### INTERNATIONAL STANDARD

ISO/IEC 14443-1

Fourth edition 2018-04

# Cards and security devices for personal identification — Contactless proximity objects —

# Part 1: **Physical characteristics**

Cartes et dispositifs de sécurité pour l'identification personnelle — Objets sans contact de proximité —

Partie 1: Caractéristiques physiques





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#### **Foreword**

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This document was prepared by ISO/IEC JTC 1, *Information technology*, Subcommittee SC 17, *Cards and security devices for personal identification*.

This fourth edition cancels and replaces the third edition (ISO/IEC 14443-1:2016), which has been technically revised.

A list of all the parts in the ISO/IEC 14443 series, can be found on the ISO website.

#### Introduction

Contactless card standards encompass a variety of types as embodied in the ISO/IEC 10536 series of standards (close-coupled cards), the ISO/IEC 14443 series of standards (Contactless proximity objects) and the ISO/IEC 15693 series of standards (Contactless vicinity objects). These device types are intended, respectively, for operation when very near, nearby and at a longer distance from associated coupling devices.

The ISO/IEC 14443 series of standards defines the technology-specific requirements for identification cards conforming to ISO/IEC 7810 and thin flexible cards conforming to ISO/IEC 15457-1 and the use of such cards to facilitate international interchange. However, it also recognizes that the technology offers the possibility that proximity objects may be provided in forms other than that of the International Standard card formats. Furthermore, it does not preclude the incorporation of other standard technologies on the card, such as those referenced in the Bibliography.

The ISO/IEC 14443 series of standards accommodates the operation of proximity cards in the presence of other contactless cards conforming to the ISO/IEC 10536 series of standards and the ISO/IEC 15693 series of standards.

## Cards and security devices for personal identification — Contactless proximity objects —

#### Part 1:

### **Physical characteristics**

#### 1 Scope

This document defines the physical characteristics of proximity cards (PICCs).

It is intended to be used in conjunction with other parts of ISO/IEC 14443.

#### 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 7810, Identification cards — Physical characteristics

ISO/IEC 14443-2:2016, Identification cards — Contactless integrated circuit cards — Proximity cards — Part 2: Radio frequency power and signal interface

ISO/IEC 15457-1, Identification cards — Thin flexible cards — Part 1: Physical characteristics