SLOVENSKI STANDARD
SIST EN ISO 14044:2006/oprA2:2019

01-december-2019

Ravnanje z okoljem - Ocenjevanje življenjskega cikla – Zahteve in smernice - Dopolnilo A2 (ISO 14044:2006/DAM 2:2019)

Environmental management - Life cycle assessment - Requirements and guidelines - Amendment 2 (ISO 14044:2006/DAM 2:2019)

Umweltmanagement - Ökobilanz - Anforderungen und Anleitungen - Änderung 2 (ISO 14044:2006/DAM 2:2019)

Management environnemental - Analyse du cycle de vie - Exigences et lignes directrices - Amendement 2 (ISO 14044:2006/DAM 2:2019)

Ta slovenski standard je istoveten z: **EN ISO 14044:2006/prA2**

ICS:

13.020.10	Ravnanje z okoljem	Environmental management
13.020.60	Življenjski ciklusi izdelkov	Product life-cycles

SIST EN ISO 14044:2006/oprA2:2019 **en,fr,de**

DRAFT AMENDMENT
ISO 14044:2006/DAM 2

ISO/TC **207**/SC **5** Secretariat: **AFNOR**

Voting begins on:
2019-09-19

Voting terminates on:
2019-12-12

Environmental management — Life cycle assessment — Requirements and guidelines

AMENDMENT 2

Management environnemental — Analyse du cycle de vie — Exigences et lignes directrices

AMENDEMENT 2

ICS: 13.020.60; 13.020.10

This document is circulated as received from the committee secretariat.

ISO/CEN PARALLEL PROCESSING

Reference number
ISO 14044:2006/DAM 2:2019(E)

COPYRIGHT PROTECTED DOCUMENT

ISO copyright office
CP 401 • Ch. de Blandonnet 8
CH-1214 Vernier, Geneva
Phone: +41 22 749 01 11
Fax: +41 22 749 09 47
Email: copyright@iso.org
Website: www.iso.org

Published in Switzerland

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

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

Amendment 2 to ISO 14044:2006 was prepared by Technical Committee ISO/TC 207, *Management environmental*, Subcommittee SC 5, *life cycle assessment*.

Environmental management — Life cycle assessment — Requirements and guidelines

AMENDMENT 2

Clause 3, Terms and definitions

Replace the following definitions:

3.1
life cycle
consecutive and interlinked stages of a product system, from raw material acquisition or generation from natural resources to final disposal

3.32
system boundary
set of criteria specifying which unit processes are part of a product system

Note 1 to entry: The term "system boundary" is not used in this International Standard in relation to LCIA.

3.41
completeness check
process of verifying whether information from the phases of a life cycle assessment is sufficient for reaching conclusions in accordance with the goal and scope definition

3.42
consistency check
process of verifying that the assumptions, methods and data are consistently applied throughout the study and are in accordance with the goal and scope definition performed before conclusions are reached

By the following definitions

3.1
life cycle
consecutive and interlinked stages ~~of a product system~~, from raw material acquisition or generation from natural resources to final disposal

3.32
system boundary
boundary based on a set of criteria specifying which *unit processes* are ~~a~~ part of a product system

~~Note 1 to entry: The term "system boundary" is not used in this International Standard in relation to LCIA.~~

3.41
completeness check
process to determine ~~of verifying~~ whether information from the phases of a life cycle assessment is sufficient for reaching conclusions in accordance with the goal and scope definition

3.42
consistency check
process to determine whether ~~of verifying that~~ the assumptions, methods and data are consistently applied throughout the study and are in accordance with the goal and scope definition performed before conclusions are reached

Subclause 4.2.3.5, second paragraph

Replace the text with the following (change "recycling" to "recycled materials", delete "mineral", add a comma after "ores", delete "or", change the place of the end bracket ")"):

Inputs may include, but are not limited to, use of ~~mineral~~ resources (e.g. metals from ores, ~~or~~ recycled materials), services like transportation or energy supply, and ancillary materials like lubricants or fertilisers~~)~~.

Subclause 4.3.4.2, last paragraph

Add the following sentence:

Additional information on allocation is given in Annex B

Add Annex B and change the number of the existing Annex B in "Annex C"

Annex B
(informative)

Allocation procedures

B.1 General

Allocation refers to the partitioning of the input or output flows of a process or product system between the product system under study and one or more other product systems (3.17).

A stepwise allocation procedure is described in subclause 4.3.4.2 and several examples of the procedure are presented in ISO 14049:2012, Clauses 6, 7 and 8.

This informative annex provides additional information to assist understanding of the subject for situations where it is not possible to apply 4.3.4.2 step 1, option 1.

Allocation methods reflect value choices, intentionally or unintentionally. Such value choices can influence decisions for different purposes, e.g. policy making or material choice in product design.

In addition, the need for data can vary between methods which can have an influence on the applicability of the method.

B.2 About system expansion

B.2.1 General

Expanding the product system to include additional functions related to the co-products (see 4.3.4.2, step 1 option 2) can be a means of avoiding allocation.

Therefore, the product system which is substituted by the co-product is integrated in the product system under study. The identification of this substituted system is done in the same way as the identification of the upstream system for intermediate product inputs; see also ISO 14049, Clause 6.4.

The application of system expansion involves an understanding of the market for the co-products. Decisions about system expansion can be improved through understanding the way co-products compete with other products, as well as the effects of any product substitution upon production practices in the industries impacted by the co-products.

Important considerations relating to the identification of product systems substituted by co-products include whether:

— specific markets and technologies are affected;

— the production volume of the studied product systems fluctuates in time, and;

— a specific unit process is affected directly.

If applicable, when the inputs are delivered through a market, it is also important to know:

— whether any of the processes or technologies supplying the market are constrained in which case they are not applicable, since their output does not change in spite of changes in demand;

— which of the unconstrained suppliers/technologies has the highest or lowest production costs and therefore, is the supplier/technology affected when the demand for the supplementary product is generally decreasing or increasing, respectively.

EXAMPLE A fuel combustion process produces co-products of heat that is used for district heating as well as electricity. The environmental impacts of the avoided electricity use can be subtracted from the environmental impacts of the fuel combustion process to determine the environmental impacts of the heat.

System expansion avoids allocation by including the product system that is substituted (avoided) by the co-product (product B) of the product system under study, as illustrated by the example in Figure 1. Since the substituted system has a negative sign, the addition of this system is mathematically the same as a subtraction. There is an additional example of this in Figure 15 and 16 in ISO 14049.

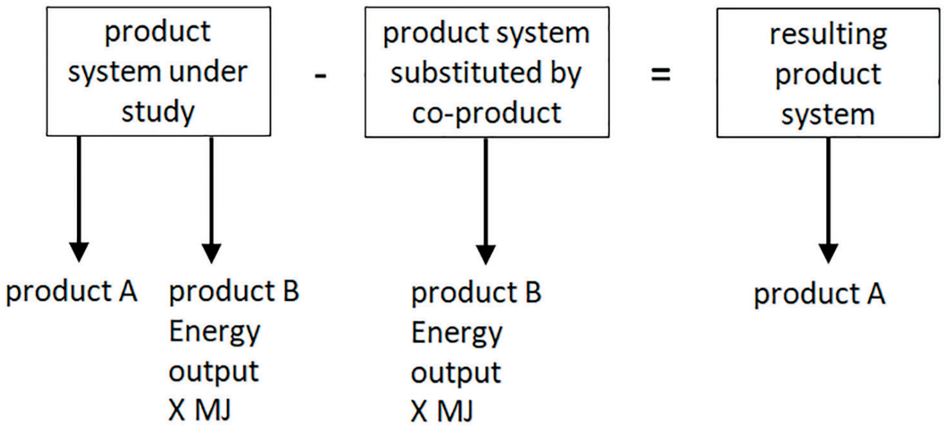

Figure1 — Example of expanding system boundaries