

# The WEEE directive and its implementation in the EU

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### **Introduction**

The European Union (EU) WEEE Directive (2002/96/EC) was adopted in 2003 and came into force on 13 August 2005 although most EU States were late. However, by 1 January 2008 all EU States had implemented national WEEE legislation. Unfortunately for manufacturers, there are many significant differences between Member States and requirements vary considerably. The WEEE Directive appears to be straightforward having only 19 Articles whereas the much longer EU REACH regulation has 141 Articles. However, implementation of WEEE is very complex because of the different approaches that have been adopted by EU Member States.

### **Scope of WEEE legislation**

The scope of the WEEE Directive is electrical equipment within ten categories of products which are listed in Annex IA. These are:

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

Certain types of products are excluded from scope:

- any equipment that is part of something else that is not covered by the WEEE Directive is itself not covered (Article 2.1). This implies that equipment installed into a train, boat, aircraft etc. is outside the scope of WEEE as they are not within the ten categories
- equipment intended solely for military or National Security applications
- equipment that is used as integral parts of large-scale stationary industrial tools (LSIT)
- types of equipment not included in any of the ten listed categories
- equipment that does not rely on electricity to function such as petrol lawnmowers
- products that rely on voltages above 1000 VDC or 1500 VAC. This excludes very few products with piezoelectric gas lighters being one of the examples
- products within scope of other waste legislation. This excludes batteries and vehicles as these are in scope of the batteries and end-of-life vehicle directives, respectively

Annex IB of the WEEE directive lists “*products that should be taken into account for the purposes of this Directive*”. These lists are interpreted differently by Member States so there are many situations where the status of a product is not clear. Some assume that these lists are “examples” or “indicative examples” and assume that the scope is as broad as possible, whereas others interpret this as actually being indicative of the types of products that are in scope and so have a smaller scope. Annex IA is the minimum scope and Member States are permitted to have a wider scope if they wish, however it is not clear from national legislation whether individual States intend to broaden the scope or if the scope is being interpreted by civil servants more broadly.

The main scope issues are:

- Some states such as Finland include as much equipment as possible and find a category to fit
- Others such as the UK only include products if they clearly fit within a category although some interpretation of the product function and what is meant by the category are required. Where there is doubt, authorities tend to include rather than exclude
- Commercial kitchen equipment – included within the scope of WEEE and usually regarded as “household appliances” even though it is not used in households
- Large-scale stationary industrial tools (LSIT) – this is a sub-category of category 6 that is excluded from the scope of WEEE. The EC has published a definition of LSIT and this indicates that the intention is to regard these as manufacturing processes in factories. Production processes that produce equipment, food, magazines, chemicals, oil and probably power are regarded as LSIT, and all permanently installed parts are therefore excluded from WEEE
- Large machine tools – the status is not clear. The UK believes that as these are large, stationary industrial tools, they should be excluded as LSIT but many States do not agree and include these in the scope of WEEE unless they are used as part of a production line
- Process control equipment – this is used to monitor and control and is often installed in process control panels. However, when used as part of a production process this should be excluded as LSIT components, but some States regard these products as being in Category 9 irrespective of how they are used
- Fixed installations – this is one of the biggest topics of debate and is based on Article 2.1 which excludes equipment that is part of other equipment that is excluded from WEEE. The debate concerns what if the “other equipment” is a building? Several Trade Associations have stated that Article 2.1 excludes fixed installations. However, there is strong disagreement between EU Member States on what should be included and what should be excluded. Some States such as those in Scandinavia include all fixed installation equipment. Germany excludes any equipment that has to be installed by a professional and the UK’s opinion is that if the product is unlikely to be removed and used at another location, or if damage to parts of the building is required to dismantle and remove the equipment, then it is excluded

- Car radios – this is another Article 2.1 issue. Most States exclude these from WEEE as they are within the scope of the ELV directive and this is stated in guidance published by the EC. However, the Netherlands and a few other States have included these in the scope of WEEE if they are sold directly to consumers (these are included in the Netherlands because they are included in the NVMP compliance scheme's list of B2C products).

### **B2C or B2B?**

The first aspect of WEEE legislation to understand is the difference between products sold to “households” – so-called B2C and products sold to businesses – B2B. This is because the obligations for B2C and B2B are different.

<b>Requirement</b>	<b>B2C</b>	<b>B2B</b>
Obligation to collect	From municipal waste sites and from retailers	From customers
Historical Waste (equipment sold before WEEE in force)	Producers responsible for quantity calculated from their market share	1:1 exchange when buying new except in France, Germany and Holland where the user is responsible
Producer Guarantee	Required in all EU States	Required in some EU States
Responsibility for WEEE at end-of-life	Always the producer	Can be transferred to user in many, but not all member states

The producer’s obligations for B2C and for B2B are clearly different and the obligations are not the same in all EU States. To confuse matters further, each State uses its own definition of B2C and B2B. A few have produced lists of products that are regarded as being B2C whereas anything not listed are assumed to be B2B. Some States allow producers to decide and there are several other different definitions that are used.

### **Who is responsible?**

The WEEE Directive states that “Producers” are responsible for financing the disposal of their products at end-of-life and so are legally responsible for compliance with national WEEE legislation. “Producer” is defined by the directive as:

- an EU based manufacturer who supply their products in a EU State
- an organisation that supply products made by another manufacturer under their own brand
- importers into a Member State on a professional basis. This could be a distributor that also imports products
- distance sellers located in one Member State who supply equipment to users in another Member State

### **Producers responsibilities in EU Member States**

Responsibilities are not the same in all EU States. In some States, the

manufacturer, re-brander or importer are classified as the producer and must meet the financial obligations. In several States however, the responsibilities of a producer can be met by the exporter based in other States or in some cases outside the EU. For example, in the UK, Belgium, Holland, and a few other countries, a distributor who imports equipment is regarded as being the producer but can decide not to register if the foreign manufacturer meets all of the producer's obligations by registering and joining compliance schemes. The actual mechanisms for compliance in Member States varies considerably and this is explained below. In general however, there are two main aspects to compliance

- Join producer compliance schemes – this is compulsory in the UK and optional in all other States. However, compliance individually is very difficult and so joining a scheme is nearly always the best option
- Registration with the Member State government – in many, but not all States, compliance schemes do this on behalf of their members

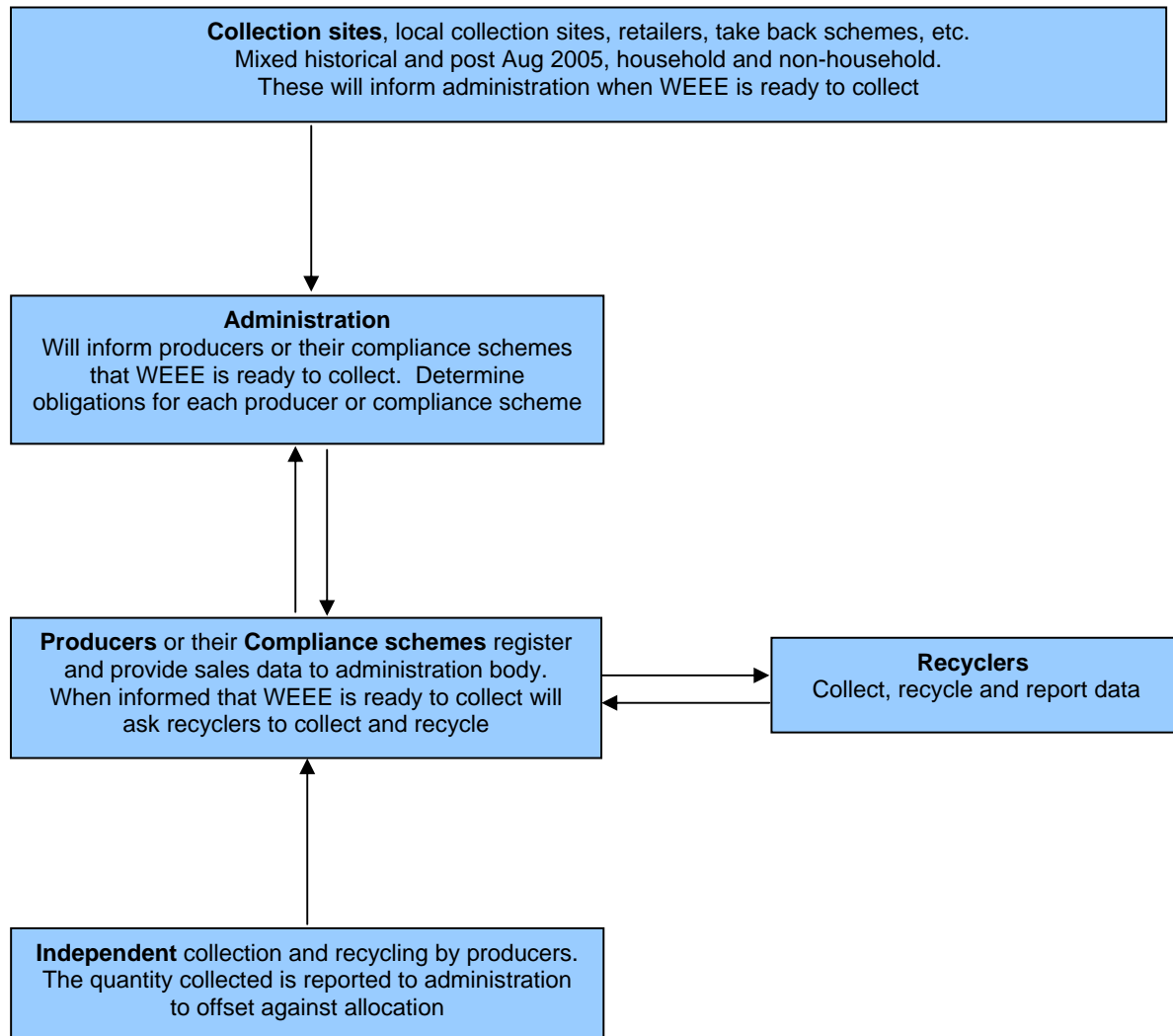
Producer compliance schemes are the main way that this legislation is implemented in the EU. The compliance schemes will:

- register its members
- report data to governments on the weight and number of products sold
- communicate with administrative authority, logistics and recyclers
- co-ordinate collection, treatment and recycling of WEEE to meet their members obligations
- report data to authorities on quantity collected, quantities recovered and quantities recycled
- choose suitable recyclers who will carry out recovery processes according to the requirements of the WEEE directive

## How WEEE compliance works

WEEE compliance for consumer WEEE is different to compliance for business WEEE.

**Consumer WEEE (B2C):** Procedures in Member States vary considerably, the “Clearing House” approach (used e.g. in Germany) is:



Some States including the UK do not have Clearing Houses and so trading of evidence is carried out to ensure that each scheme has financed the correct quantity of WEEE collection and recycling.

**Business WEEE (B2B):** The approach used is for businesses that have WEEE for disposal and recycling contact either the individual producer that sold them the product or their compliance scheme who arranges for the equipment to be collected. Producers and their customers may make alternative arrangements so that the user is responsible for disposal but the default situation is that the producer is responsible. Older equipment sold to businesses before WEEE legislation was adopted is “historical waste” and producers are obliged to collect one equivalent product when they supply one new product. Any other historical waste is the responsibility of the user.

### Implementation by Member States

WEEE is implemented nationally within EU Member States each of which has its own system and rules. All States have one or more national Producer Compliance Schemes (PCS), which producers can join and who meet all of the obligations of their members for a fee. Most schemes operate only in single States although there are a few that operate in several States. It is possible for producers to meet their obligations individually but very few find that this is feasible. Some States such as the UK and Germany have multiple PCS, the UK has over 40, whereas many other States have very few schemes and in some of these (e.g. Holland) there is only one scheme for each type of product. A few States including Belgium have only one national PCS although producers can “go it alone” if they wish.

### Distance sellers

The situation with distance sellers is complex. Distance sellers are companies that export equipment directly to users in other countries.

Distance sellers may have obligations in their home EU State or in the States where their products are sold. The table below illustrates the main situations that exist.

Suppliers location	Obligations in sellers State	Customer location	Obligation in customers State
UK	UK supplier is the producer and must join a UK compliance scheme	UK	
UK	Keep records of sales data. Report to UK government only if requested	Germany	Distance seller expected to register in Germany and is responsible for waste equipment at end-of-life
Finland	Must report sales data to Finish authorities	Netherlands	Join Dutch compliance scheme
Germany	None, no obligations for exporters	Spain	None, only Spanish entities can register
USA	None	France	B2C - Join French compliance scheme B2B – No obligations

These examples show that distance sellers may need to register in their home State, their customer's State, both or neither, depending on which countries are involved.

About half of EU States require (or allow) “distance sellers” to register and take on financial responsibility whereas some States allow only nationals to register. Some States require manufacturers who export to other EU States to provide data on exports and this means that in some circumstances, distance sellers have to register twice and in others not at all.

Countries that encourage foreign distance sellers that are located in other countries to register or to join national PCS include:

- France (not necessary for B2B, B2C is by joining a PCS)
- Germany (encourages distance sellers worldwide to register)
- Ireland
- Portugal
- Sweden (only EU based distance sellers)
- UK (by joining a PCS)

Of course, distance sellers based in one State are outside of the jurisdiction of the WEEE authorities in other Member States and currently there is no mechanism to enforce national WEEE laws outside of national boundaries.

### **Obligations in four example Member States**

Most producers comply with WEEE by joining a PCS. In many States, this is sufficient as the PCS registers their members on their behalf. However, producers must register themselves in eleven EU States including Austria, Germany, Ireland, Portugal and Sweden. The main requirements for equipment manufacturers who are also producers in four of the EU States are summarised below:

**France:** Has seven compliance schemes and these register their members on their behalf; there is no registration fee. Manufacturers are required to print the crossed wheellie bin symbol and producers name on products. France is one of the few countries that have a mandatory requirement to show “visible fees” at the point of sale of new B2C products. The visible fee informs the customer of the actual cost of collection, recycling and disposal at end-of-life and is part of the products price. French law requires that the French producer’s name be printed on products. This means that distributors who import equipment should apply labels with their name on each individual piece of equipment. In practice this is not done as it means re-packaging and it has been claimed that this requirement could be illegal as it restricts the free movement of goods within the EU. Producers have to report on weight and number of sales annually.

**Germany:** Has many compliance schemes but producers must also register with the authorities for which there is a complex fee structure. Unlike in other States, it is also necessary to pay a financial guarantee for B2C using the national guarantee scheme. Financial guarantees are required to ensure that the financial cost of disposal of WEEE at end-of-life can be met if the original seller has ceased trading. Manufacturers should print the crossed wheellie bin symbol and producers name on products although, unusually, the wheellie bin symbol appears not to be required for B2B. German producers are required to report on weight and number of sales monthly for B2C and annually for B2B. The German authorities use a long list of product types to decide if equipment is B2C or B2B although B2B producers must also prove that equipment will not become municipal waste.

This is important as there are separate fees and reporting requirements for B2C and B2B.

**Netherlands:** Most producers (both Dutch and from outside the Netherlands) join one of the three Dutch PCS and this is accepted as registration. It is possible to comply without joining a PCS but this is quite onerous and very few producers have adopted this approach. There is no registration fee in the Netherlands. The types of products accepted by each PCS are limited and so in reality there is usually a choice of only one scheme. Despite this, the Netherlands is one of the lowest cost for WEEE compliance in the EU. Dutch PCS require quarterly reporting but producers that comply individually report annually. In the Netherlands, deciding whether a product is B2C or B2B is not what it may appear at first sight. IT and telecom products weighing over 35 kg are classified as B2B whereas lighter equipment is B2C, irrespective of the customer. Deciding whether other types are B2C or B2B is decided by a lengthy list from the NVMP scheme

**UK:** All producers must join one of the approved PCS of which there are over 40 in the UK. The PCS registers producers on their behalf and pays the registration fees. Manufacturers should print the crossed wheelie bin symbol and producers name on all products. Quarterly reporting of sales in terms of weight and number is required. Showing the visible fee is optional in the UK but it is not used, mainly as it is strongly disliked by retailers. Over 3200 producers have joined UK PCS, over 6000 organisations have registered in Germany and over 3700 in France which has a smaller electronics industry than the UK. The shortfall in the UK is probably because some manufacturers have assumed their products are not in scope but others may be unaware that they should have joined a scheme.

## Product labelling

The wheelie bin symbol defined by CENELEC standard EN 50419:2005 should be attached to products with a black bar below this symbol to indicate that the product was placed on the market on or after 13 August 2005. This can be attached to the packaging or in manuals if there is insufficient space on the equipment.



## EC WEEE Review

The European Commission has carried out a comprehensive review of the WEEE directive and its implementation and submitted proposals to amend this directive in December 2009. Consultants were employed to review how it has been implemented and make recommendations for improvements. Three studies were published by Okopol, by the United Nations University and by Ecolas. These studies clearly show the wide variation in implementation and also show that the approaches adopted by some States do not meet the main intention of the legislation, i.e. to make producers responsible for their own

products when they reach end-of-life. In many EU States, WEEE is seen simply as an additional cost that does not encourage better eco-design. In 2005, over 9 million tonnes of electrical equipment was put onto the EU market with recycling rates varying from as low as ~20% of electrical tools being collected for recycling to nearly 70% of monitoring and control equipment. The performance of EU States also varies considerably, Norway collects over 13 kg per inhabitant, the UK almost 10 kg but several Eastern European States collect less than 1 kg per inhabitant.

The European Commission has reviewed all aspects of the WEEE directive. This review considered whether any changes are required to harmonise the approaches taken by Member States and how to make producers more responsible for their own products. As already explained, scope is a contentious issue with a great deal of variation between Member States. For example:

- Some States such as the UK include only products that are clearly within Annex IA
- Some States exclude large machine tools and some types of “fixed installations” from scope, whereas many States include these types of products
- A few States such as Finland endeavour to include as many types of electrical equipment as possible

The WEEE review will eventually result in an amendment to the WEEE directive although not before 2010. Aspects that might change include:

- Scope – hopefully “grey areas” will be clarified, the status of fixed installations confirmed (probably as being in-scope). It is much less likely that LSIT will be included in scope although anything is possible with some Member States demanding all EEE to be within scope of this legislation unless included in a list of excluded products. One option that is being considered is to make the scope Article 95 so that it must be the same in all EU States.
- Harmonisation of requirements – the current diversity of national legislation almost certainly inhibits the free movement of goods within the EU and changes are needed to correct this situation. A variety of options are being considered such as streamlining registration and data requirements so that these are the same in all EU States. Registration only once in the EU instead of all States where sales are made is another option being considered. Definitions should also be clarified and be the same in all EU States, such as the difference between B2C and B2B
- Promotion of individual producer responsibility – this was supposed to be a cornerstone of the WEEE directive but in practice, WEEE is no more than a tax with no incentives to design equipment for easier recycling. The Okopol study considers a number of financial models, some of which are intended to encourage better design for the environment. Manufacturers should be able to make cost savings by making products that have less environmental impact and are simpler to recycle.
- Mechanisms that account for the Global Market nature of electrical

equipment need to be implemented. Equipment made in one EU State is often sold in many others and can reach end-of-life in different States to where it was originally sold. Systems that can cope with cross-border transactions are required.

- Collection and recycling targets – these may be revised, but also the way equipment is collected could be changed to increase recovery rates. The items in Annex II are also being reviewed and these could be changed to benefit the environment.

The Commission's proposals are now subject to negotiations between the European Parliament, Member States and the EC with new legislation to be in force not before 2010.

There are an increasing number of WEEE regulations in place outside of the EU, for example in Japan, many US States, Korea and China.

**Written in collaboration with ERA Technology, trading as Cobham Technical Services ([www.era.co.uk/rfa](http://www.era.co.uk/rfa)).**