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I.S. EN 1332-1:2009

# Identification card systems - Human-machine interface - Part 1: Design principles for the user interface

## I.S. EN 1332-1:2009

*Incorporating amendments/corrigenda issued since publication:*

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English Version

Identification card systems - Human-machine interface - Part 1:  
Design principles for the user interface

Systèmes de cartes d'identification - Interface homme-  
machine - Partie 1: Principes de conception pour l'interface  
utilisateur

Identifikationskartensysteme - Mensch-Maschine-  
Schnittstelle - Teil 1: Gestaltungsgrundsätze für die  
Benutzerschnittstelle

This European Standard was approved by CEN on 20 June 2009.

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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 Management Centre has the same status as the official versions.

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## Foreword

This document (EN 1332-1:2009) has been prepared by Technical Committee CEN/TC 224 "Personal identification, electronic signature and cards and their related systems and operations", the secretariat of which is held by AFNOR.

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of an identical text or by endorsement, at the latest by January 2010, and conflicting national standards shall be withdrawn at the latest by January 2010.

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

This document supersedes EN 1332-1:1999.

This European Standard is one of a series of standards, under the general title "Identification card systems – Human-machine interface" and the different parts are the following:

- *Part 1: Design principles for the user interface*
- *Part 2: Dimensions and location of a tactile identifier for ID-1 cards*
- *Part 3: Keypads*
- *Part 4: Coding of user requirements for people with special needs*
- *Part 5: Raised tactile symbols for differentiation of application on ID-1 cards.*

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

## Introduction

Machine readable cards facilitate the provision of a growing variety of services across Europe. The purpose of this standard is to increase the accessibility of these services for the benefit of all users of the system. This will be achieved by facilitating the inter-sector and cross-border interoperability of machine-readable cards and to do so with the maximum possible degree of user-friendliness.

EN 1332 addresses the needs of all users, including elderly, people with disabilities, first time users, minors, those not conversant with the local language and/or culture.

EN 1332 specifies:

- a) the design principles for the user interface (including symbols) to be incorporated into design of card-operated equipment, but not the machine operations associated with the selection and delivery of goods or services;
- b) a tactile identifier to be incorporated into the design of machine-readable cards;
- c) a standard layout for the keypads of card-operated equipment;
- d) coding of user requirements for people with special needs;
- e) tactile markings for differentiating cards by application.

The contents of EN 1332 are generically based, not sector specific, and cover card-operated devices. It is recognised that the equipment may also be operated by other means, such as the insertion of notes and coins, but the scope of this standard has been, as indicated, narrowly defined.

Issues relating to such consumer concerns at the human-machine interface as PIN presentation are not dealt with in EN 1332.

The EN 1332 standard series has been completed with CEN/TS 15291, *Identification card system – Guidance on design for accessible card-activated devices*. This technical specification provides guidance for the design and location of card-activated devices and the immediate environment to facilitate access for the users.

## 1 Scope

The purpose of this European Standard is to ensure that card-operated devices are accessible and usable by standardising significant components of the user interface.

This European Standard describes principles and guidelines so that people with the widest range of capabilities can use card-based services in any sector. This includes, but is not limited to, purchase of goods and services, leisure, distribution, identification, banking, telecommunications, mass transport, parking, access control. It also provides recommendations for the operational procedures to be followed when users interact with a card-operated device:

- in order to enter a system;
- whilst using a system;
- leaving a system.

In particular, this European Standard will:

- aid the user's interaction with the system through a consistent user interface when entering, using and leaving card-operated devices;
- promote user confidence in card-based systems in general;
- promote efficient use, security and privacy of card-based systems;
- reduce the occurrence and consequences of error when the user enters, uses or leaves the system;
- enable people with different levels of ability and comprehension (e.g. minors, elderly, visually impaired, foreign language, motor impaired, hearing, etc) and different levels of experience (e.g. first-time users) to use card-based systems;
- improve the learnability of new card-based systems through consistency.

## 2 Normative references

The following referenced documents are indispensable for the application 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 1332-4, *Identification card systems – Man-machine interface – Part 4: Coding of user requirements for people with special needs*

## 3 Terms, definitions and abbreviations

### 3.1 Terms and definitions

For the purposes of this standard, the following terms and definitions apply:

#### 3.1.1

**automated teller machine**

**ATM**

customer operated device that dispenses and/or accepts cash and/or other services

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