

## SLOVENSKI STANDARD SIST EN 17988-4:2025

01-februar-2025

Krožna zasnova ribolovnega orodja in opreme za akvakulturo - 4. del: Okoljske in krožne zahteve ter smernice

Circular design of fishing gear and aquaculture equipment - Part 4: Environmental and circularity requirements and guidelines

Kreislaufwirtschaft von Fischfanggeräten und Aquakulturausrüstungen - Teil 4: Umweltund Kreislaufanforderungen und Leitlinien

Circularité et recyclabilité des engins de pêche et des équipements d'aquaculture -Partie 4 : Exigences et lignes directrices en matière d'environnement et de circularité

Ta slovenski standard je istoveten z: EN 17988-4:2024

ICS:

13.020.20 Okoljska ekonomija. Environmental economics.

Trainostnost Sustainability

65.150 Ribolov in ribogojstvo Fishing and fish breeding

SIST EN 17988-4:2025 en,fr,de

# iTeh Standards (https://standards.iteh.ai) Document Preview

SIST EN 17988-4:2025

https://standards.iteh.ai/catalog/standards/sist/14c8beba-0464-4564-8872-8c3c40b8230f/sist-en-17988-4-2025

# EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

EN 17988-4

November 2024

ICS 13.020.20; 65.150

#### **English Version**

# Circular design of fishing gear and aquaculture equipment - Part 4: Environmental and circularity requirements and guidelines

Circularité et recyclabilité des engins de pêche et des équipements d'aquaculture - Partie 4 : Exigences et lignes directrices en matière d'environnement et de circularité Kreislaufdesign von Fischfanggeräten und Aquakulturausrüstungen - Teil 4: Umwelt- und Kreislaufanforderungen und Leitfaden

This European Standard was approved by CEN on 30 September 2024.

CEN 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 CEN 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 CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

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

nttps://stangards.iten.ai/catalog/standards/sist/14c8beba-0464-4564-8872-8c3c40b8230f/sist-en-17988-4-2025



EUROPEAN COMMITTEE FOR STANDARDIZATION COMITÉ EUROPÉEN DE NORMALISATION EUROPÄISCHES KOMITEE FÜR NORMUNG

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

| Cor  | ntents   | Page        |
|--|--|-------------|
| Euro   | opean foreword   | 3           |
| Introduction   |  |             |
| 1  | Scope  | 6           |
| 2  | Normative references   | 6           |
| 3  | Terms and definitions  | 7           |
| 4  | Principles   | 7           |
| 4.1  | General  | 7           |
| Figure 1 — Stages in product life, linear paradigm   |  | 7           |
| Figure 2 — Stages in product life, circular paradigm |  | 8           |
| 4.2  | Modular design using standardized components                                   |             |
| 4.3  | User requirements and circularity needs  | 9           |
| 5  | Design criteria throughout the different steps in the life cycle               |             |
| 5.1  | Selection/sourcing of materials, components, parts or products                 | 10          |
| 5.2  | Design for manufacture/assembly  | 17          |
| 5.3<br>equi  | Design of placement, installation and deployment of the fishing gear or ipment | aquaculture |
| 5.4  | Design for use and maintenance   |             |
| 5.5  | Design for end-of-use stage  |             |
| Bibl   | liography  | 21          |

<u> 8181 EN 17988-4:2023</u>

https://standards.iteh.ai/catalog/standards/sist/14c8beba-0464-4564-8872-8c3c40b8230f/sist-en-17988-4-2025

#### **European foreword**

This document (EN 17988-4:2024) has been prepared by Technical Committee CEN/TC 466 "Circularity and recyclability of fishing gear and aquaculture equipment", the secretariat of which is held by NEN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by May 2025, and conflicting national standards shall be withdrawn at the latest by May 2025.

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

This document has been prepared under a standardization request addressed to CEN by the European Commission (M/574). The Standing Committee of the EFTA States subsequently approves these requests for its Member States.

This document is part of the EN 17988 series.

The EN 17988 series consists of the following parts, under the general title Circular design of fishing gear and aquaculture equipment:

- Part 1: General requirements and guidelines
- Part 2: User manuals and labelling standards.iteh.ai)
- Part 3: Technical requirements and guidelines Preview
- Part 4: Environmental and circularity requirements and guidelines
- https:/—Part 5: Circular business models sist/14c8beba-0464-4564-8872-8c3c40b8230f/sist-en-17988-4-2025
  - Part 6: Requirements and guidelines for digitalization of information of components of fishing gear and aquaculture equipment

Any feedback and questions on this document should be directed to the users' national standards body. A complete listing of these bodies can be found on the CEN website.

According to the CEN-CENELEC Internal Regulations, the national standards organisations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Türkiye and the United Kingdom.

#### Introduction

As part of the European Green Deal, launched in 2019, the European Commission introduced measures to move to a climate neutral and circular economy, together with a digital transition. One of the targets in the transition to a circular economy was to reduce the amount of waste released into the environment by decreasing the amount of waste generated, increasing the amount of waste collected and re-introducing the materials regenerated from waste into the production of new products.

Specifically, the accumulation of plastics in marine and other aquatic environments were addressed in two directives:

- The revised Port Reception Facilities (PRF) Directive [1] encourages fishers and aquaculturists to bring not only their own end-of-use gear but also bring ashore abandoned, lost or otherwise discarded (ALD) fishing gear and aquaculture equipment, thus encouraging waste to be carried back to port.
- The Single Use Plastics (SUP) Directive [2], which lays down rules concerning different plastic products, including fishing gear and aquaculture equipment containing plastics, and sets requirements to the Member States to establish Extended Producer Responsibility (EPR) schemes. Concerning fishing gear, it also contains rules on minimum national annual collection rates, together with reporting on fishing gear placed on the market and waste fishing gear collected in ports.

In 2021, the standardization request M/574 on the circular design of fishing gear [3] was passed by the European Commission and the parliament and accepted by CEN, which forms the basis for this series of documents (EN 17988 series). While the term 'fishing gear' is used predominantly in the SUP Directive and M/574, both documents encompass aquaculture equipment.

The purpose of this series of documents is to provide stakeholders with requirements, recommendations and guidelines to address the different aspects of circular design of fishing gear and aquaculture equipment containing plastics, encourage preparing for reuse and facilitate recyclability at end-of-use. These requirements are intended to be applied from the design phase across the entire life cycle of the fishing gear and aquaculture equipment. This includes but is not limited to: manufacturing, use, maintenance, repair, collection, sorting, preparation for recycling, reuse, remanufacture, disposal, uptake of recycled content and recycling.

Although this document is written for fishing gear and aquaculture equipment containing plastics, the requirements, recommendations and guidelines are also applicable to other materials.

This series of documents does not address other important design criteria such as fishing or farming efficiency. When implementing the requirements, recommendations and guidelines provided in these documents, balanced trade-offs between all relevant criteria need to be taken into account.

This series of documents aims to contribute to the following UN Sustainable Development Goals (SDGs) [4]:

- 9 Industry, innovation, and infrastructure,
- 12 Responsible consumption and production,

 14 Life below water, in particular target 14.1 By 2025, prevent and significantly reduce marine pollution of all kinds, in particular from land-based activities, including marine debris and nutrient pollution.

For a full outline of the parts of the standard, and how the parts relate to each other, see part 1.

Part 4 addresses the environmental and circularity requirements and guidelines together, as these two are interrelated and interdependent.

A circular economy focusses on environmental performance improvements with the help of resource cycles. The circular economy is a sustainable ecosystem which focusses on preventing and reducing waste, keeping the value retention of fishing gear and aquaculture equipment at its highest level, while preventing and reducing its environmental impacts throughout its life cycle. It contributes to a more sustainable world, but not all sustainability initiatives contribute to circularity.

The circular economy establishes sustainable principles for fishing gear and aquaculture equipment and sets a basis for a common approach to the eco-modulation of EPR fees.

The aim of the document is to enable the reader to more efficiently use materials and resources and reduce the amount of plastics lost as waste while delivering the best environmental outcome.

Note to the reader on normative language: In this document, the following verbal forms are used in accordance with the CEN/CENELEC Internal Regulations Part 3, Clause 7:

- "shall" indicates a requirement;
- "should" indicates a recommendation;
- "may" indicates a permission;
- "can" indicates a possibility or a capability;
- "must" indicates an external constraint. FN 17988-4:2025

ottps://standards.iteh.ai/catalog/standards/sist/14c8heha-0464-4564-8872-8c3c40h8230f/sist-en-17988-4-202

#### 1 Scope

This document specifies the environmental and circularity requirements for the components of fishing gear and aquaculture equipment which contain plastics. It establishes sustainability principles that minimize the negative impact of the plastic components of fishing gear and aquaculture equipment on the environment, taking into account the impact on its performance (e.g. catchability or lifespan). The circular and environmental design of fishing gear and aquaculture equipment focuses on:

- the selection and sourcing of materials and components;
- manufacture and assembly;
- placement, installation, and deployment of the fishing gear and aquaculture equipment;
- use and maintenance repair; and
- the end-of-use stage.

Transport, storage and distribution are taken into account at the different stages, where applicable. This document excludes design aspects related to fishing or aquaculture techniques or management.

## 2 Normative references 11th Standards

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 17988-1, Circular design of fishing gear and aquaculture equipment — General requirements and guidelines

EN 17988-2, Circular design of fishing gear and aquaculture equipment — User manuals and labelling

EN 17988-3, Circular design of fishing gear and aquaculture equipment — Technical requirements and guidelines

EN IEC 62430, Environmentally conscious design (ECD) — Principles, requirements and guidance

CEN/TS 18101, Circular design of fishing gear and aquaculture equipment - Terms and definitions

#### 3 Terms and definitions

For the purposes of this document, the terms and definitions given in CEN/TS 18101 apply.

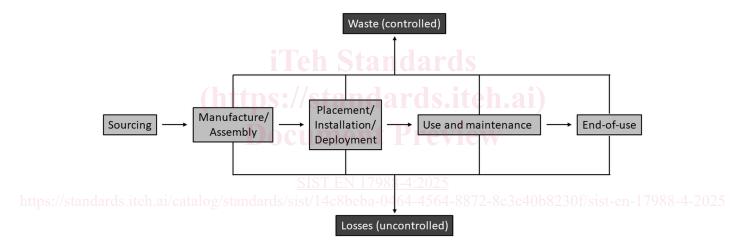
ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <a href="http://www.iso.org/obp">http://www.iso.org/obp</a>
- IEC Electropedia: available at <a href="http://www.electropedia.org/">http://www.electropedia.org/</a>

#### 4 Principles

#### 4.1 General

This document provides the reader with guidelines, recommendations and requirements for changing from a linear product life economy (Figure 1) to a circular one (Figure 2) focusing on environmental and circular design but also respecting the technical requirements for fishing gear and aquaculture equipment according to EN 17988-3 and general principles described in EN IEC 62430.



NOTE Elements in Figure 1 are differently organized than in EN IEC 62430:2019, Figure B.1.

Figure 1 — Stages in product life, linear paradigm

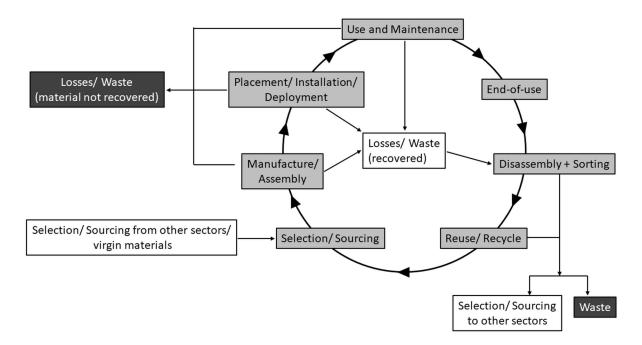


Figure 2 — Stages in product life, circular paradigm

This document will focus on the principles for retaining fishing gear and aquaculture equipment or parts thereof in the circular economy for as many cycles as feasible, together with minimizing the negative impact of the plastic components on the environment. It will provide design criteria for achieving this goal while balancing it with the impact on its performance (e.g. catchability or lifespan); it can be expected that there are trade-offs between the different criteria which will need to be evaluated for their impact on the product.

- The characteristics of materials, parts and components shall be preserved as much as possible https://star(durability, longevity). and ards/sist/14c8beba-0464-4564-8872-8c3c40b8230f/sist-en-17988-4-2025
  - Materials and parts shall be collected when damaged to be repaired and prepared for reuse, and at their end-of-use.
  - Transport, weight and packaging dimensions (including stack ability) of parts, kits, etc. shall be taken into account.
  - EPR schemes shall be taken into account where available.

The technical requirements for the specific type, size and use of the fishing gear and/or aquaculture equipment shall be considered, as further detailed in EN 17988-3.

Issues like traceability and materials identification (e.g. via a product circularity data sheet) are important but will not be covered in detail in this document. Here the reader is referred to EN 17988-2.

Concerning fishing gear, the issue of selectivity towards aquatic species and the size (which is linked to the age) for a given species is very important. For one, unwanted species add unnecessary and useless weight to the catch. For another, there are national and regional regulations concerning unwanted catch, as well as forbidding catching of protected species or younger fish. While this is an