



# DRAFT AMENDMENT ISO/IEC 24727-2:2008/DAM 1

ISO/IEC JTC 1

Secretariat: **ANSI**

Voting begins on  
**2012-04-23**

Voting terminates on  
**2012-09-23**

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION • МЕЖДУНАРОДНАЯ ОРГАНИЗАЦИЯ ПО СТАНДАРТИЗАЦИИ • ORGANISATION INTERNATIONALE DE NORMALISATION  
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## Identification cards — Integrated circuit card programming interfaces —

### Part 2: Generic card interface

#### AMENDMENT 1

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

*Partie 2: Interface de carte générique*

*AMENDEMENT 1*

ICS 35.240.15

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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.

Amendment 1 to ISO/IEC 24727-2:2008 was prepared by Joint Technical Committee ISO/IEC JTC 1, *Identification cards - integrated circuit card programming interfaces*, Subcommittee SC 17, *Generic card interface*.

- *Part 1: Architecture*
- *Part 2: Generic card interface*
- *Part 3: Application interface*
- *Part 4: API administration*
- *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.

XML encodings have become more and more used in the field of Identification, Authentication and (digital) Signature (IAS) Identity Management and general networking communication. It is therefore useful to improve the discovery mechanism in order to ascertain the availability of this technology in certain ISO/IEC 24727 stack configurations.

This new work item proposal is one of three new work item proposals on the ISO/IEC 24727 series of standards that are envisioned to be developed in parallel

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# Identification cards — Integrated circuit card programming interfaces —

## Part 2: Generic card interface

### AMENDMENT 1

All new or changed text in this amendment is underlined in the clauses being replaced. All removed text will show with a strike-through. When merging all such text into the base standard, the underlining is to be removed and any words showing a strike-through should be removed. In the case of entirely new annexes relative to the base standard will be so indicated by a statement at the beginning of the annex. In that case, the “underline” convention will NOT be used. Rather, it is to be interpreted that the entire annex wording is to be merged into the base document.

### 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.

The scope of ISO/IEC 24727-2 AMD 1 is extended in the following ways:

1. Enhance discovery mechanism to support different stack layouts of the ISO/IEC 24727 stack and different bindings of the SAL API.
2. As a result of Amendments under development for other parts of 24727, portions of this standard may be deleted and referenced.
3. Consider enhancements to the GCI either through adding APDU's, e.g. to convey application administration, or deprecating APDU's, e.g. to make the command set more concise.
4. Remove ambiguities by elaborating and re-specifying concepts that may not be clear in the current standard.
5. Remove concepts that are captured in the current ISO/IEC 24727-2 but are more relevant in other parts of ISO/IEC 24727.

### 3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO/IEC 24727-1 and the following apply.

**3.1**  
**data object**  
information seen at the interface consisting of the concatenation of a mandatory ISO/IEC 8825 DER-encoded tag field, a mandatory ISO/IEC 8825 DER-encoded length field and a conditional value field

**3.2**  
**file**  
structure for application and/or data in the card, as seen at the generic card interface when processing commands

**3.3**  
**legacy card**  
integrated circuit card which is not personalized for the ISO/IEC 24727 standard

**3.4**  
**procedural element**  
software that can be accessed to provide manipulation of specific interface commands within a processing layer; cf **translation code**

**3.5**  
**translation code**  
procedural software that transforms commands on the generic card interface to commands implemented on an integrated circuit card

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### 5.1.3 Instruction byte

In Table 2, add the following row:

ENVELOPE	'C3'	A	None.
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