

SLOVENSKI STANDARD
oSIST prEN 17099:2018
01-julij-2018

Ribe in proizvodi iz morskih sadežev - Zahteve za označevanje enot in palet za distribucijo v trgovini z ribami in proizvodi iz morskih sadežev

Fish and seafood products - Requirements for labelling of distribution units and pallets in the trade of fish and seafood products

Informationstechnik - Fisch und Fischereiprodukte - Anforderungen an die Etikettierung an Verteilungseinheiten und Paletten für den Handel mit Seafood-Produkten

Technologies de l'information - Poissons et produits à base de poisson - Exigences relatives à l'étiquetage des unités de distribution et des palettes dans le commerce des produits de la mer

Ta slovenski standard je istoveten z: prEN 17099

ICS:

35.040.50	Tehnike za samodejno razpoznavanje in zajem podatkov	Automatic identification and data capture techniques
67.120.30	Ribe in ribji proizvodi	Fish and fishery products

oSIST prEN 17099:2018

en,fr,de

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

DRAFT
prEN 17099

May 2018

ICS 35.040.50; 67.120.30

English Version

**Fish and seafood products - Requirements for labelling of
distribution units and pallets in the trade of fish and
seafood products**

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Anforderungen an die Etikettierung an
Verteilungseinheiten und Paletten für den Handel mit
Seafood-Produkten

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COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

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European foreword

This document (prEN 17099:2018) has been prepared by Technical Committee CEN/TC 225 “AIDC technologies”, the secretariat of which is held by TSE (RESP).

This document is currently submitted to the CEN Enquiry.

iTeh STANDARD PREVIEW
(standards.iteh.ai)

SIST EN 17099:2020

<https://standards.iteh.ai/catalog/standards/sist/287bb0f2-eea6-4563-a005-1c5b5cbf2191/sist-en-17099-2020>

Introduction

This document specifies requirements for the labelling of distribution units (boxes, cartons, bags, etc.) and logistic units (pallets, cages, trolleys etc.) in the trade of fish and seafood products. The data to be included on the labels will help to ensure that the correct traceability information is available throughout the supply chain, both nationally and internationally. The use of standardised labelling will help to increase efficiency and reduce costs thereby adding value across the supply chain. In addition, correct labelling will enhance traceability, increase trust in the origin and quality of the product, and ultimately improve both food safety and the supply of fresher fish and seafood products.

Standardised labelling will also enhance the quality and availability of traceability data and support the interoperability between disparate information technology systems.

Improved traceability will make it more difficult to trade with fish and seafood products caught as a result of illegal, unreported and unregulated fishing.

The requirements for information to be included on the labels relates to EC/EU regulations and information that is required across the supply chain.

The distribution of fish and seafood products has the following distinctive features:

- they constitute exports to every continent;
- they are covered by national and international legislation;
- there are requirements regarding the processing of fish and seafood products, and the documentation of these processes;
- shared distribution centres are used for loading or repackaging;
- buyers and sellers are not always known at the time of production.

Standardised labels are used on distribution and logistic units in the seafood supply chain to ensure that information is provided in both human readable text and bar codes. This enables parties involved in the supply chain to identify and manage the transport of goods and exchange information in a more efficient and reliable way. Bar codes shall be used in accordance with international standards and guidelines relevant to the exchange of the data attributes, which are described in this document.

This document has been developed with the intention of using bar codes, which are currently the most widely used type of data carrier in this supply chain. However, the data attributes which this document specifies to be included in bar codes are also compatible with the EPCIS standard (ISO/IEC 19987:2017) and Radio Frequency Identification (RFID) standards.

As well as defining the required information, this document also describes how to present the data in both human readable text and in bar codes. This document also contains examples of labels to be used on distribution units and logistic units.

1 Scope

This document specifies requirements for labels to be used on distribution units (boxes, cartons, bags, etc.), and logistic units (pallets, cages, trolleys, etc.) for fish and seafood products, ensuring uniform labels with human readable text and bar codes using a common data set, thereby fulfilling EC/EU regulations and facilitating traceability.

This document does not address the exchange of any information by means other than the use of labels.

This document does not cover consumer packaging.

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 1573, *Bar code - Multi industry transport label*

EN ISO/IEC 15415, *Information technology – Automatic identification and data capture techniques – Bar code print quality test specification – Two-dimensional symbols (ISO/IEC 15415)*

EN ISO/IEC 15416, *Information technology – Automatic identification and data capture techniques – Bar code print quality test specification – Linear symbols (ISO/IEC 15416)*

EN ISO/IEC 15419, *Information technology – Automatic identification and data capture techniques – Bar code print quality test specification – Bar code digital imaging and printing performance testing (ISO/IEC 15419)*

EN ISO/IEC 15423, *Information technology – Automatic identification and data capture techniques – Bar code print quality test specification – Bar code scanner and decoder performance testing (ISO/IEC 15423)*

ISO/IEC 15417, *Information technology — Automatic identification and data capture techniques — Code 128 bar code symbology specification*

ISO/IEC 15418, *Information technology — Automatic identification and data capture techniques — GS1 Application Identifiers and ASC MH10 Data Identifiers and maintenance*

ISO/IEC 15459-1, *Information technology — Automatic identification and data capture techniques — Unique identification — Part 1: Individual transport units*

ISO/IEC 15459-2, *Information technology — Automatic identification and data capture techniques — Unique identification — Part 2: Registration procedures*

ISO/IEC 15459-3, *Information technology — Automatic identification and data capture techniques — Unique identification — Part 3: Common rules*

ISO/IEC 16022, *Information technology — Automatic identification and data capture techniques — Data Matrix bar code symbology specification*

ISO/IEC 19762, *Information technology — Automatic identification and data capture (AIDC) techniques — Harmonized vocabulary*

ISO 15394, *Packaging — Bar code and two-dimensional symbols for shipping, transport and receiving labels*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO/IEC 19762 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

label

small piece of paper, fabric, plastic, or similar material attached to an object and giving information about it

3.2

bar code

optical, machine-readable, representation of data; the data usually describes something about the object that carries the barcode

Note 1 to entry: Originally, barcodes represented data using parallel bars of varying widths and spacings (1D). Subsequently, two-dimensional (2D) symbols using rectangles, dots, hexagons and other geometric patterns in two dimensions were developed, but are still referred to as bar codes.

3.3

bar code reader

device used to access the data represented in a bar code and includes various devices that can read images and decode the data encoded in the bar code, such as bar code scanners and smartphones with a camera and the relevant software

3.4

distribution unit

container in which fish and seafood products are distributed

Note 1 to entry: Distribution units may be in the form of boxes, cartons, crates or other means of storage.

3.5

logistic unit

storage unit in or upon which distribution units are aggregated for transportation

Note 1 to entry: A logistic unit may be in the form of a pallet, cage or other means of storage.

Note 2 to entry: A logistic unit may consist of a single distribution unit.

3.6

SSCC

Serial Shipping Container Code

unique number which identifies a logistic unit, and which remains the same for the life of the logistic unit to which it is assigned

Note 1 to entry: This unique identification number is assigned in accordance with GS1 standards.

3.7**license plate**

MH10 unique identification key for a unit that is to be transported or stored

Note 1 to entry: This unique identification number is assigned in accordance with ASC MH10 standards.

3.8**fish and seafood products**

fish, shellfish, molluscs, echinoderms and aquatic plants, including parts of these, for human consumption and products formed of or containing fish, shellfish, molluscs, echinoderms and aquatic plants, including parts or by-products of these

Note 1 to entry: Fish and seafood products are also often described as seafood, fishery products and aquaculture products.

Note 2 to entry: Regulation EU No 1379/2013 defines [1]:

- a) "fishery products" mean aquatic organisms resulting from any fishing activity or products derived therefrom, as listed in Annex I of EU No 1379/2013 [1];
- b) "aquaculture products" mean aquatic organisms at any stage of their life cycle resulting from any aquaculture activity or products derived therefrom, as listed in Annex I of EU No 1379/2013 [1].

3.9**GTIN****Global Trade Item Number**

identifier for trade items that is applied to distribution units

Note 1 to entry: This unique identification number is assigned in accordance with GS1 standards.

Note 2 to entry: The GTIN was previously known as an EAN or UCC number.

3.10**GLN****Global Location Number**

number system adopted to clearly identify the physical/operational or legal entities involved in a transaction

Note 1 to entry: This unique identification number is assigned in accordance with GS1 standards.

3.11**machine-readable**

bar codes or RFID chips that can be read electronically by fixed or hand-held devices

Note 1 to entry: Machine-readable is also known as data capture or bar codes.

Note 2 to entry: A machine that can be used for machine-reading bar codes is, for example a bar code reader.

3.12**producer**

food business operator which farms, catches or processes fish or seafood products

Note 1 to entry: The producer may also be the supplier.

3.13**supplier**

food business operator with legal responsibility for the fish or seafood products being traded

Note 1 to entry: The supplier may also be the producer.

Note 2 to entry: The supplier may also be referred to as the 'exporter' where the product is being exported.

3.14**supply chain**

range of activities or parties who create or receive value in the form of products or services

[SOURCE: ISO 26000:2010, 2.25]

3.15**linear bar code****linear**

set of modules of vertical bars and spaces representing digital data, where bars are "1" and spaces "0", read by a machine with an optical facility, i.e., a bar code reader

Note 1 to entry: Technical specifications for the different bar code types define a number of equally wide elements in a bar code module. Lines and spaces in the modules are combined in code tables to represent characters, numbers and letters which can be read and interpreted by a bar code reader.

3.16**data attribute**

value or a characteristic describing a property of an entity such as a distribution unit or logistic unit

EXAMPLE The species code data attribute refers to the FAO alpha-3 species code of the fish contained in a distribution unit.

3.17**point of first sale**

point at which fish or seafood caught by a fishing vessel or harvested in an aquaculture farm is offered for sale for the first time

Note 1 to entry: See Regulation EU 1379/2013 for more details [1].

4 Labelling requirements**4.1 Regulatory requirements**

This document refers to three primary EC/EU Regulations governing the legal requirements regarding labelling. For the extensive list of relevant regulations, please see Appendix A and Bibliography.

- 1) Regulation (EC) No 178/2002 General Food Law [2];
- 2) Regulation (EC) No 1224/2009 Community control system for ensuring compliance with the rules of the common fisheries policy [3];
- 3) Regulation (EU) No 1379/2013 on the common organization of the markets in fishery and aquaculture products [1].

The need for traceability in the food industry is described in Article 18, Traceability in Regulation, of (EC) No 178/2002 [2]. Furthermore, it states that food which is placed on the market in the Community shall be adequately labelled, or identified to facilitate its traceability.

In Regulation (EC) No 1224/2009, Article 58.1 states “all lots of fisheries and aquaculture products shall be traceable at all stages of production, processing and distribution, from catching or harvesting to retail stage” [3].

In addition, Article 58.5 of the same regulation lays out the minimum labelling and information requirements for all lots of fisheries and aquaculture products.

Article 67.8 of Regulation (EU) No 404/2011 states that “when the information is affixed to the lot by way of an identification tool such as a code, barcode, an electronic chip or a similar device [then] Operators using such tools shall ensure that they are developed on the basis of internationally recognised standards and specifications” [4].

Figure 1 shows the most relevant EU Regulations referred to by this document.

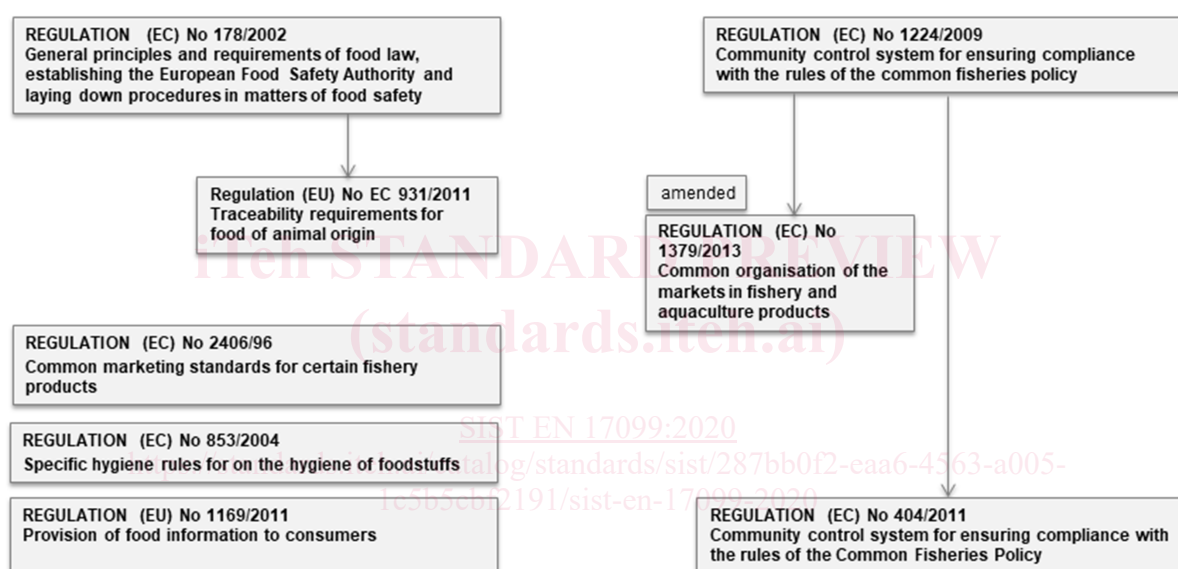


Figure 1 — Regulation overview

4.2 Labels used throughout the supply chain

All the information on the labels shall be in the form of human readable text and/or bar codes. This enables the capturing and recording of data throughout the total supply chain. The traceability information shall be made available at each step of the supply chain. The retailers shall provide information to consumers in conformance with EU regulations.

Figure 2 below shows an example of how fish and seafood products are traceable from catch or harvest through the entire supply chain:

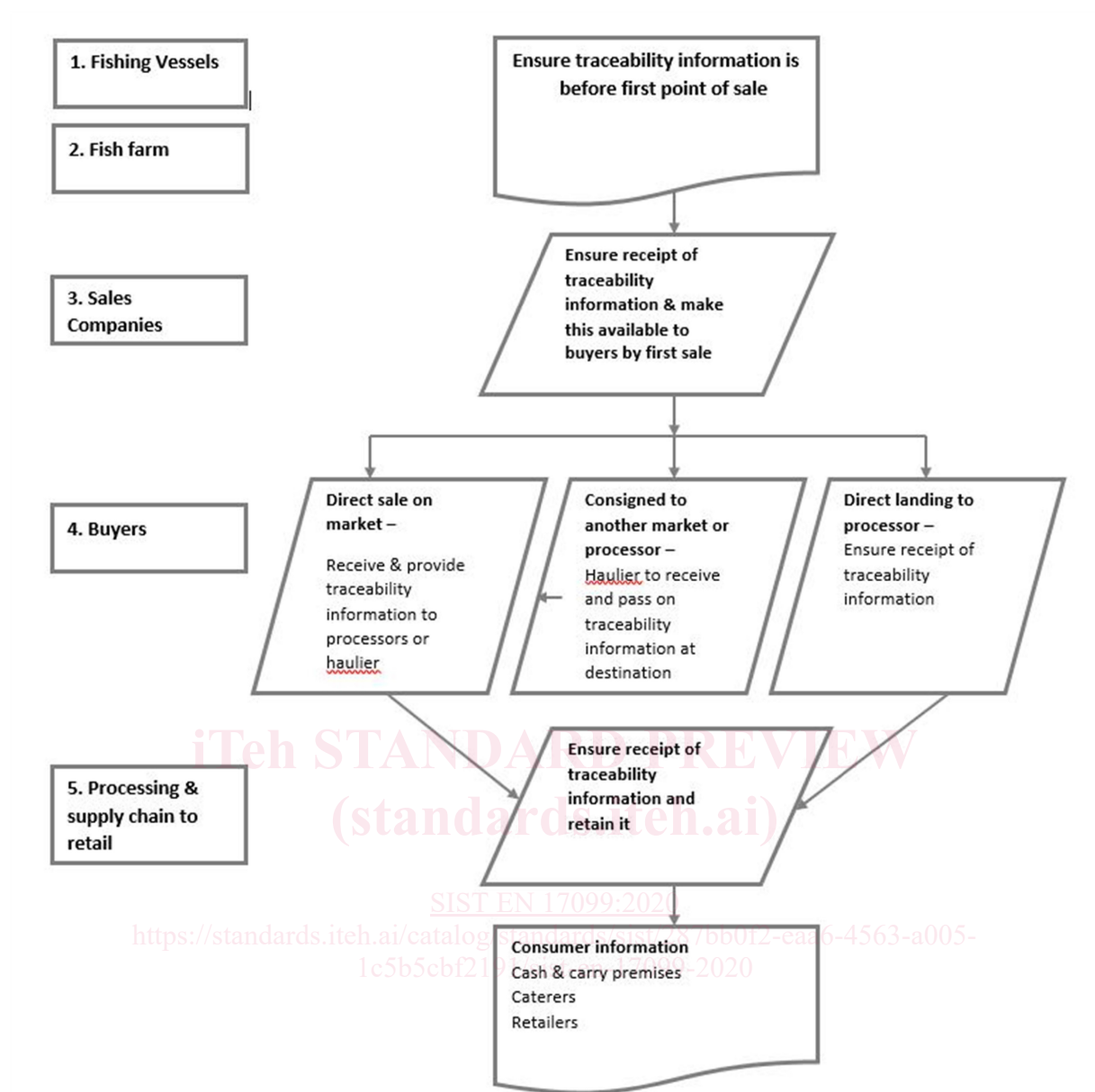


Figure 2 — An example of a simplified supply chain ensuring traceability from catch to the consumer

4.3 Overview of most relevant data attributes

A data attribute is a value or a characteristic describing a property of the traceable object being labelled. Typical data attributes relevant to this document include the species code, catch dates, quantity or net weight of the product contained in a distribution unit. Each data attribute consists of a definition, a title and instructions on how the data is to be expressed in human readable text and/or bar codes.

This document classifies each of the data attributes into 1 of 4 distinct groups:

- 1) identification of food business operators;
- 2) product specific;
- 3) batch specific;
- 4) item specific.

Tables 1 to 4 describes the mandatory and/or optional data attributes on the label in accordance with EC/EU regulations or required to facilitate traceability, for the fish and seafood industry.

Tables 5 to 8 lists the mandatory and/or optional data attributes and GS1 Application Identifiers as well as ASC MH10 Data Identifiers.

NOTE The requirement for some data attributes is dependent on whether the product is being labelled prior to point of first sale, see articles 58 and 59 of EC 1224/2009 [3] or after the point of first sale of seafood products.

Table 1 — Data attributes for the identification of sea food business operators

No	Name	Description
1.1	Vessel name/or the aquaculture production unit	Name of the fishing vessel shall be in human readable text.
1.2	Vessel ID/or the aquaculture production unit	<p>The external registration number of the vessel shall be in human readable text.</p> <p>In bar codes, the vessel is identified using at least one of the following methods;</p> <ol style="list-style-type: none"> a) a combination of the country of registration plus the external vessel registration number; b) a combination of the country of registration plus the EC/EFTA approval number; c) a combination of the country of registration plus the VAT number; d) a combination of the country of registration plus a Global Location Number (GLN). <p>If the product is sourced from more than one vessel or farm (after the point of first sale), the human readable text should read 'Mixed' and should be omitted from the bar code.</p>
1.3	Producer name	Name of the fish farm or processor (food business operator) shall be in human readable text.
1.4	Producer ID	<p>The EU/EFTA approval number of the producer shall be in human readable text (in an Oval).</p> <p>In bar codes, the producer is identified using at least one of the following methods:</p>

No	Name	Description
		<p>a) a combination of the country of registration plus the EC/EFTA plant approval number;</p> <p>b) a combination of the country of registration plus the VAT number;</p> <p>c) a combination of the country of registration plus a Global Location Number (GLN).</p> <p>If the product is sourced from more than one producer (after the point of first sale), the human readable text should read 'Mixed' and should be omitted from bar code.</p>
1.5	EC/EFTA Oval	The EU/EFTA approval number shall be displayed in an Oval as defined in EC No 853/2004 regulation Annex II Section I/B. FORM OF THE IDENTIFICATION MARK [5].
1.6	Supplier name	<p>The name of the consignor (owner), if different from the producer (food business operator). This may also be the exporter of the goods.</p> <p>This may not be required on the label if the supplier is identified on documentation accompanying the product (such as a delivery docket or invoice).</p>
1.7	Supplier ID	<p>In bar codes, the supplier, if different from the producer, is identified using at least one of the following methods:</p> <p>a) a combination of the country of registration plus the VAT number;</p> <p>b) a combination of the country of registration plus a Global Location Number (GLN).</p> <p>If the product is sourced from more than one supplier (after the point of first sale), this should be omitted from bar code.</p>

Table 2 — Data attributes for presentation of product specific data

No	Name	Description
2.1	Commercial name	The commercial designation of the product name shall be in human readable text.
2.2	Product ID	Unique identification number of the product.
2.3	Species code	<p>The fish species shall be specified using the FAO alpha-3 species code. The FAO alpha-3 code shall be in human readable text and shall be present in the bar code.</p> <p>If the product is a mix of more than one species, the human readable text shall read 'Mixed' and shall be omitted from the bar code.</p>

No	Name	Description
2.4	Scientific name	The scientific name of the fish species shall be in human readable text.
2.5	Size	Weight range that the product shall fall within. Indicated using minimum values, maximum values and units of measurement indicating the size of the species. Example: 4 kg — 6 kg.
2.6	Quality	The products quality grading in accordance with the relevant standard, for example salmon: Standard: Quality grading of farmed salmon. 1999. Norwegian Industry Standard for Fish. NBS 10-01.ver. 2. [9].
2.7	Presentation	How the fish is presented at the time of delivery in accordance with the Product Presentation alpha-3 Code List in EU No 404/2011 [4].
2.8	Preservation	How the fish is preserved at the time of delivery in accordance with the Product Preservation alpha-3 Code List in EU No 404/2011 [4].
2.9	Freshness	How fresh the fish is in accordance with the Regulation EC No 2406/96 [6].
2.10	Trim	The product has been trimmed in accordance with the relevant standard, for example for salmon: Norwegian Standard NS 9404.E. 1996. Atlantic Salmon. Degrees of trimming and skinning of salmon filet [10].
2.11	Certification	There are several certification bodies who certify various aspects of the seafood products. These bodies generally demand a higher level of traceability and this data attribute will make this process easier and more efficient. See bibliography [11], [12], [13], [14], [15].
2.12	Storage temperature	Recommended storage temperature of not more than -18°C (at least -18°C) for frozen product, of approaching that of melting ice (for example 0°C) for chilled product or within a temperature range appropriate to the product.
2.13	Ingredients	The ingredients contained in the product in accordance with EU No 1169/2011 (Consumer Information) [7].
2.14	Allergens	The substances or products which causes allergies or intolerances in accordance with EU No 1169/2011 (Consumer Information) [7].