

BUREAU OF INDIAN STANDARDS
DRAFT FOR COMMENTS ONLY

(Not to be reproduced without the permission of BIS or used as a STANDARD)

मसौदा भारतीय मानक
पहचान पत्र— एकीकृत सर्किट कार्ड्स
भाग 11: बायोमेट्रिक विधियों के माध्यम से व्यक्तिगत सत्यापन
(दूसरा पुनरीक्षण)

Draft Indian Standard
Identification Cards — Integrated Circuit Cards
Part 11 Personal Verification through Biometric Methods
(Second Revision)

ICS 35.240.15

Identification & Data capture techniques,
Cards and Security Devices Sectional
Committee, LITD 16

Last Date for Comments: 14 September 2025

NATIONAL FOREWORD

(Formal clauses will be added later)

This draft Indian Standard (Part 11) (Second Revision) which is identical to ‘ISO/IEC 7816-11: 2022 Identification cards — Integrated circuit cards — Part 11: Personal verification through biometric methods’ issued by the International Organization Standardization (ISO) and International Electrotechnical Commission (IEC) will be adopted by the Bureau of Indian Standards (BIS) on the recommendations of the Identification & Data capture techniques, Cards and Security Devices Sectional Committee and approval of the Electronics and Information Technology Division Council.

This standard was first published in 2013 and was identical to ISO/IEC 7816-11: 2013. The first revision of this standard was published in 2021 and was identical to ISO/IEC 7816-11:

2017. The second revision of this standard has been undertaken to align it with the latest version of ISO/IEC 7816-11: 2022.

The main changes are as follows:

— In Subclause 5.4, functionality of RETRIEVE BIOMETRIC REFERENCE operation has been expanded to retrieve the following two different cases of biometric reference information:

— including biometric reference;

— not including biometric reference.

— In Subclause 5.4, new alternative names have been assigned to the following two operations of PERFORM BIOMETRIC OPERATION command:

— RETRIEVE BIOMETRIC REFERENCE operation (to be deprecated)

RETRIEVE BIOMETRIC REFERENCE INFORMATION operation (assigned)

— STORE BIOMETRIC INFORMATION operation (to be deprecated)

STORE BRT CERTIFICATE operation (assigned).

— In Table 4, according to ISO/IEC 24787:2018, the parameters to be used by SET BIOMETRIC PARAMETER operation has been added.

— In Table 8, the presence condition of tag allocation authority DOs has been clarified for the case of the default tag allocation authority.

— In Table 9, the format of a biometric information template has been modified and clarified for the following use cases:

— The template conveys multiple sets of DOs defined by more than one compatible tag allocation authority.

— An individual standard becomes a tag allocation authority within the template.

— In Table 10, the format of a biometric information template group template has been modified for explicit tag allocation coding, keeping backward compatibility to implicit tag allocation coding.

— In Table 11, biometric modality specific additional data DOs have been added as optional into a biometric data template to support existing biometric data format standards.

— In Figure 1, a use case has been copied from the first edition of ISO/IEC 7816-11, which sends two different formats of biometric probes at the same time.

— Annex C has been deleted.

The other parts in this series are:

- Part 1 cards with contacts - Physical characteristics (Second Revision)
- Part 2 cards with Contacts-Dimensions and location of the contacts (Second Revision)
- Part 3 cards with contacts - Electrical interface and transmission protocols (First Revision)
- Part 4 Organization security and commands for interchange (First Revision)
- Part 5 registration of application providers (First Revision)
- Part 6 Interindustry Data Elements for Interchange (Third Revision)
- Part 7 interindustry commands for structured card query language (SCQL)
- Part 8 Commands and mechanisms for security operations (Second Revision)
- Part 9 Commands for card management (First Revision)
- Part 10 Electronic signals and answer to reset for synchronous cards
- Part 12 cards with contacts -USB electrical interface and operating procedures
- Part 13 Commands for application management in a multi-application environment
- Part 15 Cryptographic information application

The text of ISO/IEC Standard may be approved as suitable for publication as an Indian Standard without deviations. Certain conventions and terminologies are, however, not identical to those used in Indian Standards. Attention is particularly drawn to the following:

- a) Wherever the words ‘International Standard’ appear referring to this standard, they should be read as ‘Indian Standard’, and
- b) Comma (,) has been used as a decimal marker, while in Indian Standards, the current practice is to use a point (.) as the decimal marker.

In this draft standard, reference appears to certain International Standards for which Indian Standards also exist. The corresponding Indian Standards, which are to be substituted in their respective places, are listed below along with their degree of equivalence for the editions

indicated. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies:

International Standards	Corresponding Indian Standard	Degree of Equivalence
ISO/IEC 7816-4 Identification cards — Integrated circuit cards — Part 4: Organization, security and commands for interchange	IS 14202 (Part 4):2021 ISO/IEC 7816-4: 2020 Identification cards Integrated circuit cards Part 4: Organization security and commands for interchange (First Revision)	Identical with ISO/IEC 7816-4: 2020
ISO/IEC 24761 Information technology — Security techniques — Authentication context for biometrics	IS/ISO/IEC 24761:2019 Information Technology - Security Techniques - Authentication Context for Biometrics	Identical with ISO/IEC 24761:2019

The technical committee has reviewed the provisions of the following International Standard referred to in this adopted draft standard and has decided that it is acceptable for use in conjunction with this standard. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies:

International Standard	Title
ISO/IEC 24787	Information technology — Identification cards — On-card biometric comparison
ISO/IEC 2382-37	Information technology — Vocabulary — Part 37: Biometrics

Scope of ISO/IEC 7816-11: 2022 is as follows:

“This document specifies security-related inter industry commands that are intended to be used for personal verification through biometric methods in integrated circuit cards. It also defines the data structure and data access methods for use of the card as a carrier of the biometric reference and/or as the device to perform the verification of the cardholder's biometric probe (on-card biometric comparison). Identification of persons using biometric methods is outside the scope of this document.”

Note: - The Technical content of this document has not been enclosed as these are identical with the corresponding ISO/IEC Standard. For details, please refer to ISO/IEC 7816-11:2022 or kindly contact.

Head,

Electronics & IT Department

Bureau of Indian Standards

9, B.S. Zafar Marg, New Delhi-110002

Email: hlitd@bis.gov.in, litd16@bis.gov.in

Telephone: 011-23608450