

Definitions and rationale

1. The broad aim of the waste electrical and electronic equipment (WEEE) Directive is to address the environmental impacts of WEEE and to encourage its separate collection and subsequent treatment, re-use, recovery, recycling and environmentally sound disposal.
2. WEEE is a priority waste stream of the European Community because of the estimated growing volume of WEEE, particularly in relation to other forms of municipal solid waste, and because of the potential hazardousness of WEEE following its disposal. This potential hazardousness means that WEEE can have a disproportionate negative impact on the environment and on human and animal health, in relation to the volume of waste discarded.
3. The main UK Regulations implementing the WEEE Directive came into force on 2 January 2007. (separate regulations implementing the treatment and permitting requirements came into effect on 5 January 2007). Full producer responsibility comes into effect on 1 July 2007.¹
4. The WEEE Directive is one of a small number of European Directives which implement the principle of 'extended producer responsibility'. Under this principle producers are required to take responsibility for the environmental impact of their products, especially when they become waste.
5. Under the WEEE Directive each Member State is required to promote and facilitate the separate collection of WEEE from other forms of waste, and to ensure that the separately collected WEEE is treated to a new set of standards and targets for treatment and recovery. Although there is no specific target for re-use of whole appliances, the Directive encourages this where appropriate.
6. The Directive makes producers responsible for financing the collection, treatment and recovery of waste electrical equipment, and also obliges them to mark equipment with a crossed out wheeled bin symbol and make information available on components and improve design to facilitate recycling. It obliges distributors to allow consumers to return their waste equipment free of charge, on a like-for-like basis on sale of new equipment and also provide information to consumers on why and how they can separately dispose of WEEE.
7. The Directive seeks to improve the environmental performance of all operators involved in the lifecycle of electrical and electronic equipment, especially those dealing with WEEE. Accordingly it sets certain requirements relating to the separate collection of WEEE, standards of its treatment at permitted facilities, and sets targets for its recycling and recovery.
8. The main benefits of the WEEE Directive are:
 - reductions in the negative environmental impacts of electrical and electronic equipment and waste electrical and electronic equipment both in volume and in terms of its potential hazardousness;

¹ The Directive was due to be transposed into Member State legislation by August 2004 and come into force in August 2005. Implementation of the Directive in the UK was delayed.

- positive contributions to reductions in greenhouse gases, and to sustainable development and resource productivity more generally, through the re-use, recycling and recovery of WEEE; and
- increased protection of human health and animal health from the potential negative impacts of WEEE.

Arisings, trends and projections

9. Estimates suggest that the UK produces around 900,000 tonnes of WEEE per year from domestic sources. Additional WEEE arises from shops, offices and industrial premises. Although fridges and freezers are already treated and a high percentage of large domestic appliances (e.g. cookers, washing machines) are recycled, the majority of items – especially televisions and small items of WEEE have traditionally been sent to landfill without treatment.

10. The European Commission estimates that WEEE arisings are growing at around 4% per annum. Taking these figures and combining them with those from the Industry Council for Electronic Equipment (ICER) report², estimates for growth of household WEEE are shown in Table C10.1 below, and Table C10.2 below shows estimates for growth of non-household WEEE arisings.

Table C10.1: Estimated household WEEE arisings in the UK

Year	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Millions tonnes	1.1	1.13	1.18	1.23	1.28	1.33	1.38	1.43	1.49	1.56	1.61
Units	98.6	102.6	106.7	110.9	115.4	120.0	124.8	129.8	134.9	140.3	146.0

Table C10.2: Estimated non-household WEEE arisings in the UK

Year	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Millions tonnes	0.98	1.02	1.06	1.11	1.15	1.20	1.29	1.35	1.35	1.40	1.46
Units	79.6	82.8	86.1	89.6	93.2	96.9	100.8	104.8	109	113.3	117.9

² For further information see <http://www.icer.org.uk>

Management routes

11. The WEEE Regulations have implications for the following groups:

- producers (any business that manufactures, imports or re-brands electrical and electronic products);
- retailers and distributors (any business that sells electrical and electronic equipment to end users);
- local authorities and other operators of collection facilities;
- the waste management industry;
- waste exporters and reprocessors; and
- businesses and other non-household users of electrical and electronic equipment.

12. The WEEE Regulations offer two options to retailers and distributors. They can either offer free of charge one-for-one in-store take back or they can join the Distributor Takeback Scheme (DTS).

13. In December 2006 the Government announced the appointment of Valpak Retail WEEE Services Ltd as the operator of the Distributor Takeback Scheme (DTS). This operator would discharge the obligations of distributors by supporting an “adequate network” of civic amenity (CA) sites and other collection facilities that would allow consumers to deposit their WEEE separately from other waste for producers to collect for treatment and recycling. The DTS will provide funding to local authorities to assist the upgrading of CA sites to allow for separate collection, establish the network of Designated Collection Facilities (DCFs); and provide information for consumers. The DTS will be funded by member retailers.

Local authority civic amenity sites

14. The Government is keen that optimal use is made of the existing waste collection infrastructure to support compliance with the WEEE Directive. Local authorities are being encouraged to register their civic amenity sites as designated collection facilities (DCF) and become part of the DTS collection network.

15. Local authorities will save money as they will no longer be responsible for financing the treatment and disposal of WEEE deposited at their sites as this will become the responsibility of producers.

16. If a local authority is not able to get a contract with a producer compliance scheme to take on the collection, treatment and recycling of WEEE, it would arrange for separately collected WEEE to be transported, treated and recycled itself. It would then be able to recover the costs incurred for dealing with WEEE from producer compliance schemes.

Producer compliance schemes

17. All producers will have to join a Producer Compliance Scheme (PCS)³. The PCS will discharge the obligations of producers relating to registration and reporting of compliance. They will normally act on the producer’s behalf in terms of discharging the major obligations of the WEEE Directive that fall on producers – collecting WEEE from DCFs or non-household users and arranging the treatment and recycling of WEEE.

³ A list of 37 producer compliance schemes that have been approved for the 2007 compliance period can be found at: http://www.environment-agency.gov.uk/commondata/acrobat/approved_schemes_1734809.pdf

Policies and targets

18. The WEEE Regulations apply to electrical and electronic equipment (EEE) which falls within the following 10 product categories listed in the Directive:

- large household appliances;
- small household appliances;
- IT and telecommunications equipment;
- consumer equipment;
- lighting equipment;
- electrical and electronic tools;
- toys, leisure and sports equipment;
- medical devices;
- monitoring and control instruments; and
- automatic dispensers.

19. The WEEE Directive requires the following re-use, recycling and recovery targets to be achieved for separately collected WEEE once it has been treated – see Table C10.3 below.

Table C10.3: WEEE re-use, recycling and recovery targets

Category	Targets
Category 1 and 10 EEE (large household appliances and automatic dispensers)	Recovery of 80% by average weight per appliance, with a minimum of 75% re-use and recycling of components, materials and substances
Category 3 and 4 EEE (IT and telecommunications equipment and consumer equipment)	Recovery of 75% by average weight per appliance, with a minimum of 65% re-use and recycling of components, materials and substances.
Category 2,5,6,7 and 9 EEE (small household appliances, lighting equipment, electrical and electronic tools, toys, leisure and sports equipment, monitoring and control instruments)	Recovery of 70% by average weight per appliance, with a minimum of 50% re-use and recycling of components, materials and substances.
Gas discharge lamps	Re-use and recycling of 80% by weight of lamps.

Implementation and timescale

20. The main UK Regulations implementing the WEEE Directive were laid before Parliament on 12 December 2006 and entered into force on 2 January 2007. Producers must join a compliance scheme by 15 March 2007 and start marking products by 1 April 2007. Full producer responsibility and

Annex C10: Waste electrical and electronic equipment

distributor obligations apply from 1 July 2007. Separate regulations implementing the treatment permitting requirements for England came into effect on 5 January 2007; these also apply fully from 1 July 2007 in line with producer responsibility.

Roles and responsibilities

Table C10.4: Roles and responsibilities

Organisation/ stakeholder	Roles and responsibilities
Producers	<ul style="list-style-type: none"> • Join an approved compliance scheme, provide data and finance collection, treatment and recycling of WEEE • Mark products with a crossed out wheeled bin symbol and an identification mark • Ensure electrical equipment is not produced in such a way that unnecessarily prevents its re-use
Producer Compliance Schemes	<ul style="list-style-type: none"> • Register producers and discharge their collection, treatment and recycling obligations; provide evidence of this to the Environment Agencies • Prioritise the re-use of whole appliances
Retailers/distributors and operators of collection systems	<ul style="list-style-type: none"> • Take back WEEE in-store free of charge on a like for like basis when supplying a new item of equipment or join the Distributor Takeback Scheme. The DTS is responsible for establishing a network of designated collection facilities (DCFs) for WEEE throughout the UK • Provide specified information to consumers e.g. on the benefits of recycling WEEE.
Local Authorities	<ul style="list-style-type: none"> • Sign up their Civic Amenity Sites as designated collection facilities for WEEE and facilitate the collection of WEEE by producer compliance schemes
Waste management industry	<ul style="list-style-type: none"> • Facilities treating WEEE must obtain the relevant permit or exemption from permitting to become an Authorised Treatment Facility (ATF) • Where ATFs want to issue evidence of compliance to producer compliance schemes they must be approved by the Environment Agencies • Approved ATFs will issue evidence of treatment and obtain evidence of recycling for producer compliance schemes • Similar requirements apply to businesses exporting WEEE for treatment overseas
Business and other non-household users of EEE	<ul style="list-style-type: none"> • Must dispose of electrical equipment separately from other types of waste (or send it for reuse) and ensure that WEEE is delivered to an authorised treatment facility

Waste Strategy 2007

Re-use organisations	<ul style="list-style-type: none"> • If they want to issue evidence of re-use, they must be authorised to do so
Consumers	<ul style="list-style-type: none"> • Consumers are encouraged not to dispose of WEEE together with municipal waste but to take it to designated collection facilities or retail takeback schemes
Environment Agency	<ul style="list-style-type: none"> • Have statutory duty to monitor compliance and manage data for industry and Government. They must ensure that they do this in a fair, timely and proportionate way
DTI	<ul style="list-style-type: none"> • Develop legislative requirements that are simple and cost-effective for stakeholders and which ensure a level playing field • They must appoint an enforcement body for retailer obligations, the Distributor Takeback Scheme and a body to run a system for trading of evidence of compliance • Appoint stakeholder committee to advise on the regulations
Defra	<ul style="list-style-type: none"> • Develop legislative requirements on the permitting and exemption for storage and treatment of WEEE and develop treatment guidelines

Infrastructure and capacity

21. The Directive obliges Member States to provide an adequate network of collection sites where users can return WEEE free of charge. The Government considers that an adequate network would be one which has a similar capacity and distribution to the existing network of approximately 1,070 civic amenity sites. While not all these sites will register as designated collection facilities for WEEE, they are expected to form a large part of the network, and may be supplemented by other sites established by, for example, retailers, re-use organisations or producers.

22. Significant capacity already exists for WEEE collection, particularly in relation to hazardous WEEE which must already be separately collected. An increase in collection capacity is most likely to be needed for mixed, small WEEE, much of which is not currently separately collected. Under the Code of Practice for collection facilities, developed by local authorities, retailers and producers, a 1 metre cubed collection bin is the minimum required for a site to be able to separately collect this waste stream, therefore it is expected that most sites will be able to do this.

23. Treatment infrastructure and capacity is already in place for hazardous WEEE and WEEE which has a high scrap metal content. It is expected that these categories will continue to make up a large proportion of WEEE arising under the new Regulations. Additional investment in new treatment capacity is already occurring and is likely to continue, and in the event of a lack of UK capacity, the Regulations do allow WEEE to be sent to overseas treatment facilities providing it is handled by an approved exporter and is treated to an equivalent standard.

References and other information

Guidance on the UK WEEE Regulations is available at:
<http://www.dti.gov.uk/files/file38209.pdf>

More specific guidance for the treatment of WEEE can be found at:
<http://www.defra.gov.uk/environment/waste/topics/electrical/pdf/weee-batrirt-guidance.pdf>
<http://www.dti.gov.uk/innovation/sustainability/weee/page30269.html>
<http://www.environment-agency.gov.uk/weee>