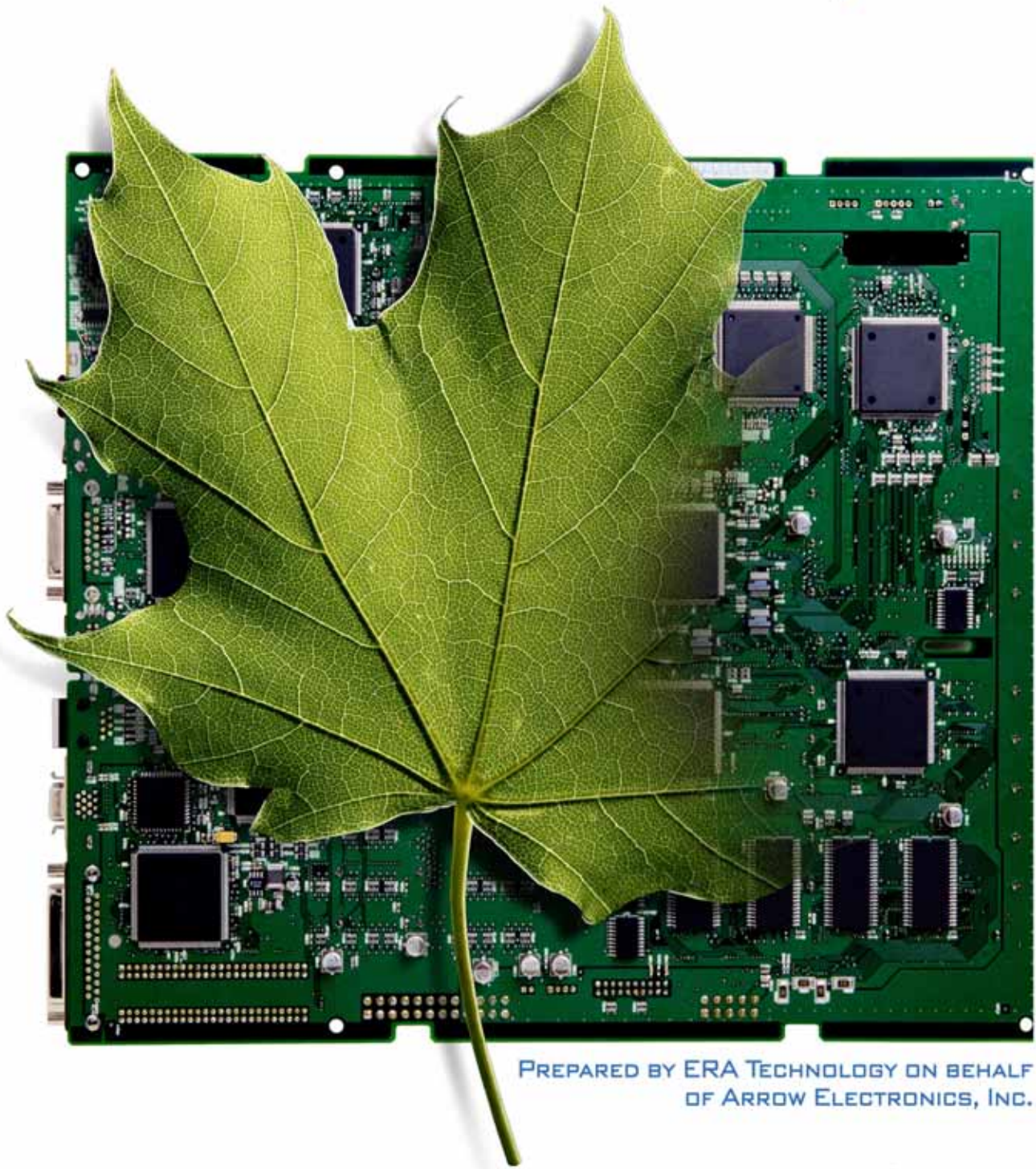


Arrow Electronics, Inc. A Common Sense Guide to WEEE Compliance



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A Common Sense Guide to WEEE

All content provided by ERA Technology on behalf of Arrow Electronics, Inc.

This guide is intended to explain the requirements of the WEEE directive and how manufacturers and producers can comply.

The aims and requirements of the Waste Electrical and Electronic Equipment (WEEE) directive (2003/96/EC) are relatively straightforward but implementation is proving to be very complex. “Producers” can comply either individually or collectively through compliance schemes. The simplest approach to compliance for producers is to join one or more compliance schemes. These compliance schemes are membership-based organizations, which will meet most of their members’ obligations for a fee. Compliance schemes are listed by country in Table 2.

1. Requirements

Producers will be required to finance the collection, treatment, recovery and recycling of their products when they reach end of life and become waste.

The directive as published by the EU comes into force on 13th August 2005 although in some instances individual EU member country laws deviate from this date. See Table 1 for more detail.

1.1 Definitions

Historical Waste: Equipment placed on the market before 13th August 2005 and reaching end of life after this date is classified as “historical waste”.

Household: There is no difference between “consumer” and “business” waste but there are differences between “household” and “non-household” waste. Household is essentially anything that passes through the domestic waste stream at end of life. This inevitably includes some business equipment, for example, one computer sold to a small company; this is likely to be disposed of via the municipal waste stream.

Producer: Producer is defined as the organisation that has legal responsibility. Some examples will explain how this works:

- A manufacturer based in UK who sells to UK users is a producer.



- A company, which sells equipment using their own brand name on equipment made by another manufacturer, is a producer. For example, when an EU retailer outsources manufacturing to Asia, the retailer is the producer since the products would carry their brand name.
- A professional importer of equipment into a EU State is a producer. In addition to an OEM, this could be an OEM's subsidiary, distributor, local trading company or retailer.
- Normally a US manufacturer is not a producer according to the definition of producer in the WEEE directive. However, if they have a presence in an EU member state, such as a subsidiary or sales office, then these would be considered producers in those countries where they are located and are subject to all legal requirements such as labelling, registration and collection for non-household WEEE
- Manufacturers based outside the EU are not able to register in most member states as producers, with the exception of Hungary, Luxembourg and Ireland, which have registration requirements for non-EU manufacturers. However, it is not clear how these countries would enforce regulations outside their jurisdiction.
- Distance Sellers are companies that sell equipment from one member state directly to users in another member state. They should register as producers in the EU states where they are based.
- An EU-based manufacturer that exports equipment to a user in a different member state where no professional importer is involved is a producer. Users would not be classified as "producers".

Products: Products that are within the scope of the directive will usually be the equipment sold to the user. Therefore if a product is sold to an OEM who uses this as a part of their products, which are then sold to users, these products are "components". Manufacturers are not responsible for the end of life disposal costs of components. If however the same items are sold directly to users, then they are equipment and the producer will be responsible. This difference may appear confusing but the following example should explain:

Thermostats are listed in Annex IB of the WEEE directive as an example of a product within the scope of the directive.

Scenario 1: If the thermostat were used to control ambient temperature in a house, it would be purchased by the homeowner and at end of life be disposed of through the municipal waste stream. Under these circumstances, the thermostat is an item of equipment within the scope of the directive.



Scenario 2: If however the same thermostat were to be purchased by a manufacturer of air conditioning equipment for installation inside one of their machines, and the air conditioner is then sold to the user, it would be a category 1 product within the scope of WEEE. The thermostat would be a component and the thermostat manufacturer has no legal WEEE obligations.

1.2 Scope

Equipment within the scope of WEEE is listed in Annex IA of the WEEE directive:

1. Large household appliances
2. Small household appliances
3. IT and telecommunications equipment
4. Consumer equipment
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

There are a number of exclusions to the scope listed in guidelines published by the European Commission which include:

- Large-scale stationary tools such as a production line
- Fixed Installations – such as railway signalling
- Something that is part of equipment outside the scope of the WEEE directive such as equipment which is integral to aircraft, trains, boats, etc.
- Equipment solely for military and national security purposes
- Equipment covered by existing waste directives such as ELV – equipment in cars

There are more details in guidance published by the European Commission at http://europa.eu.int/comm/environment/waste/pdf/faq_weee.pdf



1.3 Who is responsible for what?

For Electrical and Electronic Equipment placed on the market before 13 August 2005 and becoming waste after 13 August 2005 (This is “Historical Waste”)

There are different requirements for “household” and “non-household” WEEE.

Household WEEE: Producers will be obliged to finance the collection, treatment, recovery and recycling of WEEE from private households according to their market share.

Non-Household WEEE: Producers will be obliged to collect, treat, recover and recycle one equivalent item of non-household WEEE when they sell a new product to the user. Any other WEEE is the responsibility of the user. (e.g. a business owner has ten old end-of-life computers (historical WEEE) and buys only five new computers, the producer of the new computers is obliged to take back five old computers and the business owner must recycle the other five). In France, Germany, Holland and Poland however, there are different requirements, and users are responsible for all non-household historical WEEE.

For Electrical and Electronic Equipment placed on the market after 13th August 2005

The “producer” is responsible for collection, treatment, recovery and recycling of their products. Collection is from municipal waste sites or local collection sites but not from consumers. However producers must collect non-household WEEE from users unless alternative arrangements have been agreed.

Note: In Denmark, the cut-over date for historical/non-historical waste is 1 January 2006.

Some notes on producer responsibilities which are not yet clear:

- Where EU based manufacturers export to users located in different EU States, guidance from several Member States indicates that producers should inform the regulatory authorities in the EU State in which they are based that they are doing this. At present however it is not clear what the authorities will do with this information or how producers will be required to finance WEEE for which they are responsible.
- Data requirements, for example sales, units collected and units recycled, are not yet clearly defined in all member states. Where defined, they vary between member states. Compliance schemes and registration bodies should be able to provide further details on the requirements.



2. Practical realities

Producers may meet their obligations individually or collectively. Most producers are likely to meet their obligations by joining compliance schemes. This will involve paying a fee, which will be based on their sales by weight. The scheme will carry out all of the required activities for its members including, where allowed, registration with the authority on their behalf. These collective schemes will be a lower cost option but a few producers will opt to take back their own products, which they will recycle themselves.

In general, professional recyclers will collect the majority of WEEE from local authority waste sites on behalf of compliance schemes.

In practice, since most WEEE will be collected by local authority waste sites, it will be largely unsorted and contain:

- Equipment from many of the WEEE categories
- Equipment from many 100's of manufacturers
- Both household and non-household waste and
- Historical and post August 2005 waste which will have been collected together

It will be practically impossible to sort this WEEE and EU states will need simple cost effective procedures to deal with this material. Most, if not all, member states will set up schemes based on the following approach:

1. Each EU state will have a regulatory authority to ensure that producers' legal obligations are being met.
2. All EU-based producers must register with regulatory authorities in the EU states they do business in. The data requirements in most states have not yet been defined. In some states, the authorities may require sales data to households only but most will require data for both sales to households (or consumers) and to non-household (to business) users. The authority will use sales data from all producers in each category to calculate their market share of household WEEE.
3. Collection sites will inform the authority when they have WEEE ready for collection and the quantities of WEEE.



4. The authority will total up the reported quantities of WEEE collected to calculate the obligation for each producer. This will be calculated from their market share and the total collected in their category. The authority will contact producers to inform them that WEEE is ready for collection and they will be obliged to collect, treat, recover and recycle the waste. In fact most will sub-contract this to professional recyclers rather than do it themselves.
5. If a producer collects their own WEEE, for instance via their own take-back scheme, they can offset this quantity against their obligations set by the authority.
6. Most manufacturers will meet their WEEE financial obligations by joining compliance schemes. These register, collect, recycle and report data on behalf of their members. Producers who join compliance schemes should not need to register themselves except in Denmark and Portugal.

3. Labelling and information requirements

Equipment within the scope of the WEEE directive placed on the market after 13th August 2005 must be labelled to inform users not to dispose of the product at end of life with other waste. The label is a crossed out wheeled bin symbol as defined by the CENELEC standard EN 50419:2005. A black horizontal bar is added underneath the bin to indicate that the product was placed on the EU market after 13th August 2005.



The representation above depicts the CENELEC standard EN 50419:2005. For the label itself along with dimensions and other requirements please refer to www.cenelec.org where the standard is available for purchase.

The directive also requires a label with the name of the producer. This will often be impractical. For example, a distributor, who imports products, is the producer but the product will have only the manufacturer's name.



The manufacturer's name on the label should be sufficient for the authorities as long as this information is provided to the authorities when the producer (in this case the distributor), registers.

Although manufacturers outside the EU have no legal requirements, they are in the best position to label their products as part of their manufacturing process.

Producers will also be required to provide information for recyclers and refurbishers of electrical equipment. The information that is required is not defined but should include at a minimum: the location and type of any hazardous materials and the locations of any of the items listed in Annex II of the directive. The easiest way of providing this information is to place this on websites.

4. Deadlines for producers

The WEEE directive comes into force on 13th August 2005, though several member states have not used this date when transposing the directive into their own laws.

Labelling, information requirements and producers' financial responsibility for the end of life costs were supposed to be compulsory starting on 13th August 2005. This is being delayed in some member states, (except for the labelling requirements), as the infrastructure is not yet in place. Registration in theory must occur before this deadline but this is not yet possible in most countries in Europe. The current status with legislation and the expected registration deadlines and dates when producer financial responsibility is likely to start, where known, are listed in Table 1.

Note: Several of the new EU States including Malta have been granted a one or two year extension for meeting collection, reuse and recycling targets but labelling and financial obligations should start on 13th August 2005.

Table 1. Status of legislation, expected start dates of WEEE recycling and registration deadlines

Member State	Transposed to Law	Comments	Labelling Required	Registration Deadline*	Expected Start of Compulsory WEEE Recycling and Producer Financial Responsibility
Austria	Yes		13 Aug 2005	30 Sep 2005	13 Aug 2005
Belgium	Yes		13 Aug 2005	1 Aug 2005	13 Aug 2005
Cyprus	Yes		13 Aug 2005		Under discussion
Czech Republic	Yes		13 Aug 2005	13 Oct 2005	Should start 13 Aug 2007
Denmark	Yes		13 Aug 2005	1 Oct 2005	1 Jan 2006



Member State	Transposed to Law	Comments	Labelling Required	Registration Deadline*	Expected Start of Compulsory WEEE Recycling and Producer Financial Responsibility
Estonia	No	Transposition expected by end of 2005	13 Aug 2005		
Finland	Yes	Except in Aland	13 Aug 2005	15 May 2005	13 Aug 2005
France	Yes	More information expected soon	13 Aug 2005		
Germany	Yes		13 Aug 2005	24 Nov 2005	1 Mar 2006
Greece	Yes	Not article 9 amendment	13 Aug 2005	13 Aug 2005	May start 13 Aug 2005
Hungary	Yes		13 Aug 2005		Should start 13 Aug 2005
Ireland	Yes		13 Aug 2005	20 Jul 2005	13 Aug. 2005
Italy	No		13 Aug 2005		
Latvia	Yes		13 Aug 2005	1 Oct 2005	
Lithuania	Yes		13 Aug 2005		
Luxembourg	Yes		13 Aug 2005	13 Aug 2005	13 Aug 2005
Malta	No		13 Aug 2005		Will be late
Netherlands	Yes		13 Aug 2005	14 Nov 2005	Existing schemes in operation so should be 13 Aug 2005
Norway	-	Not EU but has similar legislation			Existing scheme in operation (not EU)
Poland	Yes	More information expected soon			
Portugal	Yes		13 Aug 2005	13 Aug 2005	
Slovakia	Yes		13 Aug 2005	30 Jun 2005	
Slovenia	Yes		13 Aug 2005	30 Jun 2005	
Spain	Yes		13 Aug 2005	13 Aug 2005	
Sweden	Yes		13 Aug 2005	Early 2006	Existing schemes in operation so will be 13 Aug 2005



Member State	Transposed to Law	Comments	Labelling Required	Registration Deadline*	Expected Start of Compulsory WEEE Recycling and Producer Financial Responsibility
Switzerland	-	Not EU but has similar legislation			Existing scheme in operation (not EU)
United Kingdom	No		13 Aug 2005	Registration during Jan & Feb 2005	June 2006

* Note: Though many registration deadlines have passed, producers should still register, as soon as possible.

Table 2 lists available information on the registration body, where these have been announced, and compliance schemes in Member States. Producers should either register with the appropriate regulatory bodies or join compliance schemes (which will typically include registration with the appropriate authorities as part of their service offering except for Denmark and Portugal where all producers must register).

Table 2. Registration bodies and compliance schemes

Member State	Registration body	Compliance Schemes
Austria	Environment Agency Umweltbundesamt	Register online at https://www2.ubavie.gv.at/edm_portal/index.jsp Reporting quarterly (units by type and collection category -there are five of these) placed on market by 31 October 2005 latest Compliance scheme http://www.ufh.at/ ERA GmbH ERP
Belgium	Not known, probably Recupel	Likely to start 13 August 2005 as Belgium has existing national recycling scheme. Best source of information is from this scheme at http://www.recupel.be
Cyprus	Statistical Service and the Environmental Service of the Ministry of Environment	None yet
Czech Republic	Ministry of Environment (may delegate subsequently) http://www.env.cz/env.nsf/homeie?OpenFrameSet	Six schemes so far including: Compliance Schemes: RETELA scheme is being planned by Czech and Moravian Electrical and Electronic Association possibly working with AREO (Czech Association of Recyclers of Electronic Waste) http://www.electroindustry.cz/ to accept medical equipment; REMA scheme to accept IT. Also ERP, Evidom and Ecolamp
Denmark	Probably the responsibility of Danish EPA http://www.mst.dk/homepage/	EI Retur Denmark



Member State	Registration body	Compliance Schemes
Estonia	May be Estonian Environment Information Centre http://nfp-ee.eionet.eu.int/ . Enforcement probably by Ministry of Environment through The Environmental Inspectorate	EES-Ringlus, an association of 26 producers is being set up http://www.eesringlus.ee/?set_lang_id=1
Finland	Pirkanmaa Regional Environmental Centre http://www.ymparisto.fi/default.asp?node=4667&lan=en Registration Forms at http://www.ymparisto.fi/default.asp?contentid=133490&lan=EN	Serty – Oy and Elker - Oy Federation for the technology industry is planning to be set up for B2B compliance
France	Adème http://www.ademe.fr/ (Environment Agency)	Seven including Eco-Systemes and ERP France
Germany	Ministry of Environment responsibility but clearing house is being delegated to Elektro-Altgeräte Register (EAR) http://www.ear-projekt.de Registration from 1 June 2005 (NB must also register if selling direct to users in other member states -i.e. an exporter where there is no importer in that state)	At least six schemes under discussion including the European Recycling Platform (ERP) http://www.erp-recycling.org/
Greece	Ministry of Environment, Planning and Public Works http://www.minenv.gr/4/41/e4100.html	National Scheme Recycling of Appliances SA being set up
Hungary	National Environmental Inspectorate http://www.kvvm.hu/	Four compliance schemes exist: Electro-Coord (White goods and others): http://www.electro-coord.hu/ Elektro-waste: IT http://www.elektrowaste.hu/ Ökomat (Gaming/vending and others): http://www.okomat.hu/ Reelectro
Ireland	Register with The National WEEE Registration Body at WEEERegister@gmail.com	Registration by 20 July 2005 required. See http://www.weeeireland.ie/ and http://www.viron.ie/DOEI/DOEIPol.nsf/wvNavView/Waste+Electrical+&+Electronic+Equipment?OpenDocument&Lang=
Italy	To be set up close to Ministry of Environment. Registration with Chamber of Commerce	La Federazione Nazionale imprese elettrotecniche ed elettroniche (ANIE) http://www.anie.it/ is setting up compliance schemes Ecodon (category 1) EcoR'It http://www.ecoq.it/page.asp?pag=1410 (category 3)



Member State	Registration body	Compliance Schemes
Latvia	State Environmental, Geological and Meteorological Agency http://www.varam.gov.lv/Esakums.htm and http://www.lva.gov.lv/lea	CECED http://www.ceced.org and Latvia Green Elektrons (LZE) are setting up compliance schemes
Lithuania	Responsibility of Ministry of Environment http://www.am.lt/EN/VI/ or Environment Agency	Three organizations including CECED http://www.ceced.org and INFOBALT http://www.infobalt.lt/english are setting up compliance schemes
Luxembourg	Ministry of the Environment http://www.environnement.public.lu/	ECOTREL http://www.ecotrel.org/servlet/Requestor
Malta	Malta Environment and Planning Authority	Under discussion http://www.doi.gov.mt/en/press_releases/2005/05/pr0639E.asp
Netherlands	VROM http://www.vrom.nl/pagina.html?id=7105 responsible.	NVMP http://www.nvmp.nl/ scheme already in existence and likely to continue as main compliance scheme. Reporting is twice monthly. ICT Milieu is the existing scheme for IT products http://213.218.71.17/smartsite.shtml?id=1786 .
Norway (not EC)	Probably the Norwegian Pollution Control Authority (SFT) http://www.sft.no/english/ or other body so authorised by the Ministry of the Environment	Producer must join take back scheme under existing regulations - WEEE like regulation publication to be published soon. Elretur http://www.elretur.no and Renas http://www.renas.no/english/ schemes already in existence and likely to continue as main compliance scheme.
Poland	Responsibility of the Chief Inspector of Environmental Protection - may be delegated	CECED Poland http://www.cecedpolska.pl/eng/indexen.po.html is working with Polish Chamber of Electronics and Telecommunication (KIGEiT) and Philips (lamps) to form joint organisation. Also KIGEiT, ERP and one for lamps
Portugal	Body to be set up under by producer associations and collective compliance system under licence from the Waste Institute	Amb3E being set up by industry. (See official notice of setting up http://www.apirac.pt/noticias.htm). Government will set targets for WEEE collection for individual producers.
Slovakia	Environment Agency will probably set up register	CECED Slovakia setting up scheme http://www.cecedslovakia.sk/ Also Envodom, Ekolamp and SEWA
Slovenia	Ministry of Environment and Spatial Planning	None yet
Spain	One national register yet to be set	At least five schemes being set up
Sweden	By Swedish EPA http://www.internat.naturvardsverket.se/	Existing El-Kretsen http://www.el-kretsen.se/ scheme will very probably handle compliance



Member State	Registration body	Compliance Schemes
Switzerland (not EU)		Existing recovery schemes - Swico http://www.swico.ch/en/default.asp - SENS http://www.sens.ch/
UK	UK Environment Agencies (EA plus Scottish and Welsh devolved authorities) - but system not set up yet	The DTI has stated that it will start registration from 1 Jan 2006. Compliance schemes include: B2B Compliance – primarily industrial equipment which is targeted specifically Category 8 and 9. http://www.b2bcompliance.org.uk/ REPIC – primarily white goods www.repic.co.uk Valpac (includes IT and office equipment) https://data1.valpak.co.uk/valpak2/nav/buildpage.aspx?SectionID=953 Onyx http://www.onyxgroup.co.uk/pages/recycling.asp Wastepack http://www.wastelink.co.uk/wastepack/index.aspx

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Please visit Arrow's Environmental Compliance Research Site at www.arrow.com/green in order to receive updates on WEEE as well as other emerging environmental legislation from around the world.

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