









UEEE and WEEE Classification

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Introduction



Legislation

Distinction UEEE and WEEE

WEEE classification

Legislation



Three main regulations:

1. Waste Framework Directive

Directive 2008/98/EC on waste (Waste Framework Directive)

2. Waste Shipment Regulation (European implementation of the Basel Convention)

Regulation (EC) No <u>1013/2006</u> of the European Parliament and of the Council of 14 June 2006 on shipments of waste.

3. Weee directive

DIRECTIVE 2012/19/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 4 July 2012 on waste electrical and electronic equipment (WEEE)

Waste Framework Directive



Basic concepts and definitions related to waste management, such as definitions of waste, recycling, recovery.

The Directive introduces the "polluter pays principle" and the "extended producer responsibility" and includes recycling and recovery targets for certain waste streams.

WEEE Directive



- Regulates the producers responsibility
- (Level of recycling WEEEBALEX)
- And is important for the distinction
 UEEE en WEEE, Annex VI (minimum requirements for shipments)





ANNEX VI, WEEE directive

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Based on the previous Basel E-waste guideline.

A guideline is not binding, but as part of the directive, the criteria are binding.





Annex VI, the criteria



The holder who claims to ship used EEE should have available:

- 1. 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;
- 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; Point 3 of Annex VI describes the steps for testing and recording like eg:
 - name of item;
 - identification number;
 - year of production when available;
 - name of the company responsible for the evidence of functionality;
 - kind of test performed.

Annex VI



3. 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 Waste Framework Directive 2008/98/EC;

Art. 3 (1) Defintion of waste: waste' means any substance or object which the holder discards or intends or is required to discard;

4. appropriate protection against damage during transportation, loading and unloading in particular through sufficient packaging and appropriate stacking of the load.

Exemption for warranty goods!!!

Properly packed?





Properly packed?





Waste?





Waste?



Question:

Does your country test if an EEE is working or not, before considering it UEEE or WEEE?

WEEE classification, first some remarks

- 1. Classification is regulated in the European Waste Shipment Regulation (WSR);
- 2. WSR is not an exact copy of the Basel Convention, takes also into account an OECD decision;
- 3. Which means classification in the WSR sometimes different than the Basel Convention;
- 4. Not all types of waste are classified;
- Classification is not easy;
- 6. So classification can differ within European countries, but we working on it.



Waste Shipment Regulation

Main rules regarding procedures:

- Export ban for <u>hazardous</u> WEEE (all hazardous waste) to non OECD countries (art. 36 WSR)
- Notification for <u>hazardous</u> WEEE to OECD countries
- Procedure depending on country of destination (prohibition, notification or Annex VII) for <u>non hazardous</u>
 WEEE to non OECD
- Annex VII for <u>non hazardous</u> components of WEEE to OECD
- Notification for unlisted waste to non OECD and OECD (unless hazardous than export ban to non-OECD)

WEEE Classification, Basel Convention



Main Basel codes for WEEE

- A 1180 (for hazardous)

Waste electrical and electronic assemblies or scrap (1) containing components such as accumulators and other batteries included on list A, mercury-switches, glass from cathode-ray tubes and other activated glass and PCB-capacitors, or contaminated with Annex I constituents (e.g. cadmium, mercury, lead, polychlorinated biphenyl) to an extent that they possess any of the characteristics contained in Annex III (note the related entry on list B, B1110)

WEEE Classification, **Basel Convention**



B1110: Electrical and electronic assemblies (non hazardous)

- Electronic assemblies consisting only of metals or alloys
- Waste electrical and electronic assemblies or scrap (1) (including printed circuit boards) not containing components such as accumulators and other batteries included on list A, mercury- switches, glass from cathode-ray tubes and other activated glass and PCB-capacitors, or not contaminated with Annex I constituents (e.g. cadmium, mercury, lead, polychlorinated biphenyl) or from which these have been removed, to an extent that they do not possess any of the characteristics contained in Annex III (note the related entry on list A, A1180)
- Electrical and electronic assemblies (including printed circuit boards, electronic components and wires) destined for direct re- use (2) and not for recycling or final disposal (3)

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WEEE Classification, based on Waste Shipment Regulation



When export to non OECD countries first check if there is an export ban.

- Check if the waste is listed in annex V of the WSR;
- Annex V is only used to check if an export ban is applicable;
- Annex V is comparible with Annex IX of the Basel Convention;
- All A codes is annex V is considered hazardous, so export ban;
- In Annex V also other hazardous waste not listed as an A code in the IX of the Basel Convention (also export ban);
- A1180 is in the list of annex V.





Baselcodes A1180 and B1110 does not apply for OECD countries

In stead of B1110:

- GC010 for electrical assemblies consisting only of metals or alloys or
- GC020 for electronic scrap (e.g. printed circuit boards, electronic components, wire, etc.) and reclaimed electronic components suitable for base and precious metal recovery

Reason definition B1110 to broad to use it for non hazardous waste

WEEE Classification, based on WSR, the codes



- GC010 and GC020
- In definition we see that the WEEE must be dismantled in assemblies or scrapped.
- So for whole electric and electronic equipment seen as WEEE there is no code, so unlisted
- Most often whole equipment is seen as hazardous
- Unlisted hazardous waste means export ban to non OECD and with notification to OECD countries

WEEE Classification, based on WSR, other possible codes



- B1010 Waste from shredding of WEEE which are composed of metals can be B1010 only when all hazardous components have been remove before shredding
- B3010 Solid plastic scrap (no hazardous component)
- B1115 Waste metal cables
- A2010 Glass waste from cathode-rays tubes and other activited glass



Theory seems easy but the practice is difficult

Waste from shredding of WEEE which are composed of metals can be B1010 only when all hazardous components have been remove before shredding. Sometimes difficult to know.





Theory seems easy but the practice is difficult

Printer circuit board assemblies can contain brominated flame retardants!!!!







Theory seems easy but the practice is difficult

Roughly shredded (smashed) components of WEEE GC020 (but can contains hazardous components) or not listed?





Theory seems easy but the practice is difficult

Plastic components of WEEE? B3010 or unlisted?

Plastic components of WEEE can contain brominated flame retardants

How much percentage of impurities (metal, wood etc) is acceptable?





Theory seems easy but the practice is difficult

Dismantled electric motors (without capacitors) GC010 (but when is it clean enough)?





Theory seems easy but the practice is difficult

Not contaminated waste of cables GC020 or B1115?





Thank you!

Comments or Questions?