



# SLOVENSKI STANDARD SIST EN 50614:2020

01-april-2020

---

## Zahteve za pripravo ponovne uporabe odpadne električne in elektronske opreme

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

(standards.iteh.ai)

Ta slovenski standard je istoveten z: **EN 50614:2020**

[SIST EN 50614:2020](https://standards.iteh.ai/catalog/standards/sist/12efb50b-d25c-4865-b1c2-9c250c91f0f2/sist-en-50614-2020)

<https://standards.iteh.ai/catalog/standards/sist/12efb50b-d25c-4865-b1c2-9c250c91f0f2/sist-en-50614-2020>

---

### ICS:

13.030.50	Recikliranje	Recycling
29.020	Elektrotehnika na splošno	Electrical engineering in general
31.020	Elektronske komponente na splošno	Electronic components in general

**SIST EN 50614:2020**

**en,fr,de**

**iTeh STANDARD PREVIEW**  
**(standards.iteh.ai)**

SIST EN 50614:2020

<https://standards.iteh.ai/catalog/standards/sist/12efb50b-d25c-4865-b1c2-9c250c91f0f2/sist-en-50614-2020>

EUROPEAN STANDARD

**EN 50614**

NORME EUROPÉENNE

EUROPÄISCHE NORM

February 2020

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 de réutilisation  
des déchets d'équipements électriques et électroniques

Anforderungen an die Vorbereitung zur Wiederverwendung  
von Elektro- und Elektronik-Altgeräten (WEEE)

This European Standard was approved by CENELEC on 2019-09-18. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CENELEC member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

<https://standards.iteh.ai/catalog/standards/sist/12efb50b-d25c-4865-b1c2-9c250c91f0f2/sist-en-50614-2020>



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**

<b>Contents</b>	<b>Page</b>
European foreword.....	4
Introduction.....	5
<b>1 Scope .....</b>	<b>6</b>
<b>2 Normative references .....</b>	<b>6</b>
<b>3 Terms and definitions .....</b>	<b>6</b>
<b>4 Administrative and organisational requirements .....</b>	<b>12</b>
4.1 Management principles.....	12
4.2 Technical and infrastructural pre-conditions .....	13
4.2.1 General .....	13
4.2.2 Tools and test equipment used for preparing for re-use .....	13
4.3 Training.....	13
4.4 Transport.....	14
4.5 Tracking and traceability .....	14
<b>5 Technical requirements for the preparing for re-use process.....</b>	<b>15</b>
5.1 Receiving WEEE .....	15
5.2 Initial inspection for selection.....	15
5.3 Safety aspects .....	16
5.3.1 General .....	16
5.3.2 Visual inspection for safety.....	17
5.3.3 Electrical safety tests.....	17
5.4 Functionality.....	18
5.5 Data-bearing equipment or components.....	18
5.6 Programming software and firmware.....	19
5.6.1 Equipment other than ICT equipment .....	19
5.6.2 ICT equipment.....	19
5.7 Disassembly and management of components and accessories.....	19
5.7.1 Disassembly.....	19
5.7.2 Replacement components.....	20
5.8 Repair.....	20
5.8.1 Failed equipment or components.....	20
5.8.2 Repairs to temperature exchange equipment .....	20
5.8.3 Re-testing .....	21
5.9 Cleaning process.....	21
5.10 Quality Assurance .....	21
5.11 Storage .....	22
5.11.1 General .....	22
5.11.2 Storage of WEEE that has failed testing .....	22
5.11.3 Storage of REEE Components .....	22
5.12 Transport of WEEE for treatment .....	22
5.13 Transport and packaging of REEE .....	23
<b>6 Returning whole equipment or separate components back into use by the preparing for re-use operator.....</b>	<b>23</b>
6.1 General .....	23
6.2 Preparing for re-use label.....	23
6.3 User information.....	24
6.4 REEE warranty.....	25
6.5 Export of REEE and/or REEE components.....	25

<b>7</b>	<b>Management of WEEE at the end of the preparing for re-use process by preparing for re-use operators .....</b>	<b>25</b>
<b>8</b>	<b>Documentation requirements for preparing for re-use operators .....</b>	<b>26</b>
<b>8.1</b>	<b>Management system .....</b>	<b>26</b>
<b>8.2</b>	<b>Segregation and storage plan .....</b>	<b>26</b>
<b>8.3</b>	<b>Risk management process .....</b>	<b>26</b>
<b>8.4</b>	<b>Tracking and traceability system .....</b>	<b>27</b>
<b>8.5</b>	<b>Technical documentation .....</b>	<b>28</b>
<b>8.6</b>	<b>Records and record keeping .....</b>	<b>29</b>
	<b>Annex A (informative) An overview of the preparing for re-use process.....</b>	<b>31</b>
	<b>Annex B (informative) Examples of good practices and procedures related to the preparing for re-use process .....</b>	<b>32</b>
<b>B.1</b>	<b>Examples of required competencies of employees (including volunteers) and contractors .....</b>	<b>32</b>
<b>B.2</b>	<b>Examples of tools and equipment suitable for the types of equipment being prepared for re-use.....</b>	<b>32</b>
<b>B.3</b>	<b>Training materials.....</b>	<b>33</b>
<b>B.4</b>	<b>Risks associated with disassembly of WEEE .....</b>	<b>33</b>
<b>B.5</b>	<b>Data .....</b>	<b>34</b>
<b>B.5.1</b>	<b>Data eradication.....</b>	<b>34</b>
<b>B.5.2</b>	<b>Data sanitizing software .....</b>	<b>34</b>
<b>B.6</b>	<b>Transport and packaging of REEE .....</b>	<b>34</b>
	<b>Bibliography.....</b>	<b>36</b>

SIST EN 50614:2020

<https://standards.iteh.ai/catalog/standards/sist/12efb50b-d25c-4865-b1c2-9c250c91f0f2/sist-en-50614-2020>

EN 50614:2020 (E)

## European foreword

This document (EN 50614:2020) has been prepared by CLC/TC 111X “Environment”.

The following dates are fixed:

- latest date by which this document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2020-08-07
- latest date by which the national standards conflicting with this document have to be withdrawn (dow) 2023-02-07

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CENELEC shall not be held responsible for identifying any or all such patent rights.

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

## iTeh STANDARD PREVIEW (standards.iteh.ai)

[SIST EN 50614:2020](https://standards.iteh.ai/catalog/standards/sist/12efb50b-d25c-4865-b1c2-9c250c91f0f2/sist-en-50614-2020)

<https://standards.iteh.ai/catalog/standards/sist/12efb50b-d25c-4865-b1c2-9c250c91f0f2/sist-en-50614-2020>

## Introduction

This document 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 document 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 document 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.

**(standards.iteh.ai)**

[SIST EN 50614:2020](https://standards.iteh.ai/catalog/standards/sist/12efb50b-d25c-4865-b1c2-9c250c91f0f2/sist-en-50614-2020)

<https://standards.iteh.ai/catalog/standards/sist/12efb50b-d25c-4865-b1c2-9c250c91f0f2/sist-en-50614-2020>

**EN 50614:2020 (E)****1 Scope**

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

NOTE 1 This document 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 document 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 document 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 document:

- 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.

<https://standards.iteh.ai/catalog/standards/sist/12efb50b-d25c-4865-b1c2-9c250c91f0f2/sist-en-50614-2020>

**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.

<std>EN 50625 (series), *Collection, logistics and treatment requirements for WEEE*</std>

**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: IEC 60050-151: 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

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.

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

### 3.3

#### **collection facility**

location designated for the gathering of WEEE to facilitate separate collection

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.

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

### 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

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

[SOURCE: Directive 2008/98/EC]

### 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]

iteh STANDARD PREVIEW  
(standards.iteh.ai)

SIST EN 50614:2020

<https://standards.iteh.ai/catalog/standards/sist/12efb50b-d25c-4865-b1c2-9c250c91f0f2/sist-en-50614-2020>

**EN 50614:2020 (E)****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: IEC 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 screen having a display screen larger than 100 cm<sup>2</sup>

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

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.

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

### 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

**EN 50614:2020 (E)**

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 operator']

**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 document 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

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

[SOURCE: Directive 2008/98/EC]

**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: IEC 60950-1:2006]

**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 document 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]