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ORGANISATION INTERNATIONALE DE NORMALISATION
МЕЖДУНАРОДНАЯ ОРГАНИЗАЦИЯ ПО СТАНДАРТИЗАЦИИ

Identification cards — Financial transaction cards

Cartes d'identification — Cartes de transactions financières

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work.

Draft International Standards adopted by the technical committees are circulated to the member bodies for approval before their acceptance as International Standards by the ISO Council. They are approved in accordance with ISO procedures requiring at least 75 % approval by the member bodies voting.

International Standard ISO 7813 was prepared by Technical Committee ISO/TC 97, *Information processing systems*.

This second edition cancels and replaces the first edition (ISO 7813 : 1985), clause 9 of which has been technically revised.

Users should note that all International Standards undergo revision from time to time and that any reference made herein to any other International Standard implies its latest edition, unless otherwise stated.

Identification cards — Financial transaction cards

0 Introduction

This International Standard is one of a series of standards describing the parameters for identification cards as defined in clause 3 below and the use of such cards for international interchange.

1 Scope and field of application

This International Standard specifies directly or by reference the requirements for cards used in financial transactions. It takes into consideration both human and machine aspects and states minimum requirements for conformity. It contains physical characteristics, layout, recording techniques, numbering system, registration procedures, but not security requirements.

2 References

ISO 554, *Standard atmospheres for conditioning and/or testing — Specifications.*

ISO 3166, *Codes for the representation of names of countries.*

ISO 4217, *Codes for the representation of currencies and funds.*

ISO 4909, *Bank cards — Magnetic stripe data content for track 3.*

ISO 7810, *Identification cards — Physical characteristics.*

ISO 7811, *Identification cards — Recording technique —*

   Part 1: Embossing.

   Part 2: Magnetic stripe.

   Part 3: Location of embossed characters on ID-1 cards.

   Part 4: Location of read-only magnetic tracks — Tracks 1 and 2.

   Part 5: Location of read-write magnetic track — Track 3.

ISO 7812, *Identification cards — Numbering system and registration procedure for issuer identifiers.*

3 Definitions

For the purpose of this International Standard, the definition of "identification card" given in ISO 7810 and the following definition apply.

financial transaction card: A card used to identify the card issuer and the card holder to facilitate the financial transaction and to provide input data for such a transaction.

4 Physical characteristics

4.1 The physical characteristics of financial transaction cards shall conform to ISO 7810.

4.2 Flammability: A method of test for this requirement is under study and will be included in this International Standard when agreement is reached on it.

5 Dimensions (see the figure)

5.1 Unembossed cards

The nominal dimensions shall conform to those specified for card type ID-1 in ISO 7810. The following dimensions and tolerances apply to cards under the standard test atmosphere of 20 °C (68 °F) and 65 % relative humidity (see ISO 554).

5.1.1 Card height and width

All points on the edges of the card in the finished state, except for the rounded corners, shall fall between two concentric, similarly aligned, rectangles which are dimensioned as follows:

—   outer rectangle: width 85,72 mm (3.375 in)
                            height 54,03 mm (2.127 in)

—   inner rectangle: width 85,47 mm (3.365 in)
                            height 53,92 mm (2.123 in)

Dimensions in millimetres
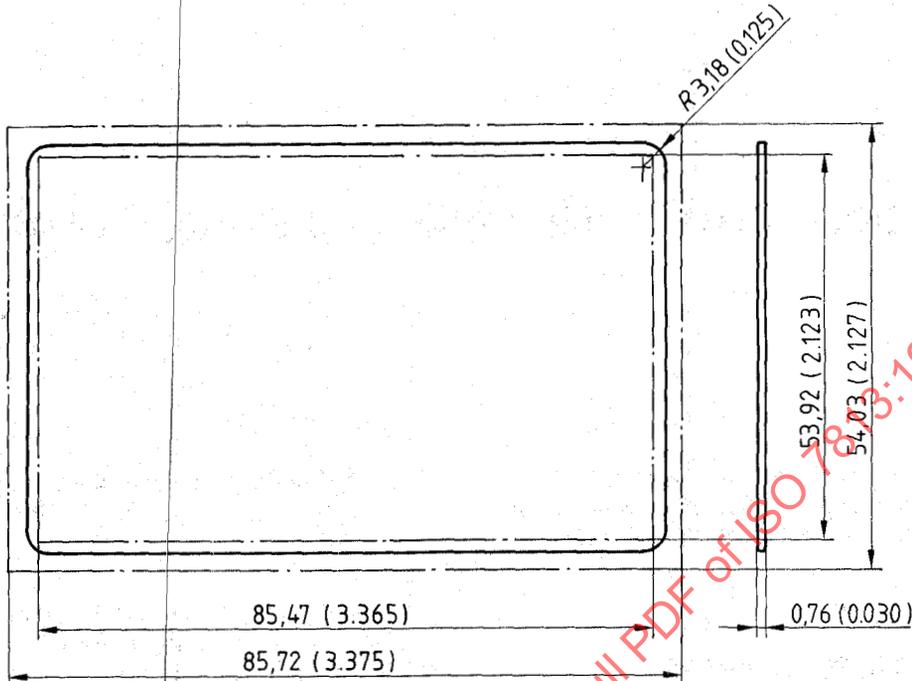(Inch dimensions in parentheses)

Figure — Card dimensions

5.1.2 Card thickness

The thickness of the card shall be 0,76 ± 0,08 mm (0.030 ± 0.003 in).

5.1.3 Corners

The corners shall be rounded with a radius of 3,18 mm (0.125 in). Care should be taken to avoid misalignments between the rounded corners and the straight edges of the card.

5.1.4 Card edges

Edge burrs normal to the card face shall not exceed 0,08 mm (0.003 in) above the card surface.

5.2 Embossed cards

The specification of dimensions of cards after they have been embossed is at present under study and will be included in this International Standard when agreement has been reached on it.

6 Layout

The following areas are defined for various media to be selected for the application concerned. One or more areas may be used but may not be relocated.

6.1 Embossing area

The embossing area shall be located on the front of the card as specified in ISO 7811-3.

6.2 Magnetic stripe area

The magnetic stripe area shall be located on the back of the card adjacent to the top edge as specified in ISO 7811-4 and ISO 7811-5.

7 Embossing

Embossing shall be as specified in ISO 7811-1 and ISO 7811-3.

8 Magnetic stripe

The magnetic stripe shall conform to ISO 7811-2, ISO 7811-4 and ISO 7811-5.

9 Information contents, formats

Track 1 and/or track 2 may be used with the following structures.

9.1 Track 1 structure

9.1.1 Structure A

Reserved for proprietary use of card issuer.

9.1.2 Structure B

STX	Start sentinel	position 0/5
FC	Format code	B (position 2/2)
PAN	Identification number	up to 19 digits
FS	Separator	position 3/14
CC	Country code (see 9.1.2.2)	3 digits
NM	Name (see 9.1.2.3)	2 to 26 characters
	surname	
	surname separator	/(0/15)
	first name or initial space (when required) (see 9.1.2.4)	0/0
	middle name or initial period (when followed by title)	.(0/14)
	title (when used)	
FS	Separator	position 3/14
ED	Expiration date (see 9.1.2.5)	4 digits or position 3/14
ID	Interchange designator (see 9.1.2.6)	1 digit } or position 3/14
SC	Service code (see 9.1.2.7)	2 digits }
DD	Discretionary data	balance of characters
ETX	End sentinel	position 1/15
LRC	Longitudinal redundancy check	1 character
	Maximum record length	79 characters

9.1.2.1 Character positions shall be as described in ISO 7811-2.

9.1.2.2 When the primary account number commences with the major industry identifier "5" followed by the digit "9", the encoding of the numeric country code (as specified in ISO 3166) in this position is mandatory. In all other situations, the name shall immediately follow the separator which terminates the primary account number.

9.1.2.3 Name: Minimum encoded data shall be a single alpha character (as surname) and the surname separator.

9.1.2.4 Space: The space character is required to separate the logical elements of the name field other than the surname. The separator terminating the name field should be encoded following the last logical element of the name field. If only the surname is encoded, it will follow the surname separator.

9.1.2.5 Expiration date: Format YYMM.

9.1.2.6 Interchange designator: A code assigned by the ISO technical body responsible for this International Standard; currently agreed assignments being

1 = available for international interchange
5 = available for interchange only in country of issue
7 = not available for general interchange (although specific bilateral agreements between issuers may override this restriction)
9 = system test card

9.1.2.7 Service code: Service codes are assigned in the following blocks:

00 to 49 codes assigned by and published by the ISO technical body responsible for this International Standard
50 to 59 codes assigned by and published by national standards bodies
60 to 99 codes available for private assignments

Where the interchange designator is 1, only service codes 00 to 49 may be assigned. Where the interchange designator is 5 or 7, all codes are available.

Codes currently assigned are

01 no restrictions
02 no ATM service
03 ATM service only
10 no cash advance
11 no cash advance nor ATM service
20 positive authorization: all transactions shall be authorized by the issuer or his agent
41 integrated circuit present: no restrictions
43 integrated circuit present: ATM service only

NOTE — The introduction of fields signifying interchange designator and service code is a change to ISO 3554 which this International Standard replaces. Certain format B cards (notably in MIIs 1 and 2) issued under ISO 3554 may not contain these fields.

9.2 Track 2 structure — Standard structure

STX	Start sentinel	BCD 11
PAN	Identification number	up to 19 digits
FS	Separator	BCD 13
CC	Country code (see 9.2.1)	3 digits
ED	Expiration date (see 9.2.2)	4 digits or BCD 13
ID	Interchange designator (see 9.2.3)	1 digit } or BCD 13
SC	Service code (see 9.2.4)	2 digits }
DD	Discretionary data	balance of available digits
ETX	End sentinel	BCD 15
LRC	Longitudinal redundancy check	1 digit
	Maximum record length	40 digits

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9.2.1 When the primary account number commences with the major industry identifier "5" followed by the digit "9", the encoding of the numeric country code (as specified in ISO 3166) in this position is mandatory. In all other situations, the name shall immediately follow the separator which terminates the primary account number.

9.2.2 Expiration date : Format YYMM.

9.2.3 Interchange designator : A code assigned by the ISO technical body responsible for this International Standard ; currently agreed assignments being

- 1 = available for international interchange
- 5 = available for interchange only in country of issue
- 7 = not available for general interchange (although specific bilateral agreements between issuers may override this restriction)
- 9 = system test card

9.2.4 Service code : Service codes are assigned in the following blocks :

00 to 49   codes assigned by and published by the ISO technical body responsible for this International Standard

50 to 59   codes assigned by and published by national standards bodies
60 to 99   codes available for private assignments

Where the interchange designator is 1, only service codes 00 to 49 may be assigned. Where the interchange designator is 5 or 7, all codes are available.

Codes currently assigned are

- 01   no restrictions
- 02   no ATM service
- 03   ATM service only
- 10   no cash advance
- 11   no cash advance or ATM service
- 20   positive authorization ; all transactions shall be authorized by the issuer or his agent
- 41   integrated circuit present ; no restrictions
- 43   integrated circuit present ; ATM service only

9.3 Track 3 structure

The information content of track 3 is described in ISO 4909.

10 Numbering system

The numbering system for issuer identifiers is described in ISO 7812.