitoring and control instruments, Large appliances which automatically deliver products and money, Photovoltaic panels.

## 5. Small equipment

Vacuum cleaners, Carpet sweepers, Appliances for sewing, Luminaires, Microwaves, Ventilation equipment, Irons, Toasters, Electric knives, Electric kettles, Clocks and Watches, Electric shavers, Scales, Appliances for hair and body care, Calculators, Radio sets, Video cameras, Video recorders, Hi-fi equipment, Musical instruments, Equipment reproducing sound or images, Electrical and electronic toys, Sports equipment, Computers for biking, diving, running, rowing, etc., Smoke detectors, Heating regulators, Thermostats, Small Electrical and electronic tools, Small medical devices, Small Monitoring and control instruments, Small Appliances which automatically deliver products, Small equipment with integrated photovoltaic panels.

6. Small IT and telecommunication equipment (no external dimension more than 50 cm)

Mobile phones, GPS, Pocket calculators, Routers, Personal computers, Printers, Telephones.

## ANNEX V

## MINIMUM RECOVERY TARGETS REFERRED TO IN ARTICLE 11

## Part 1:

# Minimum targets applicable by category from 13 August 2012 until 14 August 2015 with reference to the categories listed in Annex I:

- (a) for WEEE falling within category 1 or 10 of Annex I,
  - 80 % shall be recovered, and
  - 75 % shall be recycled;
- (b) for WEEE falling within category 3 or 4 of Annex I,
  - 75 % shall be recovered, and
  - 65 % shall be recycled;
- (c) for WEEE falling within category 2, 5, 6, 7, 8 or 9 of Annex I,
  - 70 % shall be recovered, and
  - 50 % shall be recycled;
- (d) for gas discharge lamps, 80 % shall be recycled.

## Part 2:

# Minimum targets applicable by category from 15 August 2015 until 14 August 2018 with reference to the categories listed in Annex I:

- (a) for WEEE falling within category 1 or 10 of Annex I,
  - 85 % shall be recovered, and
  - 80 % shall be prepared for re-use and recycled;
- (b) for WEEE falling within category 3 or 4 of Annex I,
  - 80 % shall be recovered, and
  - 70 % shall be prepared for re-use and recycled;
- (c) for WEEE falling within category 2, 5, 6, 7, 8 or 9 of Annex I,
  - 75 % shall be recovered, and
  - 55 % shall be prepared for re-use and recycled;
- (d) for gas discharge lamps, 80 % shall be recycled.

## Part 3:

# Minimum targets applicable by category from 15 August 2018 with reference to the categories listed in Annex III:

- (a) for WEEE falling within category 1 or 4 of Annex III,
  - 85 % shall be recovered, and
  - 80 % shall be prepared for re-use and recycled;

- (b) for WEEE falling within category 2 of Annex III,
  - 80 % shall be recovered, and
  - 70 % shall be prepared for re-use and recycled;
- (c) for WEEE falling within category 5 or 6 of Annex III,
  - 75 % shall be recovered, and
  - 55 % shall be prepared for re-use and recycled;
- (d) for WEEE falling within category 3 of Annex III, 80 % shall be recycled.

## ANNEX VI

## MINIMUM REQUIREMENTS FOR SHIPMENTS

- 1. In order to distinguish between EEE and WEEE, where the holder of the object claims that he intends to ship or is shipping used EEE and not WEEE, Member States shall require the holder to have available the following to substantiate this claim:
- (a) a copy of the invoice and contract relating to the sale and/or transfer of ownership of the EEE which states that the equipment is destined for direct re-use and that it is fully functional;
- (b) evidence of evaluation or testing in the form of a copy of the records (certificate of testing, proof of functionality) on every item within the consignment and a protocol containing all record information according to point 3;
- (c) a declaration made by the holder who arranges the transport of the EEE that none of the material or equipment within the consignment is waste as defined by Article 3(1) of Directive 2008/98/EC; and
- (d) appropriate protection against damage during transportation, loading and unloading in particular through sufficient packaging and appropriate stacking of the load.
- 2. By way of derogation, point 1(a) and (b) and point 3 do not apply where it is documented by conclusive proof that the shipment is taking place in the framework of a business-to-business transfer agreement and that:
- (a) the EEE is sent back to the producer or a third party acting on his behalf as defective for repair under warranty with the intention of re-use; or
- (b) the used EEE for professional use is sent to the producer or a third party acting on his behalf or a third-party facility in countries to which Decision C(2001)107/Final of the OECD Council concerning the revision of Decision C(92)39/Final on control of transboundary movements of wastes destined for recovery operations applies, for refurbishment or repair under a valid contract with the intention of re-use; or
- (c) the defective used EEE for professional use, such as medical devices or their parts, is sent to the producer or a third party acting on his behalf for root cause analysis under a valid contract, in cases where such an analysis can only be conducted by the producer or third parties acting on his behalf.
- 3. In order to demonstrate that the items being shipped constitute used EEE rather than WEEE, Member States shall require the following steps for testing and record keeping for used EEE to be carried out:

Step 1: Testing

- (a) Functionality shall be tested and the presence of hazardous substances shall be evaluated. The tests to be conducted depend on the kind of EEE. For most of the used EEE a functionality test of the key functions is sufficient.
- (b) Results of evaluation and testing shall be recorded.

Step 2: Record

- (a) The record shall be fixed securely but not permanently on either the EEE itself (if not packed) or on the packaging so it can be read without unpacking the equipment.
- (b) The record shall contain the following information:
  - name of item (name of the equipment if listed in Annex II or Annex IV, as appropriate, and category set out in Annex I or Annex III, as appropriate),
  - identification number of the item (type No) where applicable,
  - year of production (if available),
  - name and address of the company responsible for evidence of functionality,
  - result of tests as described in step 1 (including date of the functionality test),
  - kind of tests performed.
- 4. In addition to the documentation requested in points 1, 2 and 3, every load (e.g. shipping container, lorry) of used EEE shall be accompanied by:
- (a) a relevant transport document, e.g. CMR or waybill;
- (b) a declaration by the liable person on its responsibility.
- 5. In the absence of proof that an object is used EEE and not WEEE through the appropriate documentation required in points 1, 2, 3 and 4 and of appropriate protection against damage during transportation, loading and unloading in particular through sufficient packaging and appropriate stacking of the load, which are the obligations of the holder who arranges the transport, Member State authorities shall consider that an item is WEEE and presume that the load comprises an illegal shipment. In these circumstances the load will be dealt with in accordance with Articles 24 and 25 of Regulation (EC) No 1013/2006.

## ANNEX VII

# Selective treatment for materials and components of waste electrical and electronic equipment referred to in Article 8(2)

- 1. As a minimum the following substances, mixtures and components have to be removed from any separately collected WEEE:
- polychlorinated biphenyls (PCB) containing capacitors in accordance with Council Directive 96/59/EC of 16 September 1996 on the disposal of polychlorinated biphenyls and polychlorinated terphenyls (PCB/PCT)<sup>(29)</sup>,
- mercury containing components, such as switches or backlighting lamps,

- batteries,
- printed circuit boards of mobile phones generally, and of other devices if the surface of the printed circuit board is greater than 10 square centimetres,
- toner cartridges, liquid and paste, as well as colour toner,
- plastic containing brominated flame retardants,
- asbestos waste and components which contain asbestos,
- cathode ray tubes,
- chlorofluorocarbons (CFC), hydrochlorofluorocarbons (HCFC) or hydrofluorocarbons (HFC), hydrocarbons (HC),
- gas discharge lamps,
- liquid crystal displays (together with their casing where appropriate) of a surface greater than 100 square centimetres and all those back-lighted with gas discharge lamps,
- external electric cables,
- components containing refractory ceramic fibres as described in Commission Directive 97/69/EC of 5 December 1997 adapting to technical progress for the 23rd time Council Directive 67/548/EEC on the approximation of the laws, regulations and administrative provisions relating to the classification, packaging and labelling of dangerous substances<sup>(30)</sup>,
- components containing radioactive substances with the exception of components that are below the exemption thresholds set in Article 3 of and Annex I to Council Directive 96/29/Euratom of 13 May 1996 laying down basic safety standards for the protection of the health of workers and the general public against the dangers arising from ionizing radiation<sup>(31)</sup>,
- electrolyte capacitors containing substances of concern (height > 25 mm, diameter > 25 mm or proportionately similar volume).

These substances, mixtures and components shall be disposed of or recovered in compliance with Directive 2008/98/EC.

- 2. The following components of WEEE that is separately collected have to be treated as indicated:
- cathode ray tubes: the fluorescent coating has to be removed,
- equipment containing gases that are ozone depleting or have a global warming potential (GWP) above 15, such as those contained in foams and refrigeration circuits: the gases must be properly extracted and properly treated. Ozone-depleting gases must be treated in accordance with Regulation (EC) No 1005/2009,
- gas discharge lamps: the mercury shall be removed.
- 3. Taking into account environmental considerations and the desirability of preparation for re-use and recycling, points 1 and 2 shall be applied in such a way that environmentally-sound preparation for re-use and recycling of components or whole appliances is not hindered.

## ANNEX VIII

## **TECHNICAL REQUIREMENTS REFERRED TO IN ARTICLE 8(3)**

- 1. Sites for storage (including temporary storage) of WEEE prior to its treatment (without prejudice to the requirements of Council Directive 1999/31/EC of 26 April 1999 on the landfill of waste<sup>(32)</sup>):
- impermeable surfaces for appropriate areas with the provision of spillage collection facilities and, where appropriate, decanters and cleanser-degreasers,
- weatherproof covering for appropriate areas.
- 2. Sites for treatment of WEEE:
- scales to measure the weight of the treated waste,
- impermeable surfaces and waterproof covering for appropriate areas with the provision of spillage collection facilities and, where appropriate, decanters and cleanser-degreasers,
- appropriate storage for disassembled spare parts,
- appropriate containers for storage of batteries, PCBs/PCTs containing capacitors and other hazardous waste such as radioactive waste,
- equipment for the treatment of water in compliance with health and environmental regulations.

## ANNEX IX

## SYMBOL FOR THE MARKING OF EEE

The symbol indicating separate collection for EEE consists of the crossed-out wheeled bin, as shown below. The symbol must be printed visibly, legibly and indelibly.



## ANNEX X

INFORMATION FOR REGISTRATION AND REPORTING REFERRED TO IN ARTICLE 16 A.Information to be submitted upon registration:

- 1. Name and address of the producer or of the authorised representative where appointed under Article 17 (postal code and location, street name and number, country, telephone and fax number, e-mail, as well as a contact person). In the case of an authorised representative as defined in Article 17, also the contact details of the producer that is represented.
- 2. National identification code of the producer, including European tax number or national tax number of the producer.
- 3. Category of EEE set out in Annex I or III, as appropriate.
- 4. Type of EEE (household or other than household equipment).
- 5. Brand name of EEE.
- 6. Information on how the producer meets its responsibilities: individual or collective scheme, including information on financial guarantee.
- 7. Selling technique used (e.g. distance selling).
- 8. Declaration stating that the information provided is true.
- B. Information to be submitted for reporting:
- 1. National identification code of the producer.
- 2. Reporting period.
- 3. Category of EEE set out in Annex I or III, as appropriate.
- 4. Quantity of EEE placed on the national market, by weight.
- 5. Quantity, by weight, of waste of EEE separately collected, recycled (including prepared for re-use), recovered and disposed of within the Member State or shipped within or outside the Union.

*Note:* information set out in points 4 and 5 must be given by category.

# ANNEX XI

# PART A

## REPEALED DIRECTIVE WITH ITS SUCCESSIVE AMENDMENTS

(referred to in Article 25)	
Directive 2002/96/EC on waste electrical and electronic equipment (WEEE)	(OJ L 37, 13.2.2003, p. 24)
Directive 2003/108/EC of the European Parliament and of the Council	(OJ L 345, 31.12.2003, p. 106)
Directive 2008/34/EC of the European Parliament and of the Council	(OJ L 81, 20.3.2008, p. 65)

## PART B

## LIST OF TIME LIMITS FOR TRANSPOSITION INTO NATIONAL LAW

(referred to in Article 25)

Directive	Deadline for transposition
2002/96/EC	13 August 2004
2003/108/EC	13 August 2004
2008/34/EC	—

## ANNEX XII

## CORRELATION TABLE

Directive 2002/96/EC	This Directive
Article 1	
	Article 1
Article 2(1)	Article 2(1)
Article 2(2)	Article 2(2)
Article 2(3)	Article 2(3)(a)
Article 2(1) (partly)	Article 2(3)(b)
Annex IB, point 5, last item	Article 2(3)(c)
Annex IB, point 8	Article 2(4)(g)
_	Article 2(4)(a) to (f) and 2(5)
Article 3(a)	Article 3(1)(a)
	Article 3(1)(b) to (d)
Article 3(b)	Article 3(1)(e)
Article 3(c) to (h)	Article 3(2)
Article 3(i)	Article 3(1)(f)
Article 3(j)	Article 3(1)(g)
Article 3(k)	Article 3(1)(h)
Article 3(l)	—
Article 3(m)	Article 3(1)(i)
_	Article 3(1)(j) to (o)
Article 4	Article 4
Article 5(1) to (2)	Article 5(1) to (2)
_	Article 5(3) to (4)

Article 5(3)	Article 5(5)
—	Article 6(1)
Article 5(4)	Article 6(2)
Article 5(5)	Article 7(1) and (2)
	Article 8(1)
Article $6(1)$ , first and second subparagraphs, and (3)	Article 8(2), (3) and (4)
Annex II(4)	Article 8(4), second subparagraph, first sentence
Article 6(1), third subparagraph	Article 8(5)
Article 6(6)	Article 8(6)
Article 6(2)	Article 9(1) and (2)
Article 6(4)	Article 9(3)
Article 6(5)	Article 10(1) and (2)
	Article 10(3)
Article 7(1)	—
Article 7(2)	Article 11(1) and Annex V
	Article 11(2)
	Article 11(3)
Article 7(3), first subparagraph	Article 11(4)
Article 7(3), second subparagraph	—
Article 7(4)	—
Article 7(5)	Article 11(5)
	Article 11(6)
Article 8(1)	Article 12(1)
	Article 12(2)
Article 8(2), first and second subparagraphs	Article 12(3)
Article 8(2), third subparagraph	Article 14(1) (partly)
Article 8(3), first subparagraph	Article 12(4)
	Article 12(5)
Article 8(3), second subparagraph	Article 14(1) (partly)
Article 8(4)	
Article 9(1), first subparagraph	Article 13(1), first subparagraph
Article 9(1), second subparagraph	
Article 9(1), third subparagraph	Article 13(1), second subparagraph
	1

Article 9(1), fourth subparagraph	Article 13(1), third subparagraph
Article 9(2)	Article 13(2)
Article 10(1)	Article 14(2)
Article 10(2)	Article 14(3)
Article 10(3)	Article 14(4)
Article 10(4)	Article 14(5)
Article 11	Article 15
Article 12(1) (partly)	Article 16(1) to (3)
Article 12(1), first subparagraph (partly)	Article 16(4)
Article 12(1), second subparagraph	Article 16(1) and (2) and Article 17(2) and (3)
Article 12(1), third subparagraph	Article 16(3) and (5)
	Article 17(1)
Article 12(1), fourth subparagraph	Article 18
Article 12(2)	Article 16(5)
Article 13	Article 19
_	Article 20
Article 14	Article 21
Article 15	Article 22
Article 16	Article 23(1)
—	Article 23(2) to (4)
Article 17(1) to (3)	Article 24(1) to (3)
Article 17(4)	Article 7(3)
Article 17(5)	Article 7(4) to (7), Article 11(6) and Article 12(6)
_	Article 25
Article 18	Article 26
Article 19	Article 27
Annex IA	Annex I
Annex IB	Annex II
	Annexes III, IV and VI
Annexes II to IV	Annexes VII to IX
	Annexes X and XI
_	Annex XII

- (1) OJ C 306, 16.12.2009, p. 39.
- (2) OJ C 141, 29.5.2010, p. 55.
- (3) Position of the European Parliament of 3 February 2011 (not yet published in the Official Journal) and position of the Council at first reading of 19 July 2011 (not yet published in the Official Journal). Position of the European Parliament of 19 January 2012 (not yet published in the Official Journal) and decision of the Council of 7 June 2012.
- (4) OJ L 37, 13.2.2003, p. 24.
- (5) OJ C 138, 17.5.1993, p. 5.
- (6) OJ L 312, 22.11.2008, p. 3.
- (7) OJ L 285, 31.10.2009, p. 10.
- (8) OJ L 37, 13.2.2003, p. 19.
- (9) OJ L 266, 26.9.2006, p. 1.
- (10) OJ L 286, 31.10.2009, p. 1.
- (11) OJ L 161, 14.6.2006, p. 1.
- (12) OJ L 190, 12.7.2006, p. 1.
- (13) OJ L 24, 29.1.2008, p. 8.
- (14) OJ L 118, 27.4.2001, p. 41.
- (15) OJ L 143, 30.4.2004, p. 56.
- (**16**) OJ L 55, 28.2.2011, p. 13.
- (17) OJ C 369, 17.12.2011, p. 14.
- (18) OJ L 396, 30.12.2006, p. 1.
- (**19**) OJ L 144, 4.6.1997, p. 19.
- (**20**) OJ L 169, 12.7.1993, p. 1.
- (21) OJ L 331, 7.12.1998, p. 1.
- (22) OJ L 189, 20.7.1990, p. 17.
- (23) OJ L 342, 22.12.2009, p. 1.
- (24) OJ L 316, 4.12.2007, p. 6.
- (25) Adopted by Cenelec in March 2006.
- (26) OJ L 78, 16.3.2004, p. 56.
- (27) OJ L 119, 11.5.2005, p. 13.
- (28) OJ L 174, 1.7.2011, p. 88.
- (29) OJ L 243, 24.9.1996, p. 31.
- (**30**) OJ L 343, 13.12.1997, p. 19.
- (31) OJ L 159, 29.6.1996, p. 1.
- (**32**) OJ L 182, 16.7.1999, p. 1.