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INTERNATIONAL ELECTROTECHNICAL COMMISSION

SUSTAINABLE MANAGEMENT OF WASTE ELECTRICAL AND ELECTRONIC EQUIPMENT (E-WASTE)

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This XXX edition cancels and replaces the XXX edition published in [publication_date], Amendment 1:[publication_date] and Amendment 2:[publication_date]. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

- a) ...;
- b)

The text of this [...International Standard, Technical Specification: specify document type...] is based on the following documents:

Draft	Report on voting
XX/XX/FDIS	XX/XX/RVD

Full information on the voting for its approval can be found in the report on voting indicated in the above table.

The language used for the development of this [...International Standard, Technical Specification: specify document type...] is English [change language if necessary].

This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at https://www.iec.ch/members_experts/refdocs. The main document types developed by IEC are described in greater detail at <https://www.iec.ch/standardsdev/publications>.

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- amended.

INTRODUCTION

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SUSTAINABLE MANAGEMENT OF WASTE ELECTRICAL AND ELECTRONIC EQUIPMENT (E-WASTE)

1 Scope

This document specifies the requirements and provides guidance for the sustainable management of waste electrical and electronic equipment (e-waste) from collection to returning reusable products or components or secondary materials to the value chain.

Commented [DC(1)]: ...if we use „should” and “may”

The document is intended for use by an organization involved in e-waste management seeking to manage its responsibilities in a systematic manner.

The requirements set by this international standard will help an organization to achieve sustainability outcomes within the context of e-waste management, including

- enhancement of sustainability performance and achievement of sustainability objectives;
- fulfilment of compliance obligations.

The document is applicable to any organization, regardless of size, type and nature.

The document applies to the environmental and social aspects of e-waste management activities, products and services that the organization determines it can either control or influence, considering a lifecycle perspective.

Commented [DC(2)]: To be discussed how far we want to go into the social aspects.

Commented [W=3]: Social is out of scope of TC 111. Please delete 'social' from the text.

2 Normative references

Standard boilerplate text:

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.

Boilerplate text if no references are listed:

There are no normative references in this document.

3 Terms and definitions

3.1

product

physical-based object designed or utilized with a purpose

Note 1 to entry: A product can be, e.g.:

- goods of any type;
- hardware (e.g., engine mechanical part, spare parts, consumables, etc.);
- processed materials (e.g., lubricant).

Note 2 to entry: product excludes services (such as software) for the purposes of this standard

Source: ISO/ WD 59004

3.2

non-destructive processing

processing through which recoverable resources are separated into entire items or components without damaging them based on the equipment's structure at the existing detachable connections

Note 1 to entry: processing usually applied for the purpose of further preparation for re-use as well as for further processing and/or depollution

Note 2 to entry: this processing may include semi-destructive processing which accepts damage to or spoilage of low-value parts such as connecting elements, if this helps to achieve the same purpose as non-destructive processing

3.3

secondary material

material that has been used and thereafter processed

Source: JWG14, 2021

3.4 electronic waste

need a definition – consider referencing the UN Basel Convention definitions

3.5 compliance obligations (preferred term) legal requirements and other requirements (admitted term)

legal requirements (3.2.8) that an organization (3.1.4) has to comply with and other requirements that an organization has to or chooses to comply with

Note 1 to entry: Compliance obligations are related to the *environmental management system* (3.1.2).

Note 2 to entry: Compliance obligations can arise from mandatory requirements, such as applicable laws and regulations, or voluntary commitments, such as organizational and industry standards, contractual relationships, codes of practice and agreements with community groups or non-governmental organizations.

(ISO 14001:2015, 3.2.9)

3.6 document

information and the medium on which it is contained

Examples: Record, specification, procedure document, drawing, report, standard

Note 1 to entry: The medium can be paper, magnetic, electronic or optical computer disc, photograph or master sample, or combination thereof.

Note 2 to entry: A set of documents, for example specifications and records, is frequently called "documentation".

Commented [W-4]:

Two terms have already been defined in ISO standards.

secondary material

material (ISO 5659 2:2012, 3.6) recovered from previous use or recovered from waste (3.3.11) derived from another product system (ISO 14040:2006, 3.28) and used as an input (ISO 14040:2006, 3.21)

from ISO 21930:2017(en)

Sustainability in buildings and civil engineering works — Core rules for environmental product declarations of construction products and services

3.6.4

secondary material

material (ISO 5659 2:2012, 3.6) recovered from previous use or recovered from waste (3.3.11) derived from another product system (ISO 14040:2006, 3.28) and used as an input (ISO 14040:2006, 3.21) in another product system

EXAMPLE:

Recycled scrap metal, crushed concrete, glass cullet, recycled wood chips, recycled plastic granulate.

Note 1 to entry: Secondary material is measured at the point [i.e., **system boundary** (3.4.4)] where the secondary material enters the product system from another product system.

[SOURCE:EN 15804:2012 +A1:2013, 3.29, modified — Reference to substituting primary materials has been removed, references to derivation from a previous product system and use as input have been added to replace Note 2 to entry and Note 3 to entry has been changed to examples.

From ISO 21930:2017(en)

Sustainability in buildings and civil engineering works — Core rules for environmental product declarations of construction products and services

1

Note 3 to entry: Some requirements (e.g., the requirement to be readable) relate to all types of documents. However, there can be different requirements for specifications (e.g., the requirement to be revision controlled) and for records (e.g., the requirement to be retrievable).

(ISO 9000:2015, 3.8.5)

3.7 record

document stating results achieved or providing evidence of activities performed

Note 1 to entry: Records can be used, for example, to formalize traceability and to provide evidence of verification, preventive action, and corrective action.

Note 2 to entry: Generally records need not be under revision control.

(ISO 9000:2015, 3.8.10)

3.8 documented information

information required to be controlled and maintained by an organization (3.1.4) and the medium on which it is contained

Note 1 to entry: Documented information can be in any format and media, and from any source.

Note 2 to entry: Documented information can refer to:

- the management system (3.1.2), including related processes (3.3.5);
- information created in order for the organization to operate (can be referred to as documentation);
- evidence of results achieved (can be referred to as records).

(ISO 14001:2015, 3.3.2)

4 Principles for sustainable e-waste management

4.1 Best environmental outcome

Organizations develop and implement measures to deliver the best environmental outcome from a lifecycle perspective, generally prioritising waste prevention and extending product life over material recovery (recycling), energy and other forms of recovery and disposal.

4.2 Pollution prevention

Use of processes, practices, techniques, materials, products, services or energy to avoid, reduce or control (separately or in combination) the creation, emission or discharge of any type of pollutant or waste, in order to reduce adverse environmental impacts.

4.3 Systems approach

Organizations take a holistic approach to understand how individual decisions and activities interact within the wider systems they are part of.

4.4 Precautionary principle

Organizations take preventive action against a potentially harmful practice or substance in the absence of scientific certainty, rather than continuing the suspect practice while it is under study, or without study.