INTERNATIONAL STANDARD

ISO/IEC 24727-2

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Identification cards — Integrated circuit card programming interfaces —

Part 2: Generic card interface

Cartes d'identification — Interfaces programmables de cartes à puce —

Partie 2: Interface de carte générique

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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.

ISO/IEC 24727-2 was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 17, *Cards and personal identification*.

ISO/IEC 24727 consists of the following parts, under the general title *Identification cards — Integrated circuit card programming interfaces*:

— *Part 1: Architecture*

— *Part 2: Generic card interface*

— *Part 3: Application interface*

— *Part 4: API administration*

The following parts are under preparation:

— *Part 5: Testing*

— *Part 6: Registration authority procedures for the authentication protocols for interoperability*

Introduction

ISO/IEC 24727 defines interoperable programming interfaces to integrated circuit cards. Programming interfaces are defined for all card lifecycle stages and for use with integrated circuit cards.

ISO/IEC 24727 is written with sufficient detail and completeness that independent implementations of each part are interchangeable and can interoperate with independent implementations of the other parts.

This part of ISO/IEC 24727 specifies a command-level programming interface to contactless integrated circuit cards and cards with contacts that is a concretization of the concepts, data structures and commands found in the following documents:

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

— ISO/IEC 7816-8, *Identification cards — Integrated circuit cards — Part 8: Commands for security operations*

— ISO/IEC 7816-9, *Identification cards — Integrated circuit cards — Part 9: Commands for card management*

— ISO/IEC 7816-15, *Identification cards — Integrated circuit cards — Part 15: Cryptographic information application*

— ISO/IEC 20060, *Information technology — Open Terminal Architecture (OTA) specification — Virtual machine specification*

The commands and data objects described in this part of ISO/IEC 24727 are consistent with the commands and data objects found in these documents which will be referred to as the base documents.

This part of ISO/IEC 24727 maximizes the fungibility of independent realizations of its prescriptions. This property of this part of ISO/IEC 24727 is realized by positing a minimally sufficient subset of the base standards which realizes their core functionality through the minimization of the number of options provided.

Identification cards — Integrated circuit card programming interfaces —

Part 2: Generic card interface

1 Scope

This part of ISO/IEC 24727 defines a generic card interface for integrated circuit cards. This interface is presented as:

— command-response pairs for interoperability,

— card and application capability description and determination.

This part of ISO/IEC 24727 is based on ISO/IEC 7816-4, ISO/IEC 7816-8, ISO/IEC 7816-9, and ISO/IEC 7816-15.

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 24727-1, *Identification cards — Integrated circuit card programming interfaces — Part 1: Architecture*

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

ISO/IEC 7816-8, *Identification cards — Integrated circuit cards — Part 8: Commands for security operations*

ISO/IEC 7816-9, *Identification cards — Integrated circuit cards — Part 9: Commands for card management*

ISO/IEC 7816-15, *Identification cards — Integrated circuit cards — Part 15: Cryptographic information application*