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Committee Ref: GEL/111

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Dear Member,

DOCUMENT FOR FINAL VOTE AND APPROVAL TO PUBLISH

DEFAULT UK VOTE: Approval
COMMENTS TO christina.allen@bsigroup.com BEFORE 2018/09/26

Please find attached: FprEN 50614, Requirements for the preparing for re-use of waste electrical and electronic equipment

This document is circulated to National Committees for approval to progress to publication.

- If the UK votes yes or abstains, it is BSI's policy to implement this document as a British Standard with no further input from the Committee.
- If the UK votes no, we have to provide a technical justification at this stage and this will form the basis of additional information in the National Foreword of any resulting British Standard implementation.
- Additional texts to the National Foreword or National Annex will require endorsement from your Committee Chairman.

Note 1) Only technical comments accompanying a negative vote can be submitted at this stage and they have to be submitted on the correct comment template. If you have any queries on how to use the template then please do not hesitate to contact your Committee Secretary.

Note 2) We are obliged to implement all European Standards and our policy is to implement as full a package of International Standards as possible.

Note 3) If you do not consider an International Standard suitable as a British Standard please discuss with your Committee Secretary.

Please notify your Committee Secretary if you are aware of any keywords that might assist in classifying or identifying the standard or if the content of this standard:

i) has any issues related to 3rd party IPR, patent or copyright,
ii) affects other national standard(s),
iii) requires additional national guidance or information.

If we do not hear from you by the above date we shall submit a vote of approval to CEN on behalf of the UK committee.

Yours sincerely

Christina Allen
Secretary to GEL/111

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

FINAL DRAFT
FprEN 50614

August 2018

ICS 13.030.50; 29.020; 31.020

English Version

Requirements for the preparing for re-use of waste electrical and electronic equipment

Exigences relatives à la préparation en vue du réemploi des déchets d'équipements électriques et électroniques

To be completed

This draft European Standard is submitted to CENELEC members for unique acceptance procedure.
Deadline for CENELEC: 2018-10-26.

It has been drawn up by CLC/TC 111X.

European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

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European foreword

This document (FprEN 50614:2018) has been prepared by CLC/TC 111X "Environment".

This document is currently submitted to the Unique Acceptance Procedure.

The following dates are proposed:

• latest date by which the existence of this document has to be announced at national level	(doa)	dor + 6 months
• latest date by which this document has to be implemented at national level by publication of an identical national standard or by endorsement	(dop)	dor + 12 months
• latest date by which the national standards conflicting with this document have to be withdrawn	(dow)	dor + 36 months (to be confirmed or modified when voting)

This document has been prepared under a mandate given to CENELEC by the European Commission and the European Free Trade Association.

Introduction

This European Standard aims to assist in:

— encouraging the re-use of waste electrical and electronic equipment (WEEE) as promoted by the WEEE Directive (2012/19/EU);

— reducing the amount of waste sent to landfill and incineration by diverting WEEE to be prepared for re-use;

— providing a framework for assuring consumers and other stakeholders of the safety of equipment and quality of the preparing for re-use operator;

— encouraging and maintaining job creation in organizations involved in preparing WEEE for re-use;

— supporting the prevention of illegal (cross boundary) shipments of WEEE to enable regulatory bodies to differentiate such equipment from illegal exports of WEEE falsely described as used electrical and electronic equipment.

This European Standard supports the objectives of the Community's environment policy. These aim to preserve, protect and improve the quality of the environment, protect human health and utilize natural resources prudently and rationally.

This European Standard contains requirements applicable to the preparing for re-use of WEEE. It complements the EN 50625 standard series covering the collection, transport and general and particular treatment of WEEE. Preparing for re-use is preferred to recycling and other recovery in the waste hierarchy.

1 Scope

This European Standard is applicable to the processes relating to the preparing for re-use of WEEE.

NOTE 1 This European Standard covers the preparing for re-use of WEEE arising from electrical and electronic equipment as listed in Annex I and Annex III of Directive 2012/19/EU.

This European Standard is applicable to preparing for re-use operators only and does not cover activities connected with used or second-hand equipment that have not become waste. It applies to all preparing for re-use operators, no matter their size or main focus of activity.

This European Standard assists in quantifying re-use, recycling and recovery rates in conjunction with EN 50625-1.

In case of treatment operations (including the collection and logistics of WEEE) other than preparing for re-use the EN 50625 series applies.

Preparing for re-use processes can include the removal of whole components or parts where they are intended to either be used in the repair of faulty equipment or sold as re-use parts.

The following EEE are not in the scope of this standard:

— industrial monitoring and control instruments;

— in vitro diagnostic medical devices, medical devices or active implantable devices.

NOTE 2 Examples of industrial monitoring and control instruments include equipment intended for use in potentially explosive atmospheres, and monitoring and control equipment that performs a safety function as part of industrial control system.

NOTE 3 In vitro diagnostic medical devices, medical devices and active implantable devices have the capacity to collect and harbour pathogens, depending on the environment in which they operated. It is essential to follow clinically proven means for decontamination. Relevant Directives are 93/42/EEC and 98/79/EC.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 50625 (series), *Collection, logistics & treatment requirements for WEEE*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

— IEC Electropedia: available at http://www.electropedia.org/

— ISO Online browsing platform: available at http://www.iso.org/obp

3.1
accessory
device supplementing a main device or apparatus, but not forming part of it, that is needed for its operation or to confer on it specific characteristics

Note 1 to entry: Accessories can include, for example, refrigerator shelves, adaptor leads, internal shelves, handles and drawers.

[SOURCE: IEC60050-151: International Electrotechnical Vocabulary - Part 151: Electrical and magnetic devices modified by including the note to entry]

3.2
collection
gathering of WEEE, including the preliminary sorting and preliminary storage of WEEE for the purposes of transport to a logistics facility or a treatment facility

[SOURCE: EN 50625-1:2014, definition 3.6]

Note 1 to entry: WEEE can also be transported to a preparing for re-use facility. According to Directive 2008/98/EC, preparing for re-use is one form of treatment.

3.3
collection facility
location designated for the gathering of WEEE to facilitate separate collection

[SOURCE: EN 50625-1:2014, definition 3.10]

Note 1 to entry: This facility has as its core activity waste and/or WEEE collection, e.g. a municipal or non-municipal collection centre, unlike a collection point.

3.4
component
constituent part of a device which cannot be physically divided into smaller parts without losing its particular function

[SOURCE: EN 50625-1:2014, definition 3.9]

3.5
CRT (Cathode Ray Tube)
component used to display images comprising a vacuum tube and integral fluorescent screen

[SOURCE: EN 50625-1:2014, definition 3.7]

3.6
CRT equipment
equipment containing at least one Cathode Ray Tube

[SOURCE: EN 50625-1:2014, definition 3.8]

3.7
disposal
any operation which is not recovery even where the operation has as a secondary consequence the reclamation of substances or energy

[SOURCE: Directive 2008/98/EC]

Note 1 to entry: Annex I of Directive 2008/98/EC sets out a non-exhaustive list of disposal operations.

3.8
electrical and electronic equipment (EEE)
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

[SOURCE: Directive 2012/19/EU]

3.9
firmware
coding contained in a read-only memory device

EXAMPLE Basic input/output system (BIOS) of a personal computer.

Note 1 to entry: Firmware, in normal usage, is not intended for modification, and requires the hardware device containing it to be replaced or re-programmed.

[SOURCE: IEV definition 192-01-35]

3.10
flat panel
that part of the flat panel display where the image is produced

[SOURCE: EN 50625-1:2014, definition 3.15]

3.11
flat panel display
assembly of components that use technologies that produce and display an image without the use of cathode ray tubes

Note 1 to entry: The term “flat panel module” is also used as an alternative to the term flat panel display.

[SOURCE: EN 50625-1:2014, definition 3.16]

3.12
flat panel display equipment
equipment using a flat panel display having a display screen larger than 100 cm2

Note 1 to entry: Examples of flat panel display equipment include LCD TV, Plasma TV, LCD screens and monitors, and notebooks.

[SOURCE: EN 50625-1:2014, definition 3.17]

3.13
hazardous waste
waste which exhibits one or more hazardous properties

Note 1 to entry: The term “hazardous waste” is defined in Directive 2008/98/EC; the properties of hazardous waste are described in Annex III of Directive 2008/98/EC.

3.14
lamp
electric light source, for general or special lighting purposes, but excluding filament bulbs

Note 1 to entry: General lighting can include straight and compact fluorescent lamps, high intensity discharge lamps – including high pressure sodium and metal halide lamps, low pressure sodium lamps, and Light Emitting Diodes (including organic). Special lighting is provided by lamps for the purpose of spreading or controlling light (UV lamps, projection lamps, xenon lamps, etc.). A non-exhaustive list can be found in Directive 2012/19/EU.

[SOURCE: EN 50625-1:2014, definition 3.20]

3.15
lamp, gas discharge
lamp in which the light is produced directly or indirectly by an electric discharge through a gas, a metal vapour, or a mixture of several gases and vapours

[SOURCE: Regulation (EU) No. 1194/2012]

Note 1 to entry: Examples of gas discharge lamps include straight fluorescent lamps, compact fluorescent lamps, fluorescent lamps, high intensity discharge lamps – including pressure sodium lamps and metal halide lamps, low pressure sodium lamps, and exclude LED lamps and filament lamps.

Note 2 to entry: Some backlighting lamps (typically non-LED types), as mentioned in Annex F of EN 50625-1:2014 and Directive 2012/19/EU Annex VII, contain mercury.

3.16
logistics
planning, implementing and controlling of the transportation, handling, preliminary storage and/or sorting of WEEE from point of origin to point of delivery

[SOURCE: CLC/TS 50625-4, Technical Specification for the collection and logistics associated with WEEE definition 3.10]

3.17
logistics facility
facility for receiving and preparing for transportation to preparing for re-use facilities or to WEEE treatment facilities

[SOURCE: EN 50625-1:2014, definition 3.22 modified to include preparing for re-use facilities]

3.18
manufacturer
any natural or legal person who manufactures a product or has a product designed or manufactured, and markets that product under his name or trademark

[SOURCE: EU Regulation 765/2008]

Note 1 to entry: Directive 2012/19/EU defines ‘placing on the market’ as the first making available of a product on the market within the territory of a Member State on a professional basis.

3.19
operator terms
3.19.1
operator
entity that performs one or more processes on WEEE

Note 1 to entry: Processes on WEEE could include collection, handling, shipping, sorting, storage, transport, trading and treatment including preparing for re-use.

[SOURCE: EN 50625-1:2014, definition 3.25 modified by adding ‘including preparing for re-use’.]

3.19.2
logistics operator
responsible for logistics of WEEE

Note 1 to entry: A logistics operator can be a waste carrier who does or does not have a logistics facility.

[SOURCE: CLC/TS 50625-4, Technical Specification for Collection, Logistics and Transportation of WEEE definition 3.12.3]

3.19.3
preparing for re-use operator
operator responsible for the preparing for re-use of WEEE

Note 1 to entry: Preparing for re-use is considered as treatment (Directive 2008/98/EC). The treatment of WEEE other than preparing for re-use is defined in EN 50625-1.

3.19.4
treatment operator
operator responsible for the treatment of WEEE other than the preparing for re-use operator

[SOURCE: EN 50625-1:2014, definition 3.36 modified by adding 'other than the preparing for re-use and by adding "The EN 50625 series apply"]

3.20
preparing for re-use
checking, cleaning or repairing recovery operations, by which products or components of products that have become waste are prepared so that they can be re-used without any other pre-processing

[SOURCE: Directive 2008/98/EC]

3.21
preparing for re-use facility
location where WEEE undergoes preparing for re-use

3.22
re-use
any operation by which products or components that are not waste are used again for the same purpose for which they were conceived

[SOURCE: Directive 2008/98/EC]

3.23
re-usable electrical and electronic equipment (REEE)
whole equipment which was previously discarded as WEEE, which has been prepared for re-use for the same purpose for which it was conceived

Note 1 to entry: The term REEE is used within this standard to identify equipment that has met the requirements of the preparing for re-use process set out in this document. REEE is the result of the successful completion of the preparing for re-use process.

3.24
REEE component
spare-part, component, sub-assembly or consumable, which formed part of WEEE when it entered the preparing for re-use facility, which has been prepared for re-use for the same purpose for which it was conceived

Note 1 to entry: Re-usable components include washing machine motors, bearings, integrated circuits and accessories, attachments (e.g. vacuum cleaner hoses, food mixer blades), and sub-assemblies (e.g. hard disk drives, power supplies, memory drives, printer cartridges). It excludes new unused parts.

Note 2 to entry: The phrase "components, sub-assemblies or consumables, which formed part of the equipment at the time of discarding" has been taken from the definition of WEEE in Directive 2012/19/EU.

3.25
recovery
any operation the principal result of which is waste serving a useful purpose by replacing other materials which would otherwise have been used to fulfil a particular function, or waste being prepared to fulfil that function, in the plant or in the wider economy

[SOURCE: Directive 2008/98/EC]

Note 1 to entry: Annex II of Directive 2008/98/EC sets out a non-exhaustive list of recovery operations.

3.26
recycling
any recovery operation by which waste materials are reprocessed into products, materials or substances whether for the original or other purposes. It includes the reprocessing of organic material but does not include energy recovery and the reprocessing into materials that are to be used as fuels or for backfilling operations

[SOURCE: Directive 2008/98/EC]

3.27
REEE warranty
commitment provided by the preparing for re-use operator to a customer (e.g. private household or business) promising to repair or replace or refund a REEE or REEE component that has failed post the transfer to the new user

Note 1 to entry: This is separate from a legal warranty provided by a manufacturer or retailer.

3.28
software
programs, procedures, rules, documentation and data of an information processing system

EXAMPLE Requirements and design specifications; source code listings, check lists and comments; “Help” text and messages for display at the computer/human interface; instructions for installation and operation; and support guides for hardware and software maintenance.

Note 1 to entry: Software is an intellectual creation that is independent of the medium upon which it is recorded.

Note 2 to entry: Software requires hardware devices to execute programs, and to store and transmit data.

Note 3 to entry: Types of software include firmware, system software, and application software.

[SOURCE: IEV 192-01-07]

3.29
temperature exchange equipment
category of electrical and electronic equipment covered by Directive 2012/19/EU, which non-exhaustively encompasses, according to its Annex IV, ‘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’

Note 1 to entry: Directive 2012/19/EU does not define what is meant by “temperature exchange equipment”. If this term is clarified further by the European Commission or the Courts then it is essential that the term as used in this standard is construed in the same way as those clarifications.

3.30
treatment
recovery or disposal operations, including preparation prior to recovery or disposal

[SOURCE: Directive 2008/98/EC]

3.31
treatment facility
location where WEEE undergoes treatment

[SOURCE: EN 50625-1:2014, definition 3.35]

3.32
volatile fluorocarbon (VFC)
organic chemical compound consisting of carbon and fluorine atoms (in some cases also with chlorine and/or hydrogen), which is able to change phase when used as a refrigerant or produce cells in plastic structure of an insulating foam when used as a blowing agent

[SOURCE: EN 50625-2-3:2017]

3.33
volatile hydrocarbon (VHC)
organic chemical compound consisting entirely of hydrogen and carbon which is able to change phase when used as a refrigerant or produce cells in plastic structure of an insulating foam when used as a blowing agent

[SOURCE: EN 50625-2-3:2017]

3.34
waste
any substance or object which the holder discards or intends or is required to discard

[SOURCE: Directive 2008/98/EC]

3.35
waste management
collection, transport, recovery and disposal of waste, including the supervision of such operations and the after-care of disposal sites, and including actions taken as a dealer or broker

[SOURCE: Directive 2008/98/EC]

3.36
Waste Electrical and Electronic Equipment (WEEE)
electrical or electronic equipment which is waste within the meaning of Article 3(1) of Directive 2008/98/EC, including all components, subassemblies and consumables which are part of the product at the time of discarding

[SOURCE: Directive 2012/19/EU]

Note 1 to entry: Considering this definition, this standard covers whole equipment discarded as WEEE and fractions thereof.

4 Administrative and organisational requirements

4.1 Management principles

The preparing for re-use operator shall ensure that a management system is in place for all activities in the fields of health, safety, environment and quality.

The preparing for re-use operator shall demonstrate continuous improvement of their activities by a review and management process. This management process shall be updated or revised as changes occur to the activities of the preparing for re-use operator and evaluated in order to monitor its effectiveness.

The preparing for re-use operator shall establish and maintain a procedure in order to identify legal requirements that are applicable to the environmental, health and safety aspects of all activities, services and processes undertaken at the facility.

The preparing for re-use operator shall also establish and maintain appropriate procedures, as specified in Clauses 5, 6 and 8.

NOTE 1 A register of the preparing for re-use operator's activities and related legal provisions could be maintained together with valid permits required by all relevant authorities.

NOTE 2 Documentation requirements are given in 8.5

NOTE 3 Directive 89/391/EEC contains requirements on safety and health of workers at work.

4.2 Technical and infrastructural pre-conditions

4.2.1 General

The preparing for re-use operator shall possess infrastructure, in terms of size, technologies installed, and characteristics of the operations, that is suitable for the activities performed on site. Suitability of the site shall be assessed by a risk management process for all tasks performed on site and include the identification of hazards, the assessment of risk and, where appropriate, the elimination or reduction of the risk, and documentation of the process.

This risk assessment shall include the identification of those locations and activities that require the use of personal protective equipment and procedures to be followed.

Preparing for re-use facilities, including associated storage areas, shall be designed, organised, and maintained to provide safe access to, and egress from the site. Preparing for re-use facilities, including associated storage areas, shall be secured to prevent access by unauthorized persons, to prevent damage to and theft of WEEE and components.

Requirements for the storage of WEEE, REEE and REEE components, including requirements for weatherproof covering, are given in 5.11.

NOTE Preparing for re-use operators are encouraged to hold appropriate insurance.

4.2.2 Tools and test equipment used for preparing for re-use

4.2.2.1 Types of tools and test equipment required

The preparing for re-use operator shall possess tools and test equipment suitable for the types of WEEE being prepared for re-use.

NOTE 1 The required tools and test equipment will depend on the process, workshop design and the type of WEEE being prepared for re-use.

NOTE 2 Examples of tools and equipment are found in B.2.

4.2.2.2 Calibration requirements for equipment

Where measuring equipment is used to record the mass of incoming and outgoing streams it shall be periodically calibrated in accordance with the weighing equipment manufacturer's instructions.

All equipment used for safety testing shall be maintained and periodically calibrated in accordance with the instrument manufacturer's instructions. For functionality testing, the equipment only needs to be calibrated if an accurate measurement is required (e.g. if the measurement results need to be recorded).

Records and certificates of calibration shall be kept, in accordance with 8.6.

4.3 Training

All persons at the preparing for re-use facility shall be made familiar with the environmental, health and safety policy of the facility. Employees and contractors shall be instructed and trained to perform the tasks assigned to them.

Training shall include emergency response planning, occupational health and safety measures, and training for the relevant operations performed on site. The effectiveness and suitability of training shall

be checked regularly. Training programmes shall be delivered at a level suitable to the trainee in form, manner and language.

Training materials and information including technical guidance documents, risk assessments, safety statements, information charts, information tables, photos or examples of components of WEEE, and safety data sheets for hazardous chemical components shall be available at the work place and be easily accessible at all times.

Where the risk assessment has identified the need for personal protective equipment (PPE) training in the proper use of that PPE shall be provided.

NOTE Examples of required competencies by employees are found in B.1, and examples of training materials are found in B.3.

4.4 Transport

Transport of WEEE shall be performed by logistics operators that work in accordance with the requirements of CLC/TS 50625-4.

The requirements of this clause shall apply to all transport arranged by or for a preparing for re-use operator.

The preparing for re-use operator shall check that a logistics operator holds valid waste transport licenses before transferring waste to the logistic operator.

Preparing for re-use operators shall ensure that information regarding the handling and any hazardous property of WEEE are provided to logistics operators and treatment operators when transferring WEEE from the preparing for re-use facility.

The preparing for re-use operator shall keep a record of the transfer of all WEEE (see 8.5 (b)).

NOTE 1 Hazardous materials in whole equipment, and/or components, can require separate waste consignment documentation for transfer and storage in designated containers at the facility.

NOTE 2 Regulatory requirements for cross border shipments, including monitoring, are covered in Regulation 1013/2006/EC and Article 10 of Directive 2012/19/EU.

NOTE 3 WEEE that is ‘not listed’ in Regulation 1013/2006/EC are transported under a notification procedure in case of cross-border shipments.

NOTE 4 “ADR” (Accord européen relatif au transport international des marchandises Dangereuses par Route) concerning requirements for transport of WEEE can be required by logistics operators. See also 5.13.

4.5 Tracking and traceability

The preparing for re-use operator shall have a documented tracking and traceability system in use to track the WEEE received subsequent to completion of the initial visual inspection. The system shall track the WEEE up to and including the point in time when the product is either confirmed as waste or when it has been declared as REEE or as a REEE component.

NOTE 1 Documentation requirements for the tracking and traceability system are given in 8.4.

In order to provide traceability, the manufacturers’ rating plates shall not be removed. The preparing for re-use operator shall add a label as per 6.2.

In order to provide traceability, the manufacturers’ rating plates shall not be removed. The preparing for re-use operator shall add a label as per 6.2.

NOTE 2 The details of the manufacturer’s name / brand and serial number can usually be found on the manufacturers rating plate or other plate, sticker, label etc.

If the initial visual inspection of the WEEE received indicates that it is not suitable for:

a) preparing for re-use into REEE, or;

b) preparing for re-use into one or more REEE components

then it does not need to be uniquely tracked as per the requirements of this clause. Disassembling of such WEEE shall not be permitted and the whole WEEE shall then be transferred to a treatment operator who is working in accordance with the requirements of the EN 50625 series. An exception is allowed for accessories, which may be used to furnish REEE.

NOTE 3 Documentation requirements for the visual inspection are given in 8.4.

Whole WEEE that has no rating plate containing the manufacturers information or the possibility to access this information by other means, including via an electronic label, shall be rejected. Disassembling of such WEEE shall not be permitted and the whole WEEE shall then be transferred to a treatment operator who is working in accordance with the requirements of the EN 50625 series. An exception is allowed for accessories, which may be used to furnish REEE.

Where an accessory is available and it is intended to supply it together with the REEE or REEE component, it should accompany the WEEE throughout the preparing for re-use process. They do not need to be tracked as individual items.

At the point of sale or donation of REEE or REEE component, a unique identification or sales number shall be visible on the preparing for re-use label (see 6.2).

5 Technical requirements for the preparing for re-use process

5.1 Receiving WEEE

When receiving WEEE at the preparing for re-use facility, unloading operations shall be performed in a way that respects the preparing for re-use potential of the WEEE and the risk of substances hazardous to health or the environment from being emitted.

The preparing for re-use operator shall:

— identify the origin of the delivery;

— determine if it is WEEE or other waste through declarations of waste;

— weigh and record that part which is WEEE.

If there is a protocol, recognised by the competent authority, to provide the average mass of EEE, this will be accepted for the purpose of this standard for the calculation of the incoming mass of the WEEE.

Weigh notes can be provided by a third party as long as the weighing equipment is calibrated according to 4.2.2.

WEEE received but not intended for re-use, packaging and other non-electrical waste shall be stored separately from WEEE intended for re-use and REEE in accordance with 5.11, and the WEEE shall be assigned for treatment (see Clause 7).

5.2 Initial inspection for selection

An initial visual inspection for selection shall be performed on arrival at the preparing for re-use facility, in order to separate WEEE that is only suitable for treatment from that suitable for preparing for re-use. Where agreements are in place, the initial inspection may also be performed at a collection point, at a

collection facility or a logistics facility. WEEE that has no CE marking shall be excluded from the preparing for re-use process, and in accordance with Clause 7, this WEEE shall be transferred to a logistics operator and/or to a treatment operator that works in accordance with the EN 50625 series standards.

NOTE 1 EEE could have been designed for a non-European Union market and so there is the possibility that they do not comply with all European laws. For further details, these can be found in the Blue Guide on the implementation of EU Product rules 2016 (2016/C 272).

NOTE 2 CLC/TS 50625-4 defines “collection point”, “collection facility” and “logistic facility”.

WEEE shall be visually inspected in accordance with a documented initial inspection for selection procedure.

Where a database of stolen goods is available (e.g. mobile phones) checks shall be made by the preparing for re-use operator to ensure that the product is not stolen. In case of stolen equipment, it shall be quarantined and the authorities shall be informed.

NOTE 3 Checks for stolen goods can be required by local law.

5.3 Safety aspects

5.3.1 General

The preparing for re-use operator shall have a documented procedure in place to identify and apply the safety requirements as defined in this sub-clause and 5.3.2 and 5.3.3.

The preparing for re-use operator shall ensure that any WEEE that is prepared for re-use as originally intended is safe for use and free from defects or conditions that could cause harm to users and/or property.

The preparing for re-use operator shall document a checking procedure to see if the whole WEEE being prepared for re-use has not been recalled by the manufacturer. Whole WEEE that is listed in a product recall shall not be prepared for re-use as a whole product, unless there is explicit and documented permission from the manufacturer to the contrary.

NOTE 1 Examples of where recall notices are listed include lists managed by the European Commission (e.g. RAPEX or ICSMS) and or national consumer / safety agencies and/or on a manufacturer’s website. The URLs for EC product recall websites can be found in the Bibliography.

For equipment that is subject to a recall, it may be possible to remove components and accessories (e.g. internal shelves, handles, drawers), that are not the cause of the recall through appropriate and documented checking of the recall notices.

Each WEEE being assessed for preparing for re-use shall be tested for safety in accordance with a documented safety test procedure. The requirement to test components for safety does not apply when the component is, and will remain, an integral part of a whole product.

NOTE 2 Attention is drawn to the General Product Safety Directive (GPSD) (2001/95/EC), Low Voltage Directive (LVD) (2014/35/EU), the Electromagnetic Compatibility Directive (EMC)(2014/30/EU), the Machinery Directive (2006/42/EC), Radio Equipment Directive (2014/53/EU) and any other sector safety directives. Their purpose is to ensure that all products intended for or likely to be used by consumers and other users under normal or reasonable foreseeable conditions are safe.

NOTE 3 The relevant safety harmonised standard to consider for a product is the one valid when the product was placed on the European Union market.

Where WEEE has passed the safety tests, this shall be recorded in accordance to 8.5 (e).

WEEE, that has failed any of the safety tests shall either have all of the failures repaired (see 5.9) or assigned for treatment (see Clause 7).

NOTE 4 A list of safety hazards to be considered, when evaluating WEEE, depends on the type of the product being prepared for re-use, and can include:

— electrical shock;

— mechanical (e.g. rotating parts, stability, pinching, sharp edges);

— fire;

— explosion/implosion;

554 — radiation;

555 — biological;

556 — chemical;

557 — thermal.

558 **5.3.2 Visual inspection for safety**

559 WEEE being prepared for re-use shall be visually inspected for safety in accordance with a documented
560 visual inspection procedure depending on the type of equipment. In 5.3.1 a list of hazards is identified,
561 these may or may not present a risk to users: it is necessary to consider the risk of exposure to these
562 hazards. Example 2 provides a list of checks which can be used to identify whether such risks exist:

563 EXAMPLE A list of inspections that could be carried out for safety includes:

564 — any damage;

565 — all cables and connectors fulfil the requirements of their intended use;

566 — condition of the mains plug and the mains connectors and conductors;

567 — defects of the strain relief of the mains supply cord;

568 — defect of the mains lead cleat;

569 — condition of anchorage, cable clip, accessible fuse insert;

570 — damage of the housing and protective cover that may give access to live or dangerous moving parts;

571 — signs of overload or overheating or unintended use;

572 — signs of improper change;

573 — signs of contamination, corrosion and improper aging;

574 — blockage of cooling inlets;

575 — condition of air filter;

576 — density of container for water, air, or other medium, condition of pressure control valve;

577 — usability of switches, control and setup equipment;

578 — readability of all safety relevant markings or symbols, of the ratings and of the position indicators;

579 — all fuses accessible from the outside are of the correct type and rating.

580 — the integrity of mechanical parts;

581 — assess the relevant accessories together with the equipment (e.g. detachable or fixed power supply cords
582 tubing);

583 — defect due to over-bending of cords, cables, hoses and tubing.

584 **5.3.3 Electrical safety tests**

585 Table 1 shows which tests shall be carried out by the preparing for re-use operator on every WEEE prior
586 it to becoming REEE and to be supplied to the customer.

587 Table 1 — Electrical safety test requirements

	Class I equipment	Class II equipment	Class III equipment
	The EUT has a protective earth connection.	The EUT has no protective earth connection.	The EUT has no protective earth connection and is not powered by the mains i.e. battery powered
Measurement of the protective bonding resistance	max. limit = 0,3 Ω, including power supply cord		
Measurement of the insulation resistance	min. limit = 1 M Ω	min. limit = 2 M Ω	
Measurement of the touch current	max. limit = 3,5 mA		

NOTE 1 EUT = Equipment under test.

NOTE 2 The value of 0,3 ohm for protective bonding resistance is taken from work within CLC/TC 85x and is comprised of 0,1 ohm for the resistance from the point of entry of the power to any protectively bonded part and a resistance allowance of 0,2 ohm from the mains plug to the point of the mains attaching to the equipment.

588 ## 5.4 Functionality

589 The preparing for re-use operator shall perform appropriate functionality tests in accordance with a
590 detailed documented functionality test procedure that is applicable to the WEEE being prepared for re-
591 use.

592 WEEE that is prepared for re-use shall meet at least one key function for which the EEE was originally
593 placed on the market. If one or more functions are not working then the preparing for re-use operator
594 shall ensure that the customer is informed, before the point of sale, of such non-functioning features.
595 Information should be at least provided in written form accompanying the REEE at any time.

596 WEEE that is incomplete, or that has not been prepared for re-use, may be transferred from one
597 preparing for re-use operator to another as WEEE for continuance of repair.

598 NOTE 1 Attention is drawn to legislation regarding trans-boundary movements, in particular as regards to non-
599 functional WEEE.

600 NOTE 2 The function specified in the manufacturers user manual or technical manuals is used to determine
601 ordinary use. If these manuals are not available with the WEEE, then online manuals can be consulted.

602 Where product specific protocols are used, they shall be referred to in the documented functionality test
603 procedure.

604 Test apparatus used for assessing the functionality of WEEE for re-use shall be calibrated and
605 maintained in accordance with the tests apparatus manufacturers' instructions.

606 Where WEEE has passed the functionality tests, this shall be recorded in accordance to 8.5 (f).

607 Where WEEE fails the functionality test, it shall either be repaired (see 5.9) and recorded in accordance
608 to 8.5 (f), or assigned as WEEE for treatment (see Clause 7).

609 ## 5.5 Data-bearing equipment or components

610 Personal data and data that has been specifically licensed to a user stored within data-bearing
611 equipment or components (e.g. disk drives, memory chips) shall be eradicated in accordance with a
612 documented procedure and recorded in accordance to 8.5 (g).

Where data bearing equipment or a component is found to be faulty or components cannot have their data eradicated without preventing preparing of the equipment for re-use, the data bearing equipment or components shall be assigned for treatment (see Clause 7).

NOTE 1 Examples of data eradication or sanitisation methods to prevent unauthorised access are found in B.5.1 and B.5.2. Data eradication requirements can also be found in the General Data Protection Regulation (EU) 2016/679 and possibly national law.

NOTE 2 Data storage media can be replaced with new media and the old extracted storage media sent for treatment.

Where a data-bearing component is faulty, the WEEE shall either be repaired (see 5.9) or assigned for treatment (see Clause 7).

5.6 Programming software and firmware

5.6.1 Equipment other than ICT equipment

Where software or firmware is required in order for the REEE to function and where it requires replacement (e.g. because of corruption), the software or firmware to be uploaded shall be as recommended by the manufacturer and recorded in accordance to 8.5 (h).

NOTE The addition or updating of software not recommended by the manufacturer could affect the REEE's compliance with the manufacturer's specification or safety functions.

5.6.2 ICT equipment

Software may be transferred if licensing permits. Copyrighted software for which the license is missing and non-transferable copyrighted software shall be removed in accordance with either a documented software removal procedure or the software's own uninstall command.

Nationally approved data sanitization software may also be used to erase application software.

Examples of data sanitizing standards are found in B.5.2.

Where licensable software is loaded, the new licence pertaining to the software shall be provided with the REEE and any previous non-transferable licences and stickers shall be removed with the exception where the licence provider specified such stickers shall not be removed, and recorded in accordance to 8.5 (h).

5.7 Disassembly and management of components and accessories

5.7.1 Disassembly

Where WEEE is disassembled, it shall be disassembled in accordance with a documented disassembly procedure that identifies any associated hazards, risks and controls to reduce risk to persons and damage to equipment.

Disassembly operations by the preparing for re-use operator shall be carried out with due regard for the removal of components in such a way as to minimize the risk of damage to the components or to the environment.

WEEE that is not suitable for preparing for re-use may be disassembled to recover other components that may be suitable for use in the preparing for re-use process of other WEEE. See also 5.3.1.

Components and accessories not suitable for preparing for re-use shall be assigned for treatment. See Clause 7.

NOTE 1 Examples of risks associated with disassembly are found in B.4.

Disassembly shall be performed only by competent personnel by using tools appropriate to the type of WEEE being repaired.

If the WEEE is likely to contain Electric Static Discharge (ESD) sensitive components it shall be opened and repaired at an ESD protected work station.

NOTE 2 Industry standard setting the “Requirements for handling electrostatic-discharge-sensitive (ESDs) devices” can be found in JESD-625-A. Relevant IEC references are IEC 61340-5-1 and IEC/TR 61340-5-2.

5.7.2 Replacement components

Where components are required to replace a missing or faulty component to enable whole WEEE to be prepared for re-use, the preparing for re-use operator shall ensure that components of WEEE are sourced only with:

— a like-for-like REEE component recovered which complies with the specifications of the manufacturer for the specific equipment and that has been assessed for preparing for re-use;

— a new or used manufacturer’s spare-part / component which complies with the specifications of the manufacturer for the specific equipment, or

— an after sales spare-part / component that complies with the specifications of the manufacturer for the specific equipment manufactured by a third party other than the manufacturer.

In case standardized connections are being used (e.g. USB, HDMI, Ethernet, RS 232), the preparing for re-use operator shall use compatible connectors. A similar approach applies to the use of standardized parts (e.g. screws, bolts).

Where there are no specifications available from the manufacturer, the preparing for re-use operator shall only use an accessory that is compatible with the defined standard interfaces of the equipment.

The preparing for re-use operator shall document a procedure to set out the assessment, testing, management, storing and tracking of components when used to repair WEEE being prepared for re-use. The preparing for re-use operator shall ensure the process is recorded in accordance to 8.5 (j).

Any replacement components shall comply with all of the legal requirements in force at the time when the EEE was placed on the market.

5.8 Repair

5.8.1 Failed equipment or components

WEEE that has not passed the tests and procedures performed by the preparing for re-use operator and specified in 5.3, 5.4 and 5.5 shall either be repaired or assigned for treatment (see Clause 7) and recorded in accordance to 8.5.

Repairs shall be performed only by competent personnel by using testing equipment and tools appropriate to the type of WEEE being repaired.

5.8.2 Repairs to temperature exchange equipment

Checks shall be carried out by the preparing for re-use operator to see if the refrigerant circuit is broken or is leaking. If the refrigerant circuit is broken or is leaking, the appliance shall be repaired or rejected and assigned for treatment (see Clause 7).

The following requirements shall apply to WEEE containing refrigerants:

— the handling of any refrigerant shall be in accordance with the legal requirements concerning ozone-depleting substances and other gases;

— if a replacement refrigerant is used, the preparing for re-use operator shall only replace that refrigerant with another refrigerant approved by the manufacturer for that specific product. Where it is not possible to identify such an approved refrigerant, the WEEE shall be assigned for treatment (see Clause 7);

— if it is necessary to replace the refrigerant then the manufacturer's information regarding the type of refrigerant used shall be erased and information regarding the type and quantity of replacement refrigerant shall be recorded and added to the preparing for re-use label described in 6.2.

The preparing for re-use operator shall carry out a risk assessment specifically to assess environmental and safety risks related to the handling of the types of refrigerant involved. The risk assessment shall be recorded in accordance to 8.5 (k).

NOTE See the requirements specified in EU Regulations 517/2014 and EU 1005/2009, which include the fact that VFC gases can no longer be used for refilling a refrigerant system.

5.8.3 Re-testing

On completion of the repair(s), the tests, in accordance with 5.3 and 5.4 shall be performed by the preparing for re-use operator, and if the item fails any of the tests it shall be declared as non-repairable and be assigned for treatment (see Clause 7) or being repaired again (see 5.8). The results of which tests were performed and by whom and when shall be recorded in accordance to 8.5 (e) and (f).

5.9 Cleaning process

The preparing for re-use operator shall document the cleaning procedure to be used applicable to the WEEE being prepared for re-use in accordance with 8.5 (l).

When choosing a cleaning method and cleaning agents, the process shall ensure that it does not affect the protective function of housings or surfaces and the safety of WEEE or components thereof being prepared for re-use.

NOTE REEE can be cleaned cosmetically or it can be left to the new user to undertake.

The degree of cleaning shall depend on the requirements of the REEE customer, but shall at least include the items below:

— the removal of all former user identification (e.g. asset tags, former owner names or logos, user site or equipment specific safety test labels);

— the removal of all bio-hazard and other hazardous residues and traces of oil in accordance with a documented cleaning process.

Examples of WEEE likely to be affected by bio-hazard residues are found in B.4.

The manufacturers' brand labels and rating plate shall not be removed and shall remain legible after the cleaning process.

5.10 Quality Assurance

A manager or supervisor of the preparing for re-use operator or other nominated person shall carry out random tests on REEE or REEE components prepared for re-use to confirm the quality of the REEE or REEE component resulting from the preparing for re-use processes under Clause 5.

The preparing for re-use operator shall document the quality assurance procedure, including the justification for the random testing frequency and record the results in accordance to 8.5 (l). Reasons for failures or non-conformities found when carrying out the random tests shall be investigated and any root causes of failures and or trends identified.

Corrective and preventive action plans shall be implemented with the person(s) in the organisation responsible for any non-conformity of the operational areas concerned. The aim of these plans is to prevent recurrence of non-conformities and to improve performance. Improvement actions shall be allocated to specific owners with achievable target dates.

The preparing for re-use operator shall monitor the return rate ratio of REEE sold to customers and the reasons for returns (e.g. functionality failures).

5.11 Storage

5.11.1 General

WEEE, REEE and REEE components under the control of the preparing for re-use operator, shall be stored in a manner to prevent damage or breakage to avoid emissions harmful to the environment and human health. Consequently, locations that store WEEE, REEE and REEE components shall have:

— impermeable surfaces to prevent ground water and soil contamination;

— the provision of spillage collection facilities relevant to the type of WEEE stored;

— weatherproof covering for all REEE / REEE components and for WEEE that can cause emissions that are hazardous to the environment, and;

— where appropriate, decanters and cleanser-degreasers.

NOTE Weatherproof covering can for example, be provided by a lid or cover over a container, a closed container, or a roofed building.

These locations shall be secured to prevent access by unauthorised persons to prevent damage to and theft of WEEE, REEE or REEE components. Special attention should be given to the storage of data bearing WEEE. WEEE shall be segregated from REEE and REEE components. The weight of equipment and components shall be considered when storing WEEE, REEE and REEE components. Heavy items shall be stored in such a way as to prevent them crushing or falling upon and damaging other items.

Care shall be taken when storing WEEE, REEE or REEE components that could contain materials and substances hazardous to the environment and/or health and safety, e.g. batteries, lamps and switches containing mercury, equipment containing VFC.

5.11.2 Storage of WEEE that has failed testing

WEEE that has failed any of the tests in accordance with 5.3, 5.4 and 5.5, shall be stored by the preparing for re-use operator separately from WEEE that has not yet undergone testing in accordance with 5.3, 5.4 and 5.5 and from REEE and REEE components.

Lamps shall be stored separately from other WEEE to avoid damage or breakage of the lamps before they reach a treatment facility. Any broken lamps or lamp fractions not located in the container shall be cleared up without undue delay and stored in closable containers and dispatched to a treatment facility.

Removed and loose batteries shall be stored in robust receptacles and stored at a minimum of two metres from any other combustible materials.

CRT equipment, flat panel display equipment, temperature exchange equipment, photovoltaic panels and lamps shall be stored appropriately in receptacles or stacked in a stable manner to prevent damage or breakage. For photovoltaic panels, consideration shall be taken to minimise any exposure to daylight during storage.

5.11.3 Storage of REEE Components

Static sensitive REEE components shall be stored to prevent damage resulting from static electricity, for example by using individual anti-static bags, storage bins or other suitable measures. Special attention shall be given to the storage of data bearing REEE components.

5.12 Transport of WEEE for treatment

WEEE to be dispatched from the preparing for re-use facility for treatment shall be transported by a logistics operator that works in accordance with EN 50625 series in an appropriate manner, to minimize movement and risk of damage during transportation. All WEEE shall be handled and loaded correctly to ensure that personnel are safe from injury and that damage to the WEEE is avoided.

NOTE CLC/TS 50625-4 Specification for the collection and logistics associated with WEEE explains appropriate methods of preparing WEEE for transport to a treatment operator.

5.13 Transport and packaging of REEE

REEE and REEE components that are to be transported from the preparing for re-use facility shall be suitably packaged prior to loading and transportation to prevent movement and damage.

Examples of suitable packaging are found in B.6.

NOTE 1 In case of REEE and REEE components prepared for re-use that is sold directly to a private end consumer at the same facility (e.g. at an on-site shop), packaging is not required.

Transport of REEE or REEE components shall be carried out in a manner that does not affect the reusability. Particular care shall be taken when transporting REEE with delicate / fragile casings and components such as flat screens with gas discharge lamps, other types of screens and equipment containing refrigerants or other liquids.

Once packed, the box, pallet or cage containing REEE and REEE components shall be wrapped in shrink wrap or similar to protect the contents while loading and unloading and secure the sides during transit. If the packaging obscures the contents then the box, pallet or cage shall be labelled with the contents and any necessary handling requirements.

Lithium batteries and REEE containing lithium batteries shall be packed appropriately and the packaging labeled before being shipped.

NOTE 2 Directive 2008/68/EC defines the requirements for transportation of dangerous goods (such as lithium batteries and equipment containing lithium batteries) by road, rail or inland waterway within or between Member States, including the activities of loading and unloading, the transfer to or from another mode of transport and the stops necessitated by the circumstances of the transport. The European agreement and regulations concerning the international carriage of dangerous goods by road (ADR), rail (RID) and inland waterways (ADN) lay down uniform rules for the safe international transport of dangerous goods. Such rules are extended to national transport with Directive 2008/68/EC.

Training should be provided to all staff in relation to the correct use of tools and other equipment for packaging and storing REEE and REEE components as well as labelling, loading and transportation and including what action to take should the REEE or REEE components be irreconcilably damaged during storage or loading or transportation.

6 Returning whole equipment or separate components back into use by the preparing for re-use operator

6.1 General

The preparing for re-use operator shall be liable for all actions carried out in the preparing for re-use process.

Sales and marketing materials shall refer to the REEE or REEE component having been prepared for re-use in accordance with this European Standard.

NOTE This applies to any sales literature and promotions, including websites and direct mailing.

The preparing for re-use operator shall maintain records of when and how the WEEE has been prepared for re-use (see 8.4) and therefore is determined as REEE or as a REEE component.

6.2 Preparing for re-use label

Where REEE or REEE component has been prepared in accordance with Clause 5 and identified as REEE (e.g. the whole piece of equipment) or as a REEE component (see 8.4), a preparing for re-use label shall be applied to the piece of REEE or REEE component.

Where it is not possible to affix a label because of the physical characteristics or the label would affect the function (e.g. on circuit boards) of the REEE or REEE component, the information that would be on the preparing for re-use label shall be supplied on the packaging or in the user information (see 6.3) accompanying the piece of REEE or REEE component. If a label is not affixed to the REEE or REEE component the preparing for re-use operator shall justify and document their decision in the tracking system (see 8.4).

NOTE 1 The physical characteristics may include the size of the REEE or REEE component; surface type / area.

The label that is fixed to a REEE or REEE component shall be:

— securely fixed;

— accessible;

— legible, and

— durable.

The label may be fixed to an internal surface of the REEE or REEE component with the same level of accessibility as the manufacturer rating plate without the use of tools.

The preparing for re-use operator shall ensure the legibility and durability of the labels that are used. The legibility and durability of the type of label used shall be tested by rubbing a sample of the label by hand for 15 s with a piece of cloth soaked with water and again for 15 s with a piece of cloth soaked with petroleum spirit.

The label shall contain the following minimum information:

— reference to the REEE or REEE component meeting this standard;

— name and contact details of the preparing for re-use operator;

— unique equipment identification or sales number (see 8.4).

NOTE 2 There can be EU Regulations that contain marking requirements that need to be complied with. An example is marking requirements for refrigerants used in temperature exchange equipment (see 5.8.2)

NOTE 3 The preparing for re-use label can be used in addition to existing branding labels of the preparing for re-use operator.

6.3 User information

For each piece of REEE sold or donated, information shall be made available on:

— a REEE specific user manual or product information;

— the safe installation and use;

— working functions and non-working functions (if any);

— any software supplied (including version and any appropriate licences);

— REEE warranty information in written or electronic form as stipulated in 6.4;

— name and contact details of the preparing for re-use operator as detailed in the labelling requirements in 6.2.

NOTE 1 The Blue Guide on the implementation of EU Product rules 2016 (2016/C 272) states that the user manual/information should at least be available in a language easily understood in the country in which it is to be used

The requirement to provide a user manual/information may be transferred to a third-party if the REEE is not sold direct to the end-user.

NOTE 2 The user manual/information can be provided via a link to a website (e.g. the manufacturer), a customer service department contact, a compact disc or a hard copy, or through generic documentation developed by the preparing for re-use operator or user information integral to the software. A user manual/information is not usually provided with REEE components.

6.4 REEE warranty

Any piece of REEE that is sold or donated to an end-user customer (e.g. a private householder or business for their own use) shall be covered by a commercial REEE warranty with a defined timeframe of at least 90 days from the date of supply to the new user.

NOTE 1 Attention is drawn to legal warranty regulations relating to second-hand goods sold to private consumers.

The sale or donation of each piece of REEE or REEE component to another party other than an end-user customer shall be covered by a REEE warranty according to the commercial terms offered by the preparing for re-use operator.

Warranties shall also apply to exported REEE or REEE components in the same conditions as above (e.g. for an end-user customer or for a party other than an end-user customer) (see 8.4).

NOTE 2 The aim of the warranty is to differentiate REEE or REEE components intended for re-use from illegal exports of WEEE.

Details of the REEE warranty procedure shall be documented by the preparing for re-use operator to include arrangements where the REEE or REEE component that does not perform as specified during the warranty period will be repaired, replaced or any purchase cost refunded, whichever is agreed in the warranty provision at the time of sale.

NOTE 3 If the REEE or REEE component is destined for export, an oversupply can be provided as a warranty, at a percentage of the purchase price agreed at time of sale or of like-for-like equipment, to pre-compensate for any transit losses and/or equipment failures.

6.5 Export of REEE and/or REEE components

Where REEE or REEE components are shipped out of the EU, the preparing for re-use operator shall make available documents to meet with the requirements for used EEE as specified in Annex VI of the WEEE Directive 2012/19/EU. The preparing for reuse operator shall maintain a document register on the REEE and REEE components which are exported outside the EU.

NOTE 1 REEE equipment sent from one Member State into another Member State can be subject to end-of-life producer responsibility obligations in the destination Member State pursuant to the Directive 2012/19/EU.

NOTE 2 The preparing for re-use operators' attention is drawn to potential environmental risks that may occur in the destination country if WEEE treatment facilities working to EN 50625 series standard do not exist to treat the REEE or REEE components at its' end of life.

7 Management of WEEE at the end of the preparing for re-use process by preparing for re-use operators

Any WEEE that has been received at the preparing for re-use facility and has been subjected to the preparing for re-use process in accordance with Clause 5 and remains as WEEE shall be transferred to another preparing for re-use operator meeting this standard or to a collection operator, logistics operator or treatment operator that works in accordance with the relevant standard(s) within the EN 50625 series.

The preparing for re-use operator shall maintain records of the organization(s) to which it transfers WEEE and other waste (see 8.5).

8 Documentation requirements for preparing for re-use operators

8.1 Management system

The preparing for re-use operator shall maintain the following types of evidence:

— compliance with legal and regulatory obligations (see 4.1);

— internal administrative procedures and documentation relating to management reviews and related improvement processes (see 4.1);

— health, safety, and environmental monitoring training of employees and instructions/guidance regarding preparing for re-use processes (see 4.3).

8.2 Segregation and storage plan

The preparing for re-use operator shall have a plan for segregation and storage of WEEE, REEE and REEE components. This documented segregation and storage plan shall include as a minimum how to identify, segregate and store equipment and components at the preparing for re-use facility, for example using the following headings:

— WEEE, REEE and REEE components;

— Untested and tested WEEE which has failed testing;

— WEEE subject to preparing for re-use;

— WEEE assigned for treatment (see Clause 7);

— Treatment of other waste than WEEE

8.3 Risk management process

The documented risk management process of the preparing for re-use operator shall include the following:

— an assessment of the suitability of the site for all tasks performed on the site and include the identification of hazards;

— the assessment of risk and, where appropriate, the elimination or reduction of the risk;

— activities related to transport, for example, the arrival and departure of vehicles, their movement within the workplace and the loading and unloading of equipment and components;

— an environmental risk assessment;

— emergency response procedures;

— the identification of those locations and activities that require the use of personal protective equipment and/or procedures to be followed;

— the operational, environmental and health considerations – for example occupational health; ventilation; adequacy and appropriateness of lighting; temperature and humidity for the equipment being prepared for re-use;

— the bio-hazard risk considerations during handling and the cleaning process.

NOTE OHSAS 18001 provides requirements for an occupational health and safety management system. Attention is drawn to Council Directive 89/391/EEC of 12 June 1989 on the introduction of measures to encourage improvements in the safety and health of workers at work.

8.4 Tracking and traceability system

The documented tracking and traceability system of the preparing for re-use operator shall include the following:

— records of all tests performed in accordance with Clause 5 on WEEE to demonstrate completed and outstanding preparing for re-use activities. If a test is conducted over more than one day, the date of the final test. Each record shall include details of the test(s) performed, the location where the tests were performed (e.g. site address, country), the model number, product type, manufacturers name / brand and serial number;

— records of all repairs undertaken and the use of any replacement components in accordance with 5.7.2 and 5.8, to include the details (model/part etc.) and source of the replacement component and re-testing of the REEE; records concerning REEE and REEE components shall be retained by the preparing for re-use operator in case of market intervention/product recall by the manufacturer;

— records of the cleaning procedure in accordance with 5.9;

— records of the unique identification or sales number linked to the system that tracked the WEEE throughout the preparing for re-use process until the point of sale or donation of the REEE or REEE component. The records shall include the details of the user manual (see 6.3) and product warranty provided (see 6.4).

The preparing for re-use operator will prepare and document a mass balance on a regular basis on the following:

— Weight of the WEEE received and WEEE sent for treatment;

— Weight of the REEE and REEE components;

— Weight of the WEEE, REEE and REEE components, shipped outside the member state (see also 6.5).

NOTE 1 Article 16 of WEEE Directive 2012/19/EU gives requirements on the registration, information and reporting for quantities ‘prepared for re-use’. These mass balance records can be used for the calculation of the recycling and recovery rates according to EN 50625-1.

NOTE 2 The weight is required so that reporting of such data can be carried out. REEE or REEE components are usually only weighed when they are sold or donated and so leave the preparing for re-use facility.

If there is a protocol, which is recognised by the competent authority, to provide the average weight of a product, this will be accepted as evidence of the outgoing weight of the REEE or REEE component.

NOTE 3 In some countries the competent authority can require a periodic cross check on the protocols against actual weights.

NOTE 4 Attention is drawn to Annex VI of the WEEE Directive (2012/19/EU), which establishes the minimum records and evidence required for exports of REEE or REEE components.

If REEE or REEE components are unsold or where there is no market found, the preparing for re-use operator may declare the equipment as WEEE. In this case, it shall be recorded as WEEE and assigned for treatment (see Clause 7).

Where WEEE has been prepared and verified for re-use in accordance with this European Standard, the WEEE shall be classified as REEE or REEE component (see Clause 6) by recording the

classification on the tracking record and applying a preparing for re-use label with the unique identification or sales number to the piece of REEE or REEE component.

The tracking and traceability system shall include information provided on the preparing for re-use label (see 6.2) and put into place controls to avoid the misuse of the preparing for re-use labels and the controls of recording defaced or damaged labels.

Where an item of WEEE has not fulfilled all the requirements of Clause 5 it shall be recorded as failed and assigned for treatment (see Clause 7). A label is not required for WEEE that has failed the preparing for re-use process.

If a whole WEEE is disassembled to facilitate the preparing for re-use of components, in accordance with 5.7.2, then at that time each component shall be uniquely tracked in a record. This shall include the details of equipment that the component was taken from including the serial number; model and the product type. If the preparing for re-use operator receives components from WEEE originated from a preparing for re-use operator and/or treatment operator for the purposes of preparing for re-use the details of equipment that the component was taken from including the serial number; model and the product type shall also be recorded within the system.

NOTE 5 Logistics operators are not permitted to disassemble WEEE.

8.5 Technical documentation

The preparing for re-use operator shall implement, document, update and/or maintain the following in respect of the requirements of this standard:

a) The downstream chain of collected WEEE, through any logistic operator or interim storage facility until WEEE is assigned for treatment (see Clause 7).

b) Copies of all waste transfer documentation (e.g. transfer notes, CMR documents, trans-frontier shipment permit movement and the annex VII forms (Regulation on shipments of waste EC Regulation 1013/2006)) and weigh notes, weigh tickets or weigh receipts for the minimum legal time requirement.

NOTE 1 CMR refers to the “Convention on the Contract for the International Carriage of Goods by Road”.

c) An initial inspection for selection procedure (see 5.3) for the relevant product type (e.g. washing machines; computers; televisions and monitors) to determine whether that WEEE is to be assigned to the preparing for re-use process. The procedure shall include criteria for when acceptance for repair is possible (e.g. missing or damaged doors, knobs switches or handles that can be replaced) and when WEEE should be rejected and so consigned to a treatment operator.

d) A product recall checking procedure (see 5.4) relating to the type of WEEE being received and being prepared for re-use.

e) A safety procedure, visual inspection procedure and electrical safety tests (see 5.3) for the relevant product type being prepared for re-use. Records of the safety test(s) performed and outcome(s) (e.g. pass / fail) shall be documented for each item of WEEE prepared for re-use, including repairs undertaken (and re-testing) and/or assignment for treatment.

f) A functionality test procedure (see 5.5), that is applicable to the WEEE being prepared for re-use, with reference to product specific protocols when used. Records of the functionality test(s) performed and outcome(s) (e.g. pass / fail) shall be documented for each item of WEEE prepared for re-use, including repairs undertaken (and re-testing) and/or assignment for treatment.

g) A procedure for the eradication of personal data and data that has been specifically licensed to a user (see 5.6) stored within data-bearing equipment or components.

NOTE 2 The function test and data eradication can be conducted as one combined part of the process.

h) A disassembly procedure (see 5.7) that identifies any associated hazards, risks and controls to reduce risk in order to prevent damage to components or the environment whilst disassembling WEEE to recover the components.

i) A process on how components of WEEE should be assessed and tested (see 5.8.2) as fit for purpose (e.g. worn or defective); managed and stored; and tracked so that the route can be traced as to the REEE it was fitted in to, or to whom it was sold / donated. If a new replacement component is used, the weight of such a component shall be recorded within the tracking records. If it is likely to affect the mass balance (see 8.4).

j) A risk assessment specifically to assess environmental and safety risks related to the handling of the types of gasses involved in temperature exchange equipment (see 5.8.2); procedures made available to technically competent and qualified personnel to mitigate any such identified risk.

k) A cleaning procedure (see 5.10) to be used applicable to the WEEE being prepared for re-use including how to identify bio-hazard and other hazardous residues and traces of oil and how to select the proprietary cleaning product according to type of bio-hazard or other hazardous residues or oil and type of material and equipment. The preparing for re-use operator shall hold material safety data sheets regarding the cleaning products used.

l) A quality assurance procedure (see 5.11) to document the quality checks performed. This shall include the name of the person performing or overseeing the check, the REEE or REEE component selected, the date, the details of the tests performed and the results, using the unique tracking ID of the REEE or REEE component selected.

8.6 Records and record keeping

The preparing for re-use operator shall have internal administrative procedures and documentation (electronic and/or paper) relating to demonstrate compliance with legal and regulatory obligations applicable to all activities undertaken on site.

The preparing for re-use operator shall identify, hold and demonstrate compliance with all permits, licences and exemptions required by them to operate, and make details available to interested parties.

NOTE 1 Attention is drawn to requirements for permits, licences, exemptions and/or other authorizations required by the regulatory authorities with regards to waste management, the environment and human health and safety.

The preparing for re-use operator shall meet all reporting obligations in respect of the mass of REEE or REEE components returned to the market, according to national law (for instance, the reporting obligations could include providing information on the REEE and REEE components returned to the market).

The preparing for re-use operator shall retain all the documentation mentioned in Clause 8 for a minimum of 4 years and make them available in order to provide evidence of compliance to this European Standard.

General documentation to be implemented, updated and maintained by the preparing for re-use operator shall include the following minimum information:

a) records concerning health, safety, and environmental monitoring including records of maintenance of site and servicing of equipment according to 4.2;

NOTE 2 Records concerning health, safety, and environmental monitoring include first aid measures, emergency plans, risk assessment documents and records describing incidents, accidents, work related illness, leakages, fires, and related damages.

b) records concerning the competencies, qualifications, experience and skills and the training of employees and instructions / guidance regarding processes according to 4.2 and 4.3;

c) documents recording the WEEE received (see 5.1) and the WEEE assigned for treatment (sorted or non-sorted) (see Clause 7);

d) documents recording the WEEE tested including the records of the acceptance / rejection criteria for each piece of WEEE; and the REEE or REEE components returned to the market and the tracking system used to identify each unique piece tested (see 4.5 and Clause 6);

e) records that the REEE or REEE component has been checked to ensure it has not been subject to a product recall (see 5.3.1);

f) calibration and maintenance records for all testing apparatus and weighing apparatus (if used) (see 4.2.1)

g) documents pertaining to the segregation and storage system used (see 4.5 and 5.12)

h) documents pertaining to the electrical protection system used (see 4.2)

i) supporting documentation for each piece of REEE or REEE component (see 6.3);

j) documentation on waste and its transfer to other organizations (see 5.2 and Clause 7);

k) documents recording the details of all warranties, including legal warranties (if any), provided to customers and a register of returned equipment or warranty credits (see 6.4)

NOTE 3 Attention is drawn to regulatory requirements for record keeping, including record keeping of handling and disposal of hazardous waste.

Annex A
(informative)

An overview of the preparing for re-use process

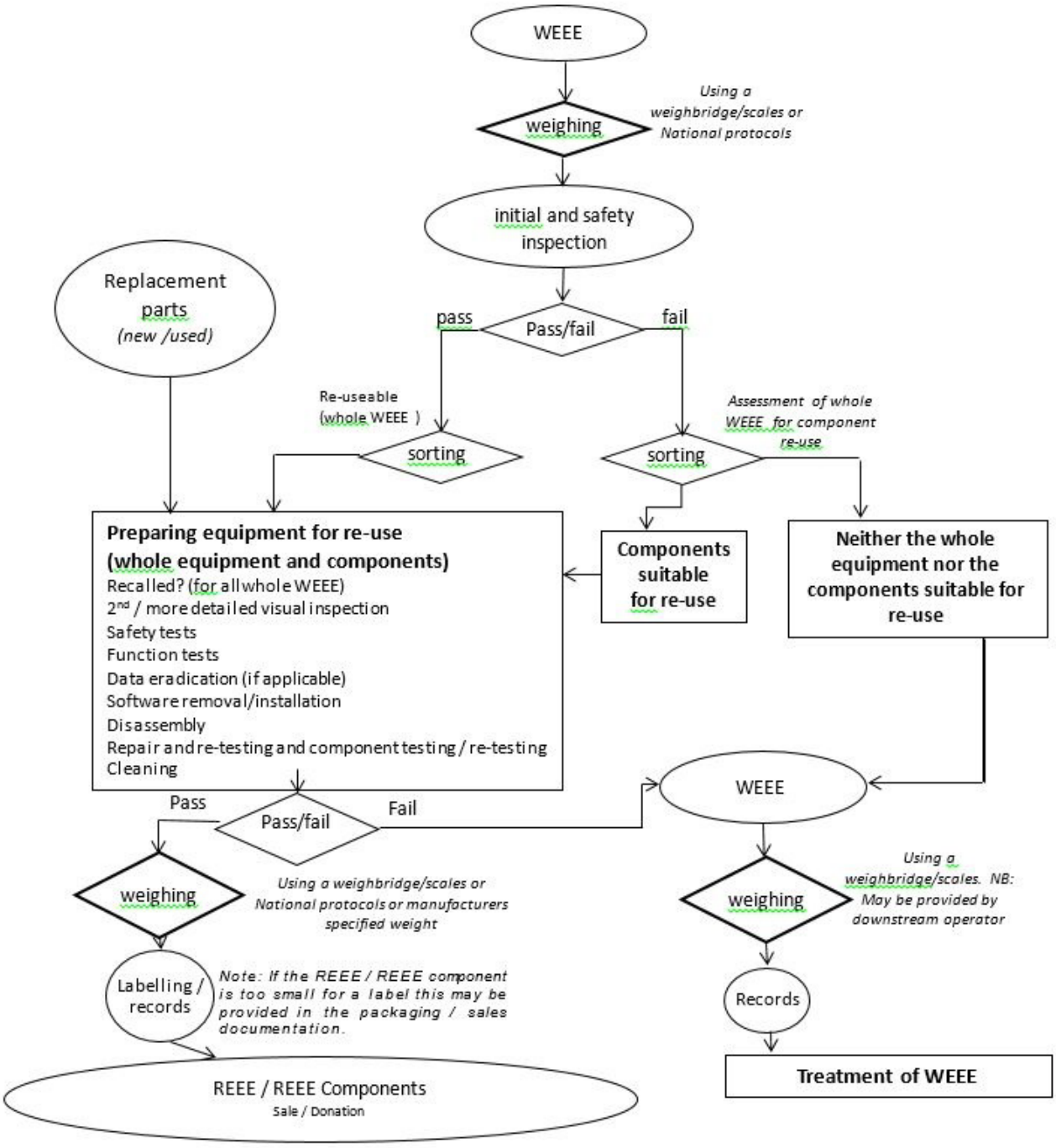

Figure A.1 — Preparing for re-use process

Annex B
(informative)

Examples of good practices and procedures related to the preparing for re-use process

B.1 Examples of required competencies of employees (including volunteers) and contractors

Competence may be demonstrated in various ways, for example:

— relevant experience (as long as there is evidence that it has been kept up to date);

— academic qualifications for example a relevant degree; professional qualifications for example membership of an appropriate institution;

— vocational qualifications;

— external training qualification/certification for example certificate of technical competence;

— attendance at external or in-house training courses.

Relevant skills and qualifications of operatives may include:

— transporting and internal handling of equipment;

— testing and repair of all types of equipment;

— disassembly of equipment;

— fault finding and diagnosis (mechanical, electrical, electronic, gas, refrigerant, pneumatic, hydraulic); fault repair;

— component replacement;

— testing for electrical safety and functionality;

— supplying equipment to the public;

— supervising trainees and assistants;

— waste transportation and internal handling; and the correct handling and safe storage or disposal of hazardous components (such as batteries; capacitors; toner cartridges; oil etc.).

NOTE Requirements for personnel involved in servicing products can exist, e.g. VDE 1000 in Germany.

B.2 Examples of tools and equipment suitable for the types of equipment being prepared for re-use

Tools and equipment may include:

— test equipment (e.g. portable appliance tester, ammeter, ohmmeter; thermometers etc.) required in order to ensure the safety and functionality of the equipment being prepared for re-use;

— proprietary software packages required to test the functionality of internal components and device re-setting;

— battery testing equipment needed to ensure that internal batteries or battery chargers are functional and safe to use;

— a range of tools (e.g. screwdrivers; pliers; soldering irons); and miscellaneous equipment (e.g. VHC recovery unit, vacuum pump) and weighing scales.

— data eradication tools needed if the WEEE contains or may contain personal data and data that has been specifically licensed to a user;

NOTE 1 Attention is drawn to the General Data Protection Regulation 2016/679, which prohibits the transfer of personal data to a country which does not ensure an adequate level of protection.

NOTE 2 There can be governmental requirements as to the level or standard of data eradication required.

— prevention and control equipment (e.g. air monitoring / ventilation/exhaust systems and dosimeters;

— personal protective equipment (e.g. gloves; safety boots; masks; goggles and protective clothing).

B.3 Training materials

Materials used to train people engaged in the preparing for re-use process to prevent injury or damage to the WEEE, REEE or REEE components may include:

— training in the use of test equipment;

— information on handling equipment (e.g. fork-lifts, sack trucks);

— unloading / loading instructions;

— handling of hazardous materials and how to deal with foreseeable emergencies;

— technical guidance documents;

— risk assessments;

— safety statements;

— information charts;

— information tables;

— photos or examples of components;

— safety data sheets for hazardous chemical components.

B.4 Risks associated with disassembly of WEEE

Examples of risks to operators associated with disassembly of WEEE are:

— residual electrical charge stored in WEEE that could lead to electric shock;

— sharp edges that could cut or puncture;

— the weight of WEEE with risks in lifting and handling and risk of harm from falling / dropped WEEE;

— chemicals and materials that could be hazardous from occasional or long-term exposure;

— potential energy (e.g. in the form of counterweights and compressed springs).

Examples of WEEE likely to be affected by bio-hazard residues may include refrigerators, cookers, microwaves and dishwashers, due to food residues and medical, personal hygiene and sterilizing equipment.

B.5 Data

B.5.1 Data eradication

For magnetic media, examples to prevent unauthorised access include:

— degaussing magnetic media;

— drilling hard disk drive platters;

— shape distortion/folding.

For other media alternative means for data destruction may be required.

B.5.2 Data sanitizing software

Data sanitisation is the process of deliberately, permanently and irreversibly removing or destroying the data stored on a memory device.

Examples of nationally approved data sanitizing standards include:

— HMG IA/IS 5, Secure Sanitisation of Protectively Marked Information or Sensitive Information (UK)

— DIN 66399 (Germany)

— NIST 800-88r1 (USA)

Guidance on data eradication is given in BS EN ISO/IEC 27040.

B.6 Transport and packaging of REEE

Examples of suitable packaging for the prevention of damage to REEE and REEE components may include:

— the use of the original box the equipment was packed in by the manufacturer or another suitably sized box; and

— sufficient packing materials (e.g. bubble wrap; shrink wrap, corrugated cardboard; polystyrene chips; foam or screen protectors, etc.);

— Anti-static bags / wrapping should be used where required.

Accessories and peripherals (e.g. remote controls, keyboards, cables, chargers, etc.) could be packed with the REEE where available; and packaged so as to not damage the REEE during storage or transportation (e.g. so that it does not scratch the screen or surface of the REEE it is paired with).

Large appliances could be covered with blankets or cardboard or shrink wrap to prevent damage during transit (e.g. knocks / scratches).

Larger products should be placed at the bottom of a box, pallet or cage (or on its own) to ensure that the box, pallet or cage is not top heavy and thus prevent it from tipping. Corner supports should be used

where it is intended for one box to be stored on top of another. If pallets are used, the height should not be that great so as to pose a risk of topping over – especially during transit or loading / unloading.

Examples of equipment that can contain a lithium battery are mobile phones, tablets, laptops, digital cameras, camcorders, electric shavers, electronic cigarettes, torches, wearable technology, remote-controlled toys and drones and hand-held power tools.

Bibliography

Useful links:

[1] For product recalls:

http://ec.europa.eu/consumers/safety/rapex/alerts/main/index.cfm?event=main.search

[2] For general information of the Rapid Alert System for dangerous non-food products:

http://ec.europa.eu/consumers/consumers_safety/safety_products/rapex/index_en.htm

[3] To receive weekly reports notifications on products that have been recalled:

http://ec.europa.eu/consumers/safety/rapex/alerts/main/index.cfm?event=main.listNotifications

[4] WRAP have developed a set of protocols based on industry experience that highlight the tests and procedures that should be carried out as a minimum. They form a baseline for electrical product assessment and repair for re-use and can be used as a guideline to product assessment and testing.

http://www/wrap.org.uk/content/re-use-protocols-electrical-products

Standards publications:

[5] EN 17065, *General requirements for bodies operating product certification systems*

[6] EN ISO 14001, *Environmental management systems — Requirements with guidance for use (ISO 14001)*

[7] OHSAS 18001, *Occupational health and safety management systems — Requirements*

[8] EN ISO/IEC 27040, *Information technology — Security techniques — Storage security (ISO/IEC 27040)*

Other publications:

[9] Directive 2012/19/EU of the European Parliament and of the Council on waste electrical and electronic equipment (WEEE) (recast).

[10] Directive 2011/65/EU of the European Parliament and of the Council on the restriction of the use of certain hazardous substances in electrical and electronic equipment (recast)

[11] Regulation (EC) No 1013/2006 of the European Parliament and of the Council of 14 June 2006 on shipments of waste. Luxembourg: Office for Official Publications of the European Communities.

[12] Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste and repealing certain Directives. (The Waste Framework Directive). Luxembourg: Office for Official Publications of the European Communities.

[13] Regulation (EC) No 765/2008 of the European Parliament and of the Council of 9 July 2008 setting out the requirements for accreditation and market surveillance relating to the marketing of products and repealing

[14] Regulation (EEC) No 339/93. Luxembourg: Office for Official Publications of the European Communities.

[15] Directive 2014/35/EU of the European Parliament and of the Council of 26 February 2014 on the harmonisation of the laws of Member States relating to electrical equipment designed for use within certain voltage limits. Luxembourg: Office for Official Publications of the European Communities.

[16] Commission Decision 2000/532/EC of 3 May 2000 on the European list of wastes. [Official Journal L 226/3, 6.9.2000]. EUROPEAN COMMUNITIES. Council Directive 2001/95/ECof 3 December 2001 on general product safety. The General Product Safety Directive (GPSD). (as revised 2001/95/EC). Luxembourg: Office for Official Publications of the European Communities.

[17] Directive 95/46/EC of the European Parliament and of the Council of 24 October 1995 on the protection of individuals with regard to the processing of personal data and on the free movement of such data (Data Protection Directive). Luxembourg: Office for Official Publications of the European Communities.

[18] Directive 2011/65/EU of the European Parliament and of the Council of 8 June 2011on the restriction of the use of certain hazardous substances in electrical and electronic equipment. Luxembourg: Office for Official Publications of the European Communities.

[19] Revised Correspondents' Guidelines No 1 on shipments of waste electrical and electronic equipment (WEEE). Luxembourg: Office for Official Publications of the European Communities.
(http://ec.europa.eu/environment/waste/shipments/pdf/correspondents_guidelines_en.pdf)

[20] Regulation (EC) No 1005/2009 of the European Parliament and of the Council of 16 September 2009 on substances that deplete the ozone layer. Luxembourg: Office for Official Publications of the European Communities.

[21] Council Directive 89/391/EEC of 12 June 1989 on the introduction of measures to encourage improvements in the safety and health of workers at work. Luxembourg: Office for Official Publications of the European Communities.

[22] Regulation (EC) No 1999/92 regarding the minimum requirements for the improving the safety and health protection of workers potentially at risk from explosive atmospheres

[23] Regulation (EC) No 94/9 on the approximation of the laws of the member states concerning equipment and protective systems intended for use in potentially explosive atmospheres (ATEX)

Further reading:

[24] BASEL CONVENTION. Guidance document on the preparation of technical guidelines for the environmentally sound management of wastes subject to the Basel Convention. Switzerland: Secretariat of the Basel Convention,
(http://www.basel.int/meetings/sbc/workdoc/techdocs.html)

[25] BASEL CONVENTION. Guidance document on trans-boundary movements of hazardous wastes destined for recovery operations. Switzerland: Secretariat of the Basel Convention, 2002. (http://www.basel.int/meetings/sbc/workdoc/techdocs.html)

[26] BASEL CONVENTION. Technical guidelines for the identification and environmentally sound management of plastic wastes and for their disposal. Switzerland: Secretariat of the Basel Convention, 2002. (http://www.basel.int/meetings/sbc/workdoc/techdocs.html)

[27] BASEL CONVENTION. Technical guidelines on the environmentally sound recycling/reclamation of metals and metal compounds (R4). Switzerland: Secretariat of the Basel Convention, 2004. (http://www.basel.int/meetings/sbc/workdoc/techdocs.html)