

Information technology - Identification cards — Integrated circuit(s) cards with contacts — Part 5: Numbering system and registration procedure for application identifiers

Technologies de l'information - Cartes d'identification — Cartes à circuit(s) intégré(s) à contacts — Partie 5: Système de numérotation et procédure d'enregistrement pour les identificateurs d'applications

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Contents

1 Scope	5
2 Normative references	5
3 Definitions and abbreviations	6
3.1 Definitions	6
3.2 Abbreviations	6
4 Data elements for application identification and selection	7
5 Coding of the data elements for application identification and selection	8
5.1 IDOs	8
5.2 Application identifier	8
5.2.1 Principles	8
5.2.2 Registration category = 'A'	8
5.2.3 Registration category = 'D'	8
5.2.4 Registration category = 'F'	8
5.2.5 Registration category = 'E'	8
5.3 Additional data elements	9
5.3.1 Application label	9
5.3.2 Command to perform	9
5.3.3 Discretionary data	10
5.3.4 Application template	10
5.3.5 Uniform resource locator	10
5.4 Retrieval of IDOs for application identification and selection.	10
6 Use of the data elements	11
6.1 Application identification	11
6.2 Retrieval of the application identifier	11
6.3 Application selection	11
6.3.1 Direct application selection with AID	11
6.3.2 Selection by the use of a DIR file or an ATR file	11

6.3.3 Implicit application selection	12
7 Registration of identifiers.....	12
7.1 Request and registration procedures	12
7.1.1 Request procedure for a RID.....	12
7.1.2 Criteria for approval and rejection of requests	12
7.2 Appeal process	13
7.2.1 Appeal bodies	13
7.2.2 Information to be provided.....	13
7.3 Responsibilities of applicants.....	13
7.4 Sponsoring Authorities	14
7.4.1 Eligibility to become a Sponsoring Authority	14
7.4.2 Responsibilities	14
7.5 Registration Management Group (RMG)	14
7.5.1 Constitution.....	14
7.5.2 Responsibilities	15
7.5.3 Voting procedures	15
7.6 The register of RIDs.....	15
7.6.1 Publication and availability	15
7.6.2 Contents	15
7.7 Registration Authority	16
7.7.1 Appointment.....	16
7.7.2 Resignation	16
7.7.3 Responsibilities	16
Annex A (normative) Request registration form for a registered application provider identifier.....	17
Annex B (informative) National numbering systems for applications in integrated circuit(s) cards	18
Annex C (informative) Application identifiers using an issuer identification number as registered application provider identifier.....	19

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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 3.

In the field of information technology, ISO and IEC have established a joint technical committee, ISO/IEC JTC 1. 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.

ISO/IEC 7816 consists of the following parts, under the general title *Information technology - Identification cards - Integrated circuit(s) cards with contacts* :

- Part 1 : Physical characteristics ;
- Part 2 : Dimensions and location of the contacts ;
- Part 3 : Electronic signals and transmission protocols ;
- Part 4 : Interindustry commands for interchange
- Part 5 : Numbering system and registration procedure for application identifiers ;
- Part 6 : Interindustry data elements ;
- Part 7 : Interindustry commands for Structured Card Query Language (SCQL) ;
- Part 8 : Security related interindustry commands ;
- Part 9 : Additional interindustry commands and security attributes ;
- Part 10 : Electronic signals and answer to reset for synchronous cards

Annex A forms an integral part of this part of ISO/IEC 7816.

Annexes B and C are for information only.

Information technology - Identification cards — Integrated circuit(s) cards with contacts — Part 5: Numbering system and registration procedure for application identifiers

1 Scope

This part of ISO/IEC 7816 specifies a numbering system for application identifiers and a registration procedure for application provider identifiers.

The numbering system described in this standard provides a means for an application and related services offered by a provider to identify if a given card contains the components required by its application and related services.

An application identifier (AID) is used to address an application in the card.

This part of ISO/IEC 7816 specifies the coding of application identifiers together with means and mechanisms for addressing application parts in cards.

This part of ISO/IEC 7816 establishes the authorities and procedures to ensure and optimize the reliability of the corresponding registration.

2 Normative references

The following standards contain provisions which, through reference in this part of ISO/IEC 7816, constitute provisions to this standard. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this part of ISO/IEC 7816 are encouraged to investigate the possibility of applying the most recent editions of the standards listed below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 3166-1 : 1997, *Codes for the representation of names of countries* £££.

ISO 7812 : 2000, *Identification cards - Numbering system and registration procedure for issuer identifiers*.

ISO/IEC 15693 : £££.

ISO/IEC 7816-3 : 1997, *Identification cards - Integrated circuit(s) cards with contacts - Part 3: Electronic signals and transmission protocols*.

ISO/IEC 7816-4 : 1995, *Identification cards - Integrated circuit(s) cards with contacts - Part 4 : Interindustry commands for interchange*.

ISO/IEC 7816-6 : 1995, *Identification cards - Integrated circuit(s) cards with contacts - Part 6 : Interindustry data elements*.

RFC 1738 : 1994, *Uniform resource locators (URL)*.

3 Definitions and abbreviations

For the purposes of this part of ISO/IEC 7816, the definitions given in ISO/IEC 7816-4, as well as the following definitions, apply.

3.1 Definitions

3.1.1 application

As defined in ISO/IEC 7816-9.

3.1.2 application identifier

Data element which identifies an application in a card.

NOTE : An application identifier may contain a registered application provider identifier making this identification unambiguous.

3.1.3 application provider

Entity which provides those components of an application on a card required to perform the respective application.

3.1.4 application label

Data element for use at the man-machine interface.

3.1.5 application template

Data element, which may be present for example in a DIR file, and which contains one or more DOs relevant to an application.

3.1.6 ATR file

Answer to reset (ATR) file, optional elementary file, as defined in ISO/IEC 7816-4.

3.1.7 data element

As defined in ISO/IEC 7816-4.

3.1.8 directory (DIR) file

Optional elementary file containing a list of applications supported by the card, and optional related data elements defined in this part of ISO/IEC 7816.

NOTE : The structure of the DIR file, and the commands to use for reading it, are either implicitly known, or defined according to ISO/IEC 7816-4, clauses 8 and 9.

3.1.9 master file

As defined in ISO/IEC 7816-4.

3.1.10 path

As defined in ISO/IEC 7816-4.

3.1.11 qualified path

Concatenation of path and parameter P1 for the SELECT FILE command.

3.2 Abbreviations

AID	Application identifier
ATR	Answer-to-Reset, as defined in ISO/IEC 7816-3
BCD	Binary coded decimal
BER-TLV	Tag Length Value encoding of DEs defined in ISO/IEC 7816-4

DE	Data element
DO	Data object, as defined in ISO/IEC 7816-4
FSS	Application-independent file selection service, defined in ISO/IEC 7816-4
IDO	Interindustry data object, as defined in ISO/IEC 7816-6
IFD	Interface device, as defined in ISO/IEC 7816-3
PIX	Proprietary application identifier extension
PPS	Protocol and parameters selection, as defined in ISO/IEC 7816-3
RID	Registered application provider identifier
RMG	Registration management group
URL	Uniform resource locator, as defined in RFC 1738

4 Data elements for application identification and selection

The following data elements are defined in this part of ISO/IEC 7816 :

- The application identifier (AID) ;
- The application label ;
- The path to a file ;
- A command to perform ;
- Discretionary data ;
- The application template
- The Uniform Resource Locator (URL).

Table 1 — IDOs for application identification and selection

Tag	Length (L)	Value (data element) L bytes
'4F'	'01' to '10'	Application identifier (AID)
'50'	'00' to '10'	Application label
'51'	'00' to '7E'	Path
'52'	'04' to '7F'	Command to perform, see ISO/IEC 7816-4
'53'	'00' to '7F'	Discretionary data
'73'	'00' to '7F'	Discretionary template
'61'	'03' to '7F'	Application template
'5F50'	variable	Uniform resource locator

Table 2 — Registration category values

'0'-9'	Reserved by ISO for backward compatibility, see annex C.
'A'	International registration
'B'	Reserved for ISO/IEC JTC1/SC17
'C'	Reserved for ISO/IEC JTC1/SC17
'D'	National registration
'E'	Reserved for ISO, see subclause 5.2.4
'F'	Proprietary non-registered

NOTE : Unless the value is defined as a template, all DOs of table 1 are primitive. All other application class tags are reserved by ISO

5 Coding of the data elements for application identification and selection

5.1 IDOs

A DE defined in this clause, when encoded as IDO, shall be encoded according to table 1.

5.2 Application identifier

5.2.1 Principles

The AID is coded using hexadecimal notation. The most significant 4 bits of the first byte are the registration category (see table 2). The AID is comprised of :

- either the registered application provider identifier (RID) and optionally the proprietary application identifier extension (PIX),
- or the proprietary application identifier;

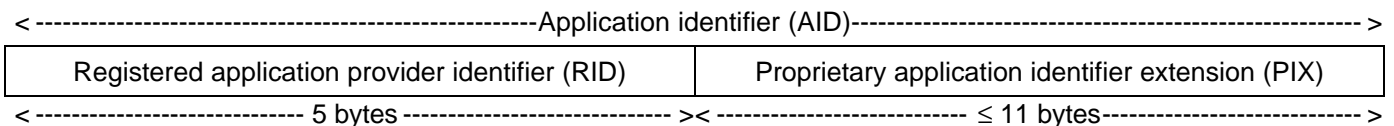
The PIX allows an application provider to identify its application(s). The PIX has a free coding. If the AID is 16 bytes long, then the value 'FF' for the least significant byte is reserved for future use.

5.2.2 Registration category = 'A'

The RID consists of the following fields :

- Registration category : 4 bits, coded as 1010.
- Registered application provider number, 36 bits as 9 BCD digits. Other codings are reserved for ISO use.

The format of the AID is therefore :

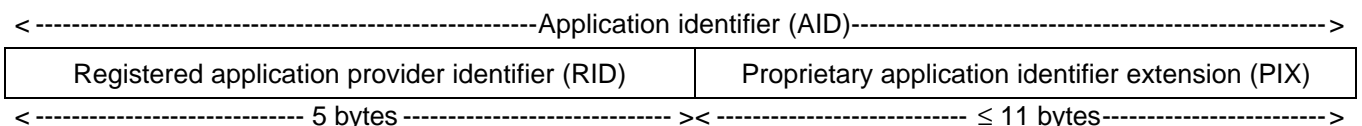


5.2.3 Registration category = 'D'

The RID consists of the following fields

- Registration category : 4 bits, coded as 1101.
- Country code of the national registration authority, 12 bits as 3 BCD digits, coded according to ISO 3166, numeric part only.
- Field(s) specified by the national authority, 24 bits, BCD coding recommended.

The format of the AID is therefore :



5.2.4 Registration category = 'E'

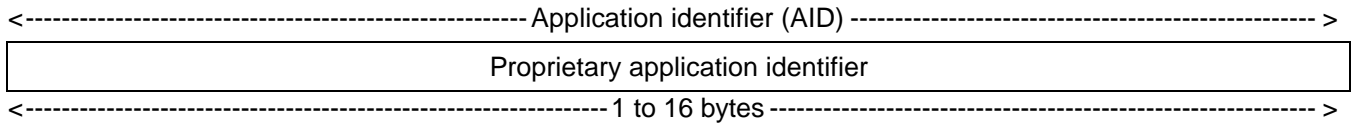
When 'E' is followed by 4 bits in the range '0'..'7', these values are reserved for use by vicinity cards. Coding of these values is defined in ISO/IEC 15693. When 'E' is followed by 4 bits in the range '8'..'F', these values are reserved for use by ISO/IEC JTC1/SC17.

5.2.5 Registration category = 'F'

The AID consists of the following fields

- Registration category : 4 bits, coded as 1111.
- The coding of the remaining part of the AID is proprietary.

The format of the AID is therefore :



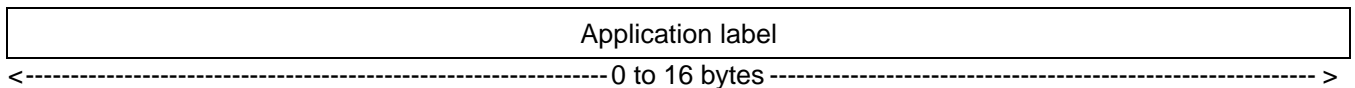
WARNING : Within the category 'F', where identifiers are not registered, the same value of the AID may be used by different application providers.

5.3 Additional data elements

In addition to the application identifier, the following data elements may be used for the application selection.

5.3.1 Application label

This data element of free coding may be specified by an application provider for use at the man-machine interface, e.g. trademark to be displayed to the customer.

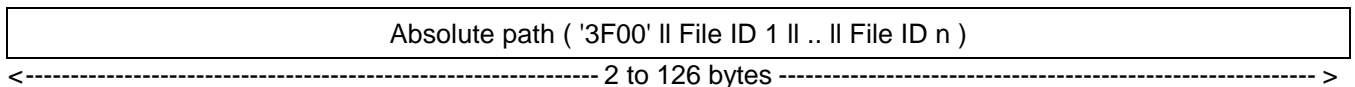


5.3.2 Path

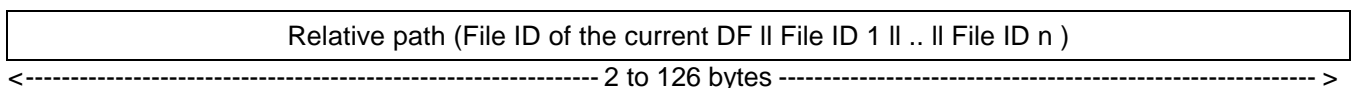
The data element path is either :

- empty, or consists of :
- an absolute path, or
- a relative path, or
- a qualified path.

The number of bytes of an absolute path (starting with '3F00') path is even :

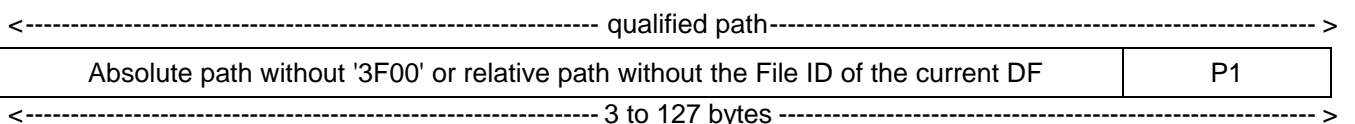


The number of bytes of a relative (starting with the File ID of the current DF) path is even :



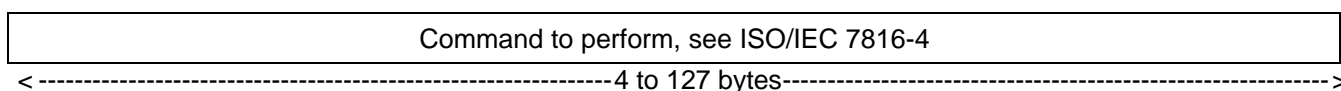
The number of bytes of a qualified path is odd. A qualified path is the concatenation of :

- a path, i.e. an absolute path without '3F00' or a relative path without the File ID of the current DF ;
- and the P1 value to use in the relevant SELECT FILE command(s) :



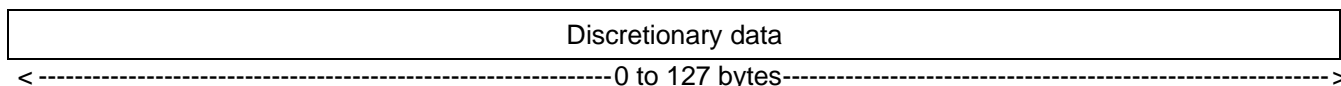
5.3.3 Command to perform

The 'command to perform' data element is a command APDU relevant to application selection.

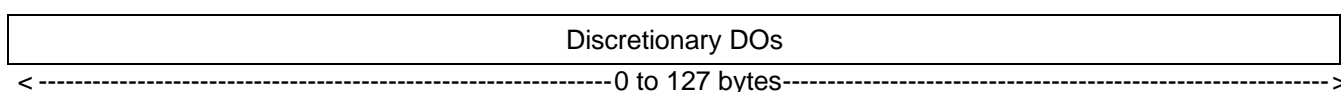


5.3.4 Discretionary data

The application provider may put any relevant data in this data element.

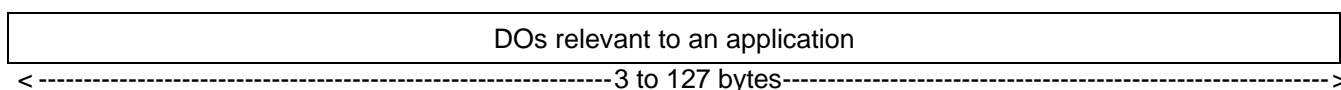


OR



5.3.5 Application template

The application template shall contain one or more of the DOs relevant to an application.



Within the application template,

- the DO containing the application identifier is mandatory,
- all other DOs defined in this part of ISO/IEC 7816 are optional.

If a DF has more than one DF name used as AID, these AIDs should not be presented in the same application template.

5.3.6 Uniform resource locator

When present in the application template, the value of this DO is an uniform resource locator, as defined in RFC 1738. Part of the software required in the IFD to communicate with the application in the card is pointed to by this DE.

5.4 Retrieval of IDOs for application identification and selection.

The DOs defined in this part of ISO/IEC 7816 may be found:

- In the historical bytes of the ATR,
- In a DIR file,
- In the ATR file,
- In any command or response message where BER-TLV is used, e.g. in the file control information of a file, see ISO/IEC 7816-4.

See ISO/IEC 7816-4 for the coding conventions of an AID in the historical bytes, thus : 'FY', followed by an AID of Y bytes.

6 Use of the data elements

6.1 Application identification

The application identification shall enable the IFD

- To ascertain that an application may be initiated in the card ;
- To identify the access method to a specific application in the card.

6.2 Retrieval of the application identifier

If application identifier retrieval is offered by the card, the application identifier(s) may be read in the DIR file(s) and/or ATR file, as defined in ISO/IEC 7816-4. The short file identifier of the DIR file is 11110.

For single application cards, the AID may be found in the historical bytes.

6.3 Application selection

A card shall support one or more of the following application selection methods :

- Direct application selection with AID;
- Application selection by the use of a DIR file or an ATR file;
- Implicit application selection.

6.3.1 Direct application selection with AID

Direct application selection is performed by a SELECT FILE command, with the AID (possibly truncated) as DF name (direct application selection service defined in ISO/IEC 7816-4). If this mechanism is supported by the card, then the IFD may explicitly select an application to be performed, without previously checking that the respective application is present in the card.

The card shall at least support a SELECT FILE command with P1 P2 = '0400' for the first selection with a given data field.

A card supporting selection with a truncated AID shall at least support a SELECT FILE command with P1 P2 = '0402' for the following selections with the same data field.

Other values of P2 may be supported.

The first occurrence selected is implementation-dependent. It may be e.g. the first of a static list, or the last activated in a previous session.

If the respective application is not present, then the card shall reject the command.

If the application is present, the card shall execute the SELECT FILE command according to ISO/IEC 7816-4.

For a multi-application IFD, the mechanism described in clause 6.3.2 may be more efficient.

6.3.2 Selection by the use of a DIR file or an ATR file

A DIR file contains application templates and AID IDOs, in any order. Erased DOs may be replaced by a sequence of '00' or 'FF' bytes. Application templates and AID IDOs may be present in the ATR file. The contents of the DIR file and/or ATR file determine which command(s) shall be performed in order to select the application.

Direct application selection applies (see clause 6.3.1) when an AID IDO in the DIR file is

- not part of an application template,
- not accompanied by at least a command to perform, or a path.

When an AID IDO is part of application template containing an empty path or a 2-byte path DE (which shall be '3F00'), it means that the application is supported by the current DF, i.e. the MF.

When an AID IDO belongs to a template containing a path (>2 bytes), the application selection should be done by one or several SELECT FILE command(s), with P1 P2 Lc = '010002', according to the FSS. Other values of P2 may be supported

When an AID IDO belongs to a template containing a qualified path, the application selection depends on the value of P1 indicated :

- If P1='08' or '09', the card shall at least support a single SELECT FILE command with P2 = '00', P1, Lc and the data field given by the qualified path.
- In other cases, the the card shall at least support one or several SELECT FILE command(s) with P2 Lc = '0002', P1 as given by the qualified path. All files of the path shall be selected sequentially. With those two exceptions, it is identical to the FSS.

NOTE Other values of P2 may be supported.

When an AID IDO belongs to a template containing at least one command to perform, the application selection is done by the command(s) indicated. They shall be performed in the order presented in the template if several are present.

6.3.3 Implicit application selection

An application may be selected implicitly after ATR and possible PPS. This is indicated in the historical bytes, see ISO/IEC 7816-4. When the AID is present in the historical bytes, it denotes the implicitly selected application.

NOTE : The implicit application selection is not recommended for multi-application cards.

7 Registration of international identifiers

7.1 Request and registration procedures

7.1.1 Request procedure for a RID

An application provider (including international organisations) shall apply to the standards body of its related country (i.e. national standards body), or in the absence of a national standards body, to the secretariat of the ISO technical body responsible for this part of ISO/IEC 7816 for the assignment of a RID using the form shown in annex A. Registration forms are also available, on request, from the Registration Authority, the secretariat of the Registration Management Group (RMG) and the secretariat of the ISO technical body responsible for this part of ISO/IEC 7816. The national standards body or the secretariat of the ISO technical body responsible for this part of ISO/IEC 7816 then acts as the "Sponsoring Authority" (see subclause 7.4) with respect to the request.

7.1.2 Criteria for approval and rejection of requests

7.1.2.1 Criteria for approval of a request for a RID

Requests for a RID shall meet all the following criteria:

- a) the applicant shall be a corporate entity or its subsidiaries operating under a specific legislative regulation ;

- b) the applicant requesting a RID shall not already have a RID of category A assigned.

7.1.2.2 Criteria for rejection of a request for a RID

A request for a RID shall be rejected if any of the following conditions exist :

- a) the applicant is not an application provider as defined in subclause 3.1 ;
- b) the applicant has requested a specific number or the reservation in the register of a specific number or has made a request which is outside the scope of this part of ISO/IEC 7816.

NOTE: Where special circumstances exist, the Sponsoring Authority may approve a request and forward the request to the Registration Authority for assignment of a number. All such assignments must be reported by the Sponsoring Authority to the RMG.

7.2 Appeal process

7.2.1 Appeal bodies

Where a request has been rejected by a Sponsoring Authority, the applicant may appeal to the secretariat of the RMG (see subclause 7.5). Where a request has been rejected by the RMG, the applicant may appeal to the ISO technical body responsible for this part of ISO/IEC 7816 through the secretariat of that ISO technical body. Applicants may submit for appeal requests that have been rejected by the ISO technical body responsible for this part of ISO/IEC 7816 to the ISO Central Secretariat.

Appeal against rejection of a request shall be submitted to the appropriate body within 90 days of the date of the letter of rejection.

7.2.2 Information to be provided

Where a request has been rejected by the Sponsoring Authority, the following information shall be provided by the applicant to the relevant appeal body in support of the appeal:

- a) statement of which rejection clause (see subclause 7.1.2.2) is disputed and why the applicant believes that the rejected request fulfills the criteria for acceptance (see subclause 7.1.2.1) ;
- b) statement of special circumstances whereby a specific requirement of the rejected request can be met, but such requirement is outside the current procedures and criteria for acceptance outlined in this international standard.

7.3 Responsibilities of applicants

The responsibilities of applicants shall be:

- a) to comply fully with the numbering system and the procedures for requesting RIDs as contained in this part of ISO/IEC 7816 ;
- b) to forward to its national standards body, or in the absence of a national standards body, to the secretariat of the ISO technical body responsible for this part of ISO/IEC 7816, a completed registration form, (see annex A) together with the requisite fee ;

NOTE: The registration fee is not refundable.

- c) to retain the completed registration form containing the RID assigned to the applicant by the Registration Authority ;
- d) to inform the Sponsoring Authority of any modification to the data related to the assigned RID.

7.4 Sponsoring Authorities

7.4.1 Eligibility to become a Sponsoring Authority

The following bodies may act as Sponsoring Authorities in processing requests for RIDs :

- a) any national member body of ISO (or agent appointed to act for its national member body) ;
- b) the ISO technical body responsible for this part of ISO/IEC 7816 ; and
- c) any group within the ISO technical body responsible for this part of ISO/IEC 7816 appointed for purposes concerning the Registration system for applications in IC cards.

7.4.2 Responsibilities

The responsibilities of a Sponsoring Authority shall be:

- a) to fully comply with the numbering system and procedures for requesting RIDs in this part of ISO/IEC 7816 ;
- b) to process within 30 days of receipt of requests, requests for RIDs from within their countries or areas of responsibility ;
- c) to notify the applicant in writing, within 30 days of receipt of the request, as to the disposition of their request. If rejected, to advise applicant of the reason(s) ;
- d) ensure that section "A" of the registration form has been filled in correctly ;
- e) confirm whether or not the applicant already has a RID of category A ;
- f) to forward to the Registration Authority (see subclause 7.7) requests for RIDs that meet the approval criteria, together with the requisite fee in a form determined by the Registration Authority ;
- g) on receipt of the number assignment from the Registration Authority, the Sponsoring Authority shall inform the applicant of the number assignment, returning the completed registration form containing the number assignment to the applicant informing it of the requirement to retain the completed registration form as a permanent record ;
- h) to reject requests for a specific number and for reservation of a specific number or any request outside the scope of this part of ISO/IEC 7816. Or, where special circumstances exist, to approve such a request and to put forward a copy of the relevant papers to the RMG for review ;
- i) to respond to general enquiries covering this part of ISO/IEC 7816 ;
- j) to establish and maintain a national numbering system where necessary according to this part of ISO/IEC 7816 annex B ;
- k) to forward to the Registration Authority any modification to the data related to an assigned RID.

7.5 Registration Management Group (RMG)

7.5.1 Constitution

In order to effectively manage the Registration system for applications in IC cards, the ISO technical body responsible for this part of ISO/IEC 7816 has established a RMG, ISO/IEC JTC1/SC17/WG5, which is delegated to act on its behalf.

The RMG shall be made up of:

- a) a representative of the Registration Authority who shall be a non-voting member of the RMG and shall be expected to attend all meetings ;
- b) each P and L member of the ISO technical body responsible for this part of ISO/IEC 7816 is entitled to nominate one delegate and one alternate to the RMG. The alternate may attend all meetings but is entitled to vote only in the absence of the principal delegate ;
- c) the convenor of the RMG and the secretariat of the RMG, nominated from the membership of the RMG.

7.5.2 Responsibilities

The responsibilities of the RMG shall be:

- a) to ensure that applicants whose requests do not fulfill the conditions in subclause 7.1.2.1 are rejected and informed of the cause of the rejection and furthermore informed of their right to appeal (see subclause 7.2) ;
- b) to provide, on request, guidance and counsel to any national standards body on the establishment of a national numbering system ;
- c) to provide guidance to Sponsoring Authorities on requests which demonstrate special circumstances and requests for specific numbers. This guidance shall be decided by resolution at a meeting or in writing following a letter ballot ;
- d) to review at each meeting of the RMG the Registration Management Report and the Summary of the Register of Issued Numbers Report received from the Registration Authority ;
- e) to provide guidance to Sponsoring Authorities to ensure that they comply with the criteria laid down within this part of ISO/IEC 7816 ;
- f) to respond to all requests from the Registration Authority within 60 days of the date of request ;
- g) to review annually the register of RIDs and to report the activities of the RMG to each meeting of the ISO technical body responsible for this part of ISO/IEC 7816 and as required between meetings.

7.5.3 Voting procedures

Where requests for assignment of a specific number(s), or any specific request outside the scope of this part of ISO/IEC 7816, have been forwarded to the RMG by a Sponsoring Authority, such requests may be dealt with either by voting at a meeting or by ballot.

By approval of a majority of returned votes in a ballot or by majority of those voting at a meeting, the RMG may authorise specific unusual requests.

Where a ballot has failed, it shall be referred to a meeting. If the RMG cannot resolve the failed ballot at a meeting, the matter shall be referred to the ISO technical body responsible for this part of ISO/IEC 7816.

Where a request has been rejected, the RMG shall notify the applicant in writing, within 30 days of the close of the ballot, or where a vote was taken at a meeting, within 30 days of that meeting, that the request has been rejected. The RMG shall state the specific reason(s) for the rejection and advise the applicant of their right to appeal to the ISO technical body responsible for this part of ISO/IEC 7816 (see subclause 7.2).

7.6 The register of RIDs

7.6.1 Publication and availability

The Registration Authority shall maintain a database of information taken directly from the registration form. From the database the Registration Authority shall publish a register of RIDs. The register shall be published in both numerical and alphabetical order. The information in the register shall be made available according to the rules given in subclause 7.7.3.1

7.6.2 Contents

The register of RIDs shall contain the following information:

- a) name of organisation;
- b) information as indicated on the registration form;
- c) RID(s) assigned to the application provider by the Registration Authority.

NOTE: A copy of each request received shall be maintained on file by the Registration Authority.

7.7 Registration Authority

7.7.1 Appointment

For the purpose of this part of ISO/IEC 7816 and according to the rules for the designation and operation of registration authorities in the ISO Directives, the ISO Council has designated Tele Danmark to act as registration authority. The contact information for the registration authority is located on the ISO web site (<http://www.iso.ch>) on the registration authority page.

7.7.2 Resignation

If a Registration Authority finds it necessary to resign, six months notice shall be given to the ISO Central Secretariat and the Secretariat of the ISO technical body responsible for this part of ISO/IEC 7816. The Secretariat of the ISO technical body responsible for this part of ISO/IEC 7816 shall notify the RMG and initiate a search for a new Registration Authority. If a new Registration Authority cannot be found within six months, the Secretariat of the ISO technical body responsible for this part of ISO/IEC 7816 in association with the ISO Central Secretariat shall assume the responsibilities of the Registration Authority on a temporary basis until a replacement is found. The information contained in the database and the associated documents remain the property of the ISO technical body responsible for this part of ISO/IEC 7816.

7.7.3 Responsibilities

7.7.3.1 General

The responsibilities of the Registration Authority shall be:

- a) to maintain the register of RIDs (see subclause 7.6) including its recoverability;
- b) to submit a copy of the ISO register of RIDs annually to the Secretariat of the ISO technical body responsible for this part of ISO/IEC 7816 and to the RMG. The form in which this copy shall be provided shall be agreed upon by the Registration Authority and the secretariat of the ISO technical body responsible for this part of ISO/IEC 7816;
- c) to submit for review to each meeting of the RMG, a Summary of the Register of Issued Numbers Report and a Registration Management Report. These reports shall be sent to the secretariat of the RMG two months prior to a meeting;
- d) to forward to the RMG, within 30 days of receipt of the request, requests where special circumstances exist;
- e) to retain as a permanent record copies of all requests submitted to it, along with the disposition of each request.
- f) to make available upon request a copy of the register to national standard bodies. Such copies are for the exclusive use of national standard bodies and should not be distributed to third parties.

7.7.3.2 Responsibilities to applicants requesting a RID

The responsibilities of the Registration Authority to applicants requesting a RID shall be:

- a) where requests fulfill the criteria set down in subclause 7.1.2.1, notify the Sponsoring Authority or the Secretariat of the ISO technical body responsible for this part of ISO/IEC 7816 as appropriate, in writing, within 30 days of receipt of the request, as to the number assignment;
- b) to assign a number(s) to the applicant and to forward the completed registration form to the Sponsoring Authority, within 30 days of receipt of the sponsored request;
- c) where a request is referred to the RMG, the Registration Authority shall notify the applicant, in writing, that a reply may not be received within the usual time frame, and the reason for referring the request to the RMG.

Annex Erreur! Argument de commutateur inconnu. (normative)

Request registration form for a registered application provider identifier

This request is submitted in accordance with International Standard ISO/IEC 7816-5, *Identification cards - Integrated circuit(s) cards with contacts - Numbering system and registration procedure for application identifiers*.

A.1 To be completed by the requesting organization

Name of organization		
Address to be registered		
Principal contact in organization		
Telephone number	Fax number	Email Address
Address for correspondence/billing		
Date	Signature	

A.2 To be completed by national standards body

Request received by	
Date	Signature

A.3 To be completed by ISO/IEC 7816-5 registration authority

Registered application provider identifier	
Date	Signature

Annex Erreur! Argument de commutateur inconnu. (informative)

National numbering systems for applications in integrated circuit(s) cards

B.1 Introduction

Registration category value 'D' has been assigned for use by national standards bodies in order to establish national numbering systems for applications in integrated circuit(s) cards.

B.2 Operation of national numbering systems

National standards bodies are advised to establish rules by means of national standards or other methods, for identifying applications in integrated circuit(s) cards in a national numbering system. They are also recommended to make arrangements for the administration of the system, including the procedures to be adopted for application providers, when the application providers make a request for and are assigned RIDs in accordance with the rules, and the maintenance of a register of assigned RIDs (copies of which should be supplied at regular intervals to the registration authority at no cost). To this end, they may wish to appoint a responsible organization to act as their agents in the administration and maintenance of the system within their countries.

B.3 Contact with the registration authority

National standards bodies that intend to set up national numbering systems for applications in integrated circuit(s) cards are asked to notify the registration authority accordingly and to supply that authority with details of the national procedures for the assignment of numbers, the method used to identify applications in integrated circuit(s) cards, and the name of the organization administering the system.

NOTE Where no national standards body exists, or if the national standards body is unable or unwilling to establish a national numbering system, application providers in that country may apply to the secretariat of the ISO technical body responsible for this part of ISO/IEC 7816 for assistance.

B.4 Role of registration management group

The registration management group in the ISO technical body responsible for this part of ISO/IEC 7816 shall, on request, provide advice and counsel to any national standards body on the national numbering system.

Annex Erreur! Argument de commutateur inconnu. (informative)

Application identifiers using an issuer identification number as registered application provider identifier

C.1 Background information

In the 1994 edition of this standard, it was possible to use issuer identification numbers as RIDs. As some of those may be in use, the purpose of this annex is to indicate the format of the AID in this case.

C.2 Format of an AID using an issuer identification number

The first part of the AID is the issuer identification number, the registration category is its first digit.

If the issuer identification number contains an odd number of digits, it is padded with 'F' (i.e. bit 4 to bit 1 of the least significant byte are set to 1).

If a PIX is present, it is preceded by a byte coded as 'FF'.

The coding of the AID is therefore :

