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**Integrated circuit cards — Enhanced  
terminal accessibility using cardholder  
preference interface**

*Cartes à circuit intégré — Amélioration de l'accès aux terminaux via une  
interface d'acquisition des préférences du porteur de carte*



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## Foreword

ISO (the International Organization for Standardization) and IEC (the International Electrotechnical Commission) form the specialized system for worldwide standardization. National bodies that are members of ISO or IEC participate in the development of International Standards through technical committees established by the respective organization to deal with particular fields of technical activity. ISO and IEC technical committees collaborate in fields of mutual interest. Other international organizations, governmental and non-governmental, in liaison with ISO and IEC, also take part in the work. In the field of information technology, ISO and IEC have established a joint technical committee, ISO/IEC JTC 1.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of the joint technical committee is to prepare International Standards. Draft International Standards adopted by the joint technical committee are circulated to national bodies for voting. Publication as an International Standard requires approval by at least 75 % of the national bodies casting a vote.

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

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## Introduction

Card system terminals, which are commonly used worldwide in modern society and whose numbers are still growing, do not operate effectively enough for cardholders with special needs or senior citizens because most of those terminals only have uniform man-machine interfaces.

This International Standard aims to improve the man-machine interface through which cardholders interact with terminals by defining a mechanism by which terminal functions can be adjusted to the individual's preferences.

It can help terminal design to be more user-friendly by allowing the cardholder to carry his preferences within his card. This will benefit both ordinary cardholders and those with special needs.

The purpose of this International Standard is to prescribe the contents and the form of unifying assistance information that can be mutually used in international systems to improve interoperability. Moreover, this will benefit manufacturers as currently system developers have to design and fund for each system.

# Integrated circuit cards — Enhanced terminal accessibility using cardholder preference interface

## 1 Scope

This International Standard specifies a set of data elements to be personalized into an integrated circuit card, encoding cardholder preferences. These data elements are to be retrieved from the card and to be used to indicate to the terminal that the user has special needs regarding the user interface. It is not intended to standardize the actual application programming interface or other terminal-specific software allowing the functionality, nor does it cover the actual alignment of the card to the card-reader slot.

This International Standard is independent of the physical interface and is applicable to situations where the cardholder operates the card-accepting equipment (e.g. a cash dispenser, ticket machine, vending machine). It applies not only to ID-1 type cards, but also to SIM/UIM (ID-000) on mobile phones and form-factor-free contactless integrated circuit cards which are specified in ISO/IEC 14443.

This International Standard comprises:

- data elements containing the user preferences,
- the storage/retrieval formats for input and output of these data elements,
- security related to the information contained in these data elements,
- the access method to these data elements, and
- protection of cardholder information.

## 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.

ISO/IEC 7816-4:2005, *Identification cards — Integrated circuit cards — Part 4: Organization, security and commands for interchange*

ISO/IEC 7816-6:2004, *Identification cards — Integrated circuit cards — Part 6: Interindustry data elements for interchange*

ISO 639-1:2002, *Codes for the representation of names of languages — Part 1: Alpha-2 code*

ISO/IEC 19785-3:2007, *Information technology — Common Biometric Exchange Formats Framework — Part 3: Patron format specifications*