



**SLOVENSKI STANDARD**  
**kSIST-TP FprCEN/TR 17004:2016**  
**01-junij-2016**

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**Proizvodi strojne in kovinskopredelovalne industrije - Smernice za izbiro okoljskih komunikacijskih modelov**

Mechanical products - Guidelines for the selection of environmental communication models

Mechanische Produkte - Leitfaden für die Auswahl von Modellen der Umweltkommunikation

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**ICS:**

13.020.99	Drugi standardi v zvezi z varstvom okolja	Other standards related to environmental protection
21.020	Značilnosti in načrtovanje strojev, aparatov, opreme	Characteristics and design of machines, apparatus, equipment

**kSIST-TP FprCEN/TR 17004:2016**      **en**



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April 2016

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ICS 13.020.10

English Version

## Mechanical products - Conditions to set up environmental communication models by recognizing sectorial particularities

Mechanische Produkte - Leitfaden für die Auswahl von Modellen der Umweltkommunikation

This draft Technical Report is submitted to CEN members for Vote. It has been drawn up by the Technical Committee CEN/TC 406.

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

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## European foreword

This document (FprCEN/TR 17004:2016) has been prepared by Technical Committee CEN/TC 406 “Mechanical products - Ecodesign methodology”, the secretariat of which is held by AFNOR.

This document is currently submitted to the vote on TR.

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## Introduction

The European mechanical sector can find opportunities in producing rules for environmental product declaration from such perspectives as business opportunities, financial perspectives, sectorial consistency and public image.

It allows companies in the mechanical field to address current and anticipate future demands coming from clients or markets on the environmental efficiency of their products. In addition, they have sometimes to meet requirements of regulations in force or to come, and to measure products improvements in an eco-innovation project to enhance the attractiveness of the products.

Any communication on environmental criteria will have to be decided for each category of products by the corresponding Technical Committee.

Declaration of environmental performance of products can present several advantages:

- to promote existing eco-innovation efforts to clients and market;
- to create the market for green mechanical products;
- to ensure a fair competition on the market.

This document is aimed at:

- optimizing rules to reduce the cost of environmental communication;
- sharing the efforts needed to develop declaration rules;
- reducing the costs for information exchange within the supply chain.

As most of companies in the mechanical field sell products across Europe and around the world, it is impossible to evaluate and communicate environmental characteristics, taking into account all specific local rules and methodologies. That is why companies expect simple, pragmatic and unified rules.

## 1 Scope

This Technical Report provides guidance on how to apply existing communication models regarding environmental concerns to mechanical products.

Carrying out communication models for environmental performances of mechanical products can be relevant for several entities, e.g. single companies, enterprises, collective bodies (trade associations, standardization committees, etc.) and others.

On the one hand side, mechanical products represent a large variety of non-uniform items. They can be characterized by several properties distinguishing them from each other. On the other hand side, various generic standards/standard-series are existent addressing on how to communicate environmental issues.

This Technical Report provides a consistent approach on how to match a particular mechanical product with an appropriate generic standard.

In order to do so, this Technical Report contains criteria to cluster the great variety of mechanical products into categories. Based on this categorization, existing standards concerning environmental performance communication are evaluated with regards to their suitability.

## 2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN ISO 14050, *Environmental management — Vocabulary (ISO 14050)*

## 3 Terms and definitions

For the purposes of this document, the terms and definitions from EN ISO 14050 and the following apply.

### 3.1

#### **mechanical product**

product manufactured by enterprises from mechanical engineering and metalworking industry, such as capital goods (machinery, production systems, components), tools, household goods, optical parts, measuring instruments

[SOURCE: CEN/TS 16524:2013, 2.1]

### 3.2

#### **consumer goods**

goods that satisfy personal needs rather than those required for the production of other goods or services

### 3.3

#### **capital goods**

goods that are themselves utilized in the production of other goods rather than being sold to consumers

## 4 Principal considerations before applying a type of communication

The following should be considered before initiating reflexions on environmental communication (see Figure 1):

## FprCEN/TR 17004:2016 (E)

- first check whether regulation at European or at national levels applies concerning environmental issues for the concerned product; if this situation applies, the declaration requested by this regulation shall be applied;
- if not, secondly search for standards covering the concerned product, if such standards exist, it is recommended to follow the communication proposed;
- if not, thirdly search for sectorial initiatives covering the concerned product (e.g initiatives from manufacturers associations): if such initiatives exist, it is recommended to follow the communication proposed;
- if this is not the case, it is recommended to use the following guidelines (see Clauses 4 and 5): after having identified the category of the mechanical product, a suitable type of communication is obtained (Clause 4) and Clause 5 provides the proper tools for communication.

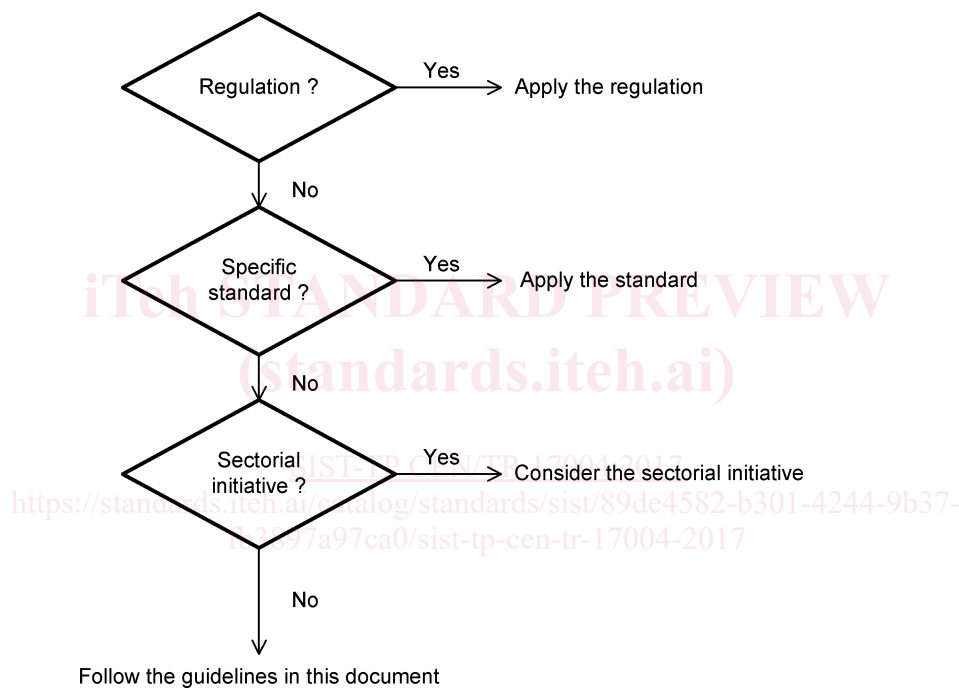


Figure 1 — Principal considerations before applying a type of communication

## 5 Choice of a type of communication according to categories of mechanical products

### 5.1 General

The definition of a mechanical product in 2.1 is very generic to cover a wide range of different mechanical products or product groups. A classification can help to provide better insights. Mechanical products can be divided in two principal categories: either consumer goods or capital goods taking into account the answers to the questions provided in 4.2.

**NOTE** In general, capital goods are often custom-made and tailored to the client's needs, being a long-term investment for the industrial clients and having typically a long lifetime. On the other side, consumer goods are mainly stand-alone, purpose made, mass produced goods in terms of their complexity, application range and intended use, functionality and customer base. It does not mean that a capital good is not produced in series (e.g. catalogue products) for use by industrial clients.



## 5.2 Characteristics to identify the principal category of a mechanical product

### 5.2.1 What are the economic issues/acquisition costs?

Acquisition costs of mechanical products can vary from few euros for some consumer goods to several million euros for some capital goods such as production systems.

### 5.2.2 What is the place of use?

Capital goods are mainly used in factories, plants, businesses or in general by professionals while consumer goods are used by consumers at their private premises.

### 5.2.3 What are the intended application and the customer maturity?

Capital goods are intended to produce other parts and components (not ready-for-use products) which are further processed in a business value chain or in final products intended for sale to costumers. The use of capital goods requires special knowledge and/or training. Consumer goods are ready-for-use products which are intended to provide an immediate service (Business to Consumer (B2C)). The use of consumer goods does not require special knowledge and/or training.

### 5.2.4 What is the intended workload?

While capital goods, e.g. production systems are intended to be operated with high load factor, often 24/7, consumer goods are not intended to be used so intensively.

### 5.2.5 What is the intended lifespan?

In general capital goods are built to be in operation for many years whereas consumer goods are more often designed for a lifespans of few years.

### 5.2.6 What is the number of units to be produced?

Capital goods are produced in small numbers or are often custom made. Consumer goods are produced in large batch sizes.

### 5.2.7 What is the level of complexity of the mechanical product?

Consumer goods are often composed of few parts compared to capital goods which may be an assembly of a large variety of different components being themselves complex systems.

### 5.2.8 Does the operator need special knowledge to use the mechanical product?

Consumer goods are designed to be operated by everyone. Whereas, the operation of capital goods requires special training and know how.

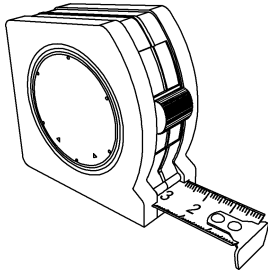
## 5.3 Classification obtained

Answering the questions listed in 4.2 allows classifying products/product groups as capital good or as consumer good.

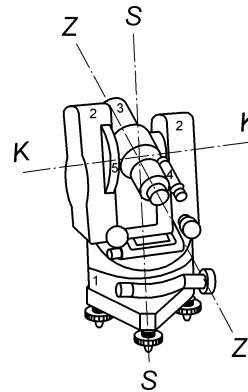
When answering the questions for a certain product group leads to the result that all separate product covered by this group can be assigned to the same category, no further investigation is necessary.

In some cases, a product group covers products that may have characteristics of both consumer and capital goods. In these cases, the questions listed in 4.2 shall be answered for each product and a decision shall be taken case by case.

**NOTE** For instance, the product group “cranes” fulfils all characteristics of capital goods whether the specific product is a mobile crane, a tower crane or a gentry crane. Obviously a simple measuring tape is a consumer good whereas a theodolite fulfils all the criteria of a capital good, nevertheless both products belong to the product group “measuring instruments” (see Figure 2).



a) Measuring tape



b) Theodolite

Figure 2 — Measuring instruments

#### 5.4 Type of communication

Table 1 presents the different types of communication.

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