![SIST logo]

SLOVENSKI STANDARD
SIST EN 17366:2020

01-september-2020

Ravnanje z odpadki - Nadzor dostopa do zabojnikov za zbiranje odpadkov - Identifikacija in avtorizacija

Waste management - Access control to collection containers - Identification and authorization

Abfallwirtschaft - Zugriffssteuerung - Identifikation und Autorisierung

Gestion des déchets - Contrôle des accès - Identification et autorisation

Ta slovenski standard je istoveten z: **EN 17366:2020**

ICS:

13.030.99	Drugi standardi v zvezi z odpadki	Other standards related to wastes

SIST EN 17366:2020 en,fr,de

iTeh STANDARD PREVIEW
(standards.iteh.ai)

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 17366

June 2020

ICS 13.030.40

English Version

Waste management - Access control to collection containers - Identification and authorization

Gestion des déchets - Contrôle des accès aux
conteneurs à déchets - Identification et autorisation

Abfallwirtschaft - Zugriffssteuerung von
Abfallbehältern - Identifikation und Autorisierung

This European Standard was approved by CEN on 27 April 2020.

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, Turkey and United Kingdom.

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

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

Ref. No. EN 17366:2020 E

EN 17366:2020 (E)

Contents

Page

iTeh STANDARD PREVIEW
(standards.iteh.ai)

2

European foreword

This document (EN 17366:2020) has been prepared by Technical Committee CEN/TC 183 "Waste management", the secretariat of which is held by DIN.

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 December 2020, and conflicting national standards shall be withdrawn at the latest by December 2020.

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.

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, Turkey and the United Kingdom.

iTeh STANDARD PREVIEW
(standards.iteh.ai)

EN 17366:2020 (E)

Introduction

This document takes ISO/IEC 14443-1, ISO/IEC 14443-2 and ISO/IEC 14443-3 as a basis. In the case that this document and ISO/IEC 14443-1, ISO/IEC 14443-2 and ISO/IEC 14443-3 are in conflict, this document prevails.

As this document takes ISO/IEC 14443-1, ISO/IEC 14443-2 and ISO/IEC 14443-3 as a basis, it is necessary to conform to these three parts of ISO 14443 to be able to conform to the standard defined in this document.

This document presents the standard for the identification of access chips.

The ISO 14443 series defines two types of access chips: type A and type B. This document restricts this choice and defines that the type of access chip to be used is type A.

iTeh STANDARD PREVIEW
(standards.iteh.ai)

1 Scope

This document is used in the framework of the waste processing industry and defines the processing of relevant information for the deposit of garbage between access chips and the collection container systems.

This document is not intended to be used for container identification.

NOTE   The container identification is covered by EN 14803.

This document provides the technical specification and the restrictions that are defined on top of ISO/IEC 14443-1, ISO/IEC 14443-2 and ISO/IEC 14443-3.

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.

ISO/IEC 14443-1, *Cards and security devices for personal identification — Contactless proximity objects — Part 1: Physical characteristics*

ISO/IEC 14443-2, *Identification cards — Contactless integrated circuit cards — Proximity cards — Part 2: Radio frequency power and signal interface*

ISO/IEC 14443-3:2018, *Cards and security devices for personal identification — Contactless proximity objects — Part 3: Initialization and anticollision*

3 Terms and definitions

For the purposes of this document, the following terms and definitions 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 https://www.iso.org/obp

3.1
access chip
device like a card or a keyfob capable of carrying a transponder

3.2
reader
sensing device which, with an antenna, transmits a radio signal according to a given frequency towards one or more transponders and receives a signal back

Note 1 to entry: The reader is used to establish dialogue without contact with the transponder and to exchange data.

3.3
chip
device carrying data, which can be recognized by a reading device

EN 17366:2020 (E)

3.4
collection container
reservoir capable of containing waste for more than one household or building

3.5
collection container system
reservoir capable of containing waste for more than one household or building together with all its electronics to manage the system

3.6
Mifare Application Directory
MAD
common data structures for access chip application directory entries

3.7
Unique Identifier
UID
unique number stored on the access chip by the chip manufacturer according to ISO/IEC 14443-3

Note 1 to entry: Defined in standard ISO/IEC 14443-3.

4   Requirements

4.1 General

iTeh STANDARD PREVIEW

This clause deals with the technical requirements for the identification of access chips.

(standards.iteh.ai)

The requirements defined in this clause shall be regarded as additional requirements on top of the ISO/IEC 14443-1, ISO/IEC 14443-2 and ISO/IEC 14443-3, to be able to conform to this document.

It is therefore necessary to conform to all three parts of ISO/IEC 14443.

4.2 Frequency

According to the ISO 14443 series, the frequency to be used is 13,56 MHz.

4.3 Type of the access chip

Compliance to this document requires that type A is used as defined in standard ISO/IEC 14443-3:2018 (see 3.1).

4.4 Unique Identifier (UID)

4.4.1 Generalities

Each access chip that complies with ISO/IEC 14443-1, ISO/IEC 14443-2 and ISO/IEC 14443-3 shall contain a unique number.

This unique number will be used to identify the access chip at the collection container.

4.4.2 Requirement

The uniqueness of the access chip number shall be guaranteed by the manufacturers of the access chips by attributing a range of numbers they can use, which shall not be provided to any other manufacturer.

Furthermore, the manufacturers shall comply with the rule that they release each number they received, only once.

4.5 Length of unique number

4.5.1 Generalities

Implementations of ISO/IEC 14443-1, ISO/IEC 14443-2 and ISO/IEC 14443-3 include access chips that contain a unique number with a length of 4 bytes, with a length of 7 bytes and with a length of 10 bytes.

4.5.2 Requirement on unique number

For use, this document restricts these options by defining that the length of the unique number of the access chip shall be minimum 7 bytes. Readers and systems shall be able to read and process access chips in accordance.

4.6 Information on access chip

4.6.1 Generalities

ISO/IEC 14443-1, ISO/IEC 14443-2 and ISO/IEC 14443-3 not only define that each access chip shall have a unique number, they also define other sectors on the access chip memory that can be used to contain information. This document does not define or restrict the use of the other sectors on the access chip memory. It is therefore possible to use the access chip for instance to get access to buildings or pools, without the access chip being not conformant to this document.

4.6.2 Requirement on access chip

In the case extra information is stored in the available sectors on the access chip memory, the MAD writing method shall be used to prevent two applications using the same sector and therefore causing problems. The MAD method uses an index to define to which sector of the access chip memory the information for a specific application can be found, thereby optimizing the use of the access chip.

4.7 Information required to open the collection container

The unique number on the access chip shall be the only element of information that is necessary to determine whether the collection container should be opened. So the UID shall be used in the data chain. The opening of the insertion mechanism (i.e. drum, trap door, compartment…) shall always be based on the UID. If any other information that is stored on the access chip is necessary to determine whether the container shall be opened, the reading device does not conform to this document.

4.8 Reading the unique number

ISO/IEC 14443-1, ISO/IEC 14443-2 and ISO/IEC 14443-3 define that each access chip that conforms to the standard shall have a unique identifier (the so-called "UID") stored on the access chip.

To ensure that every reader reads the same number, the byte order that shall be used to represent the number when supplying this to the other systems, shall be the big-endian order.

4.9 Writing to the access chip

The UID is the only and sole way to get access to the collection container. Other applications can of course write information to the access chip; this is out of the scope of this document.

4.10 Security

The unique number on the access chip shall be non changeable and readable without encryption or password and shall be read by every reader.

For the other parts of the access chips, that contain information that is not used for the collection of waste (but for instance for access control), this document does not define whether or not security measures are allowed.