Data elements marked with an asterisk are recommended to be part of the minimum data requirements for ICC transactions.

For informational purposes, Annex D describes an example for conversion into message data elements.

2.1.1 Authorisation Request

An authorisation request should convey the data elements contained in Table III-1 and Table III-2 subject to the specified conditions.

Table III-1 contains the new data elements specifically created for an ICC transaction.

Data Element	Condition
Application Interchange Profile *	
Application Transaction Counter *	
ARQC *	
Cryptogram Information Data	
CVM Results	
IFD Serial Number	Present if Terminal Identifier does not implicitly refer to IFD Serial Number
Issuer Application Data *	Present if provided by ICC in GENERATE AC command response
Terminal Capabilities	
Terminal Type	
Terminal Verification Results *	
Unpredictable Number*	Present if input to application cryptogram calculation

Table III-1 - New Authorisation Request Data Elements

Table III-2 contains existing data elements necessary for an ICC transaction.

Data Element	Condition
Acquirer Identifier	Present for Terminal Type = '1x' or '2x' if Merchant Identifier or Terminal Identifier does not implicitly refer to a single acquirer
Amount, Authorised *	
Amount, Other *	Present if cashback used for current transaction
Application Effective Date	Present if in ICC
Application Expiration Date	Present if not in Track 2 Equivalent Data
Application PAN *	Present if not in Track 2 Equivalent Data
Application PAN Sequence Number *	Present if in ICC
Enciphered PIN Data	Present if CVM performed is 'enciphered PIN for online verification'
Merchant Category Code	Present for Terminal Type = '2x' if Merchant Identifier or Terminal Identifier does not implicitly refer to a single merchant category
Merchant Identifier	Present for Terminal Type = '2x' if Terminal Identifier does not implicitly refer to a single merchant
POS Entry Mode	
Terminal Country Code *	Present if Terminal Identifier or IFD Serial Number does not implicitly refer to a single terminal country
Terminal Identifier	
Track 2 Equivalent Data	Present if in ICC
Transaction Currency Code *	Present if Merchant Identifier or Terminal Identifier does not implicitly refer to a single transaction currency accepted at point of transaction
Transaction Date *	
Transaction Time	Present if Terminal Type = 'x2', 'x3', 'x5', or 'x6'
Transaction Type *	

Table III-2 - Existing Authorisation Request Data Elements

2.1.2 Financial Transaction Request

A financial transaction request should convey the data elements contained in Table III-3 and Table III-4 subject to the specified conditions.

Table III-3 contains the new data elements created specifically for an ICC transaction.

Data Element	Condition
Application Interchange Profile *	
Application Transaction Counter *	
Application Usage Control	Present if requested by acquirer
ARQC *	
Cryptogram Information Data	
CVM List	Present if requested by acquirer
CVM Results	
IFD Serial Number	Present if Terminal Identifier does not implicitly refer to IFD Serial Number
Issuer Action Code - Default	Present if requested by acquirer
Issuer Action Code - Denial	Present if requested by acquirer
Issuer Action Code - Online	Present if requested by acquirer
Issuer Application Data *	Present if provided by ICC in GENERATE AC command response
Terminal Capabilities	
Terminal Type	
Terminal Verification Results *	
Unpredictable Number *	Present if input to application cryptogram calculation

Table III-3 - New Financial Transaction Request Data Elements

Table III-4 contains existing data elements necessary for an ICC transaction.

Data Element	Condition
Acquirer Identifier	Present for Terminal Type = '1x' or '2x' if Merchant Identifier or Terminal Identifier does not implicitly refer to a single acquirer
Amount, Authorised *	Present if final transaction amount is different from authorised amount
Amount, Other *	Present if cashback used for current transaction
Application Effective Date	Present if in ICC
Application Expiration Date	Present if not in Track 2 Equivalent Data
Application PAN *	Present if not in Track 2 Equivalent Data
Application PAN Sequence Number *	Present if in ICC
Enciphered PIN Data	Present if CVM performed is 'Enciphered PIN for online verification'.
Issuer Country Code	Present if requested by acquirer
Merchant Category Code	Present for Terminal Type = '2x' if Merchant Identifier or Terminal Identifier does not implicitly refer to a single merchant category
Merchant Identifier	Present for Terminal Type = '2x' if Terminal Identifier does not implicitly refer to a single merchant
POS Entry Mode	
Terminal Country Code *	Present if Terminal Identifier or IFD Serial Number does not implicitly refer to a single terminal country
Terminal Identifier	
Track 2 Equivalent Data	Present if in ICC
Transaction Amount *	

Transaction Currency Code *	Present if Merchant Identifier or Terminal Identifier does not implicitly refer to a single transaction currency accepted at point of transaction
Transaction Date *	
Transaction Time	Present if Terminal Type = 'x2', 'x3', 'x5', or 'x6'
Transaction Type *	

Table III-4 - Existing Financial Transaction Request Data Elements

2.1.3 Authorisation or Financial Transaction Response

Authorisation and financial transaction responses should convey the data elements contained in Table III-5 and Table III-6 subject to the specified conditions:

Table III-5 contains the new data elements specifically created for an ICC transaction.

Data Element	Condition
Issuer Authentication Data	Present if online issuer authentication performed
Issuer Script(s)	Present if commands to ICC are sent by issuer

Table III-5 - New Authorisation or Financial Transaction Response Data Elements

Table III-6 contains existing data elements necessary for an ICC transaction.

Data Element	Condition
Acquirer Identifier	Present for Terminal Type = '1x' or '2x' if in request message
Amount, Authorised	
Authorisation Code	Present if transaction is approved
Authorisation Response Code	

Terminal Identifier	
Transaction Date	
Transaction Time	

Table III-6 - Existing Authorisation or Financial Transaction Response Data Elements

2.1.4 Financial Transaction Confirmation

A financial transaction confirmation should convey the data elements contained in Table III-7 and Table III-8 subject to the specified conditions.

Table III-7 contains the new data elements specifically created for an ICC transaction.

Data Element	Condition
Issuer Script Results	Present if script commands to ICC are delivered by terminal
TC or AAC	

Table III-7 - New Financial Transaction Confirmation Data Elements

Table III-8 contains existing data elements necessary for an ICC transaction.

Data Element	Condition
Terminal Identifier	

Table III-8 - Existing Financial Transaction Confirmation Data Elements

2.1.5 Batch Data Capture

Batch data capture should convey the data elements contained in Table III-9 and Table III-10 subject to the specified conditions. Message Type is used to distinguish between an offline advice and a financial record.

Table III-9 contains the new data elements specifically created for an ICC transaction.

Data Element	Condition
Application Interchange Profile *	
Application Transaction Counter *	
Application Usage Control	Present if requested by acquirer
Cryptogram Information Data	
CVM List	Present if requested by acquirer
CVM Results	
IFD Serial Number	Present if Terminal Identifier does not implicitly refer to IFD Serial Number
Issuer Action Code - Default	Present if requested by acquirer
Issuer Action Code - Denial	Present if requested by acquirer
Issuer Action Code - Online	Present if requested by acquirer
Issuer Application Data *	Present if provided by ICC in GENERATE AC command response
Issuer Script Results	Present if script commands to ICC are delivered by terminal
Terminal Capabilities	
Terminal Type	
Terminal Verification Results *	
TC or AAC *	
Unpredictable Number *	Present if input to application cryptogram calculation

Table III-9 - New Batch Data Capture Data Elements

Table III-10 contains existing data elements necessary for an ICC transaction.

Data Element	Condition
Acquirer Identifier	Present if for Terminal Type = '1x' or '2x' Merchant Identifier or Terminal Identifier does not implicitly refer to a single acquirer
Amount, Authorised *	Present if final transaction amount is different from authorised amount
Amount, Other *	Present if cashback used for current transaction
Application Effective Date	Present if in ICC
Application Expiration Date	
Application PAN *	
Application PAN Sequence Number *	Present if in ICC
Authorisation Code	Present if transaction is approved
Authorisation Response Code	
Issuer Country Code	Present if requested by acquirer
Merchant Category Code	Present for Terminal Type = '2x' if Merchant Identifier or Terminal Identifier does not implicitly refer to a single merchant category
Merchant Identifier	Present for Terminal Type = '2x' if Terminal Identifier does not implicitly refer to a single merchant
Message Type	
POS Entry Mode	
Terminal Country Code *	Present if Terminal Identifier or IFD Serial Number does not implicitly refer to a single terminal country
Terminal Identifier	
Transaction Amount *	

Transaction Currency Code *	Present if Merchant Identifier or Terminal Identifier does not implicitly refer to a single transaction currency accepted at point of transaction
Transaction Date *	
Transaction Time	
Transaction Type *	

Table III-10 - Existing Batch Data Capture Data Elements

2.1.6 Reconciliation

A reconciliation should convey the existing data elements necessary for ICC transactions and subject to the specified conditions.

Data Element	Condition
Acquirer Identifier	Present for Terminal Type = '1x' or '2x' if Merchant Identifier or Terminal Identifier does not implicitly refer to a single acquirer
Amount, Net Reconciliation	
Merchant Identifier	Present for Terminal Type = '2x' if Terminal Identifier implicitly does not refer to a single merchant
Reconciliation Currency Code	Present if Merchant Identifier or Terminal Identifier does not implicitly refer to a single transaction currency accepted at point of transaction
Terminal Identifier	
Transactions Number (per transaction type)	
Transactions Amount (per transaction type)	

Table III-11 - Existing Reconciliation Data Elements

2.1.7 Online Advice

An online advice should convey the data elements contained in Tables III-12 and III-13 subject to the specified conditions.

Table III-12 contains the new data elements specifically created for an ICC transaction.

Data Element	Condition
Application Interchange Profile	
Application Transaction Counter	
Cryptogram Information Data	
CVM Results	
IFD Serial Number	Present if Terminal Identifier does not implicitly refer to IFD Serial Number
Issuer Application Data	Present if provided by ICC in GENERATE AC command response
Issuer Script Results	Present if script commands to ICC are delivered by terminal
Terminal Capabilities	
Terminal Type	
Terminal Verification Results	
TC or AAC	
Unpredictable Number	Present if input to application cryptogram calculation

Table III-12 - New Online Advice Data Elements

Table III-13 contains existing data elements necessary for an ICC transaction.

Data Element	Condition
Acquirer Identifier	Present for Terminal Type = '1x' or '2x' if Merchant Identifier or Terminal Identifier does not implicitly refer to a single acquirer
Amount, Authorised	Present if final transaction amount is different from authorised amount
Application Effective Date	Present if in ICC
Application Expiration Date	Present if not in Track 2 Equivalent Data
Application PAN	Present if not in Track 2 Equivalent Data
Application PAN Sequence Number	Present if in ICC
Authorisation Response Code	
Merchant Category Code	Present for Terminal Type = '2x' if Merchant Identifier or Terminal Identifier does not implicitly refer to a single merchant category
Merchant Identifier	Present for Terminal Type = '2x' if Terminal Identifier does not implicitly refer to a single merchant
POS Entry Mode	
Terminal Country Code	Present if Terminal Identifier or IFD Serial Number does not implicitly refer to a single terminal country
Terminal Identifier	
Track 2 Equivalent Data	Present if in ICC
Transaction Amount	
Transaction Currency Code	Present if Merchant Identifier or Terminal Identifier does not implicitly refer to a single transaction currency accepted at point of transaction
Transaction Date	
Transaction Time	Present if Terminal Type = 'x2', 'x3', 'x5, or 'x6'
Transaction Type	

Table III-13 - Existing Online Advice Data Elements

2.1.8 Reversal

A reversal should convey the data elements contained in Table III-14 and Table III-15 subject to the specified conditions.

Table III-14 contains the new data elements specifically created for an ICC transaction.

Data Element	Condition
Application Interchange Profile	
Application Transaction Counter	
IFD Serial Number	Present if Terminal Identifier does not implicitly refer to IFD Serial Number
Issuer Application Data	Present if provided by ICC in GENERATE AC command response
Issuer Script Results	Present if script commands to ICC are delivered by terminal
Terminal Capabilities	
Terminal Type	
Terminal Verification Results	

Table III-14 - New Reversal Data Elements

Table III-15 contains existing data elements necessary for an ICC transaction.

Data Element	Condition
Acquirer Identifier	Present for Terminal Type = '1x' or '2x' if Merchant Identifier or Terminal Identifier does not implicitly refer to a single acquirer
Application Expiration Date	Present if not in Track 2 Equivalent Data
Application PAN	Present if not in Track 2 Equivalent Data
Application PAN Sequence Number	Present if in ICC
Authorisation Response Code	
Merchant Category Code	Present for Terminal Type = '2x' if Merchant Identifier or Terminal Identifier does not implicitly refer to a single merchant category
Merchant Identifier	Present for Terminal Type = '2x' if Terminal Identifier does not implicitly refer to a single merchant
Original Data Elements	Present if available at terminal
POS Entry Mode	
Terminal Country Code	Present if Terminal Identifier or IFD Serial Number does not implicitly refer to a single terminal country
Terminal Identifier	
Track 2 Equivalent Data	Present if in ICC
Transaction Amount	
Transaction Currency Code	Present if Merchant Identifier or Terminal Identifier does not implicitly refer to a single transaction currency accepted at point of transaction
Transaction Date	
Transaction Time	Present if Terminal Type = 'x2', 'x3', 'x5, or 'x6'
Transaction Type	

Table III-15 - Existing Reversal Data Elements

2.2 Exception Handling

This section describes exception conditions that may occur during real-time authorisation, financial transaction, or online advice and the associated actions the terminal shall perform.

In this section, the term 'authorisation' applies to authorisation messages as well as financial transaction messages.

2.2.1 Unable to Go Online

During transaction processing, the terminal may send an authorisation request to the acquirer due to at least one of the following conditions:

- Online-only terminal type

- Attendant action (for example, merchant suspicious of cardholder)

- Terminal risk management parameters set by the acquirer

- Terminal action analysis in comparing Terminal Verification Results with Issuer Action Code - Online (see the *Integrated Circuit Card Application Specification for Payment Systems*)

- Card action analysis via its response to the first GENERATE AC command: Cryptogram Information Data indicates ARQC returned (see the *Integrated Circuit Card Specification for Payment Systems* and the *Integrated Circuit Card Application Specification for Payment Systems*)

If the terminal is unable to process the transaction online, as described in the *Integrated Circuit Card Application Specification for Payment Systems,* the terminal shall compare the Terminal Verification Results with both Terminal Action Code - Default and Issuer Action Code - Default to determine whether to accept or decline the transaction offline and shall issue the second GENERATE AC command to the ICC indicating its decision:

- If the terminal accepts the transaction, it shall set the Authorisation Response Code to 'Unable to go online, offline accepted'.

- If the terminal declines the transaction, it shall set the Authorisation Response Code to 'Unable to go online, offline declined'.

The result of card risk management performed by the ICC is made known to the terminal through the return of the Cryptogram Information Data indicating either a TC for an approval or an AAC for a decline.

2.2.2 Downgraded Authorisation

When the authorisation response received by the terminal does not contain the Issuer Authentication Data, the terminal shall not execute the EXTERNAL AUTHENTICATE command and shall set the 'Issuer authentication was performed' bit in the Transaction Status Information to '0', as described in the *Integrated Circuit Card Application Specification for Payment Systems*. The terminal shall continue processing based on the Authorisation Response Code returned in the response message as described in section I-2.2.6 of this specification.

Note: If the acquirer or the intermediate network is unable to support ICC messages, the terminal should send messages compliant with current payment system specifications. Payment systems will determine compliance requirements for message content.

2.2.3 Authorisation Response Incidents

The authorisation response may not be correctly received by the terminal. The following incidents may occur:

- Response not received or received too late (for example, network failure, time-out)

- Response with invalid format or syntax

- Request not received by the authorisation host (for example, network failure)

After repeat(s) of the authorisation request, the terminal shall process the transaction as being unable to go online. As described in the *Integrated Circuit Card Application Specification for Payment Systems,* the terminal shall compare the Terminal Verification Results with both Terminal Action Code - Default and Issuer Action Code - Default to determine whether to accept or decline the transaction offline and shall issue the second GENERATE AC command to the ICC indicating its decision:

- If the terminal accepts the transaction, it shall set the Authorisation Response Code to 'Unable to go online, offline accepted'.

- If the terminal declines the transaction, it shall set the Authorisation Response Code to 'Unable to go online, offline declined'.

The result of card risk management performed by the ICC is made known to the terminal through the return of the Cryptogram Information Data indicating either a TC for an approval or an AAC for a decline.

When online data capture is performed by the acquirer, the terminal shall send a reversal message regardless of the final decision on the transaction (to ensure that if the authorisation host received a request and sent a response, the transaction is cancelled). After transmission of the reversal, if the transaction is finally approved

offline (TC returned by the ICC), the terminal shall create a financial record to be forwarded to the acquirer.

2.2.4 Script Incidents

The Issuer Script may not be correctly processed. The following incidents may occur:

- Script length error: The response message contains one (or more) Issuer Script(s) whose cumulative total length is larger than the script length supported by the network or terminal.

- Script with incorrect format or syntax: The terminal is unable to correctly parse the Issuer Script(s) into single Script Commands, as specified in the *Integrated Circuit Card Application Specification for Payment Systems.*

If either of these incidents occur, the terminal shall terminate the processing of the Issuer Script in which the incident occurred, shall read if possible the Script Identifier (when present) and shall report it as not performed in the Issuer Script Results of the financial transaction confirmation or batch data capture message. The terminal shall continue processing any subsequent Issuer Script.

2.2.5 Advice Incidents

If the terminal is unable to create an advice when requested by the card in the Cryptogram Information Data returned in the response to the GENERATE AC command as described in section I-2.2.6, of this specification, the terminal shall terminate the transaction.

Annexes

Annex A - Coding of Terminal Data Elements

This annex provides the coding for the Terminal Type, Terminal Capabilities, Additional Terminal Capabilities, CVM Results, Issuer Script Results, and Authorisation Response Code.

Coding of data (bytes or bits) indicated as RFU shall be '0'.

A1. Terminal Type

Environment	Operational Control Provided By:		
	Financial Institution	Merchant	Cardholder[14]
Attended			
Online only	11	21	--
Offline with online capability	12	22	--
Offline only	13	23	--
Unattended			
Online only	14	24	34
Offline with online capability	15	25	35
Offline only	16	26	36

Table A-1 - Terminal Type

Terminal Types '14', '15', and '16' with cash disbursement capability (Additional Terminal Capabilities, byte 1, 'cash' bit = '1') are considered to be ATMs. All other Terminal Types are not considered to be ATMs.

---

[14] For the purpose of this specification, an attended cardholder-controlled terminal is considered to be a nonexistent category.

Examples of terminal types are:

- Attended and controlled by financial institution: Branch terminal

- Attended and controlled by merchant: Electronic cash register, portable POS terminal, stand-alone POS terminal, host concentrating POS terminal

- Unattended and controlled by financial institution: ATM, banking automat

- Unattended and controlled by merchant: Automated fuel dispenser, pay telephone, ticket dispenser, vending machine

- Unattended and controlled by cardholder: Home terminal, personal computer, screen telephone

See Annex F for more detailed examples.

A2. Terminal Capabilities

In the tables, a '1' means that if that bit has the value '1', the corresponding 'meaning' applies. An 'x' means that the bit does not apply

Byte 1: Card Data Input Capability

b8	b7	b6	b5	b4	b3	b2	b1	Meaning
1	x	x	x	x	x	x	x	Manual key entry
x	1	x	x	x	x	x	x	Magnetic stripe
x	x	1	x	x	x	x	x	IC with contacts
x	x	x	0	x	x	x	x	RFU
x	x	x	x	0	x	x	x	RFU
x	x	x	x	x	0	x	x	RFU
x	x	x	x	x	x	0	x	RFU
x	x	x	x	x	x	x	0	RFU

Table A-2 - Terminal Capabilities

Byte 2: CVM Capability

b8	b7	b6	b5	b4	b3	b2	b1	Meaning
1	x	x	x	x	x	x	x	Plaintext PIN for ICC verification
x	1	x	x	x	x	x	x	Enciphered PIN for online verification
x	x	1	x	x	x	x	x	Signature (paper)
x	x	x	0	x	x	x	x	RFU
x	x	x	x	0	x	x	x	RFU
x	x	x	x	x	0	x	x	RFU
x	x	x	x	x	x	0	x	RFU
x	x	x	x	x	x	x	0	RFU

Table A-2 - Terminal Capabilities

If the terminal supports a CVM of signature, the terminal shall be an attended terminal (Terminal Type = 'x1', 'x2', or 'x3') and shall support a printer (Additional Terminal Capabilities, byte 4, 'Print, attendant' bit = '1').

Byte 3: Security Capability

b8	b7	b6	b5	b4	b3	b2	b1	Meaning
1	x	x	x	x	x	x	x	Static data authentication
x	1	x	x	x	x	x	x	Dynamic data authentication
x	x	1	x	x	x	x	x	Card capture
x	x	x	0	x	x	x	x	RFU
x	x	x	x	0	x	x	x	RFU
x	x	x	x	x	0	x	x	RFU
x	x	x	x	x	x	0	x	RFU
x	x	x	x	x	x	x	0	RFU

Table A-2 - Terminal Capabilities

A3. Additional Terminal Capabilities

In the tables, a '1' means that if that bit has the value '1', the corresponding 'meaning' applies. An 'x' means that the bit does not apply

Byte 1: Transaction Type Capability

b8	b7	b6	b5	b4	b3	b2	b1	Meaning
1	x	x	x	x	x	x	x	Cash
x	1	x	x	x	x	x	x	Goods
x	x	1	x	x	x	x	x	Services
x	x	x	1	x	x	x	x	Cashback
x	x	x	x	1	x	x	x	Inquiry[15]
x	x	x	x	x	1	x	x	Transfer[16]
x	x	x	x	x	x	1	x	Payment[17]
x	x	x	x	x	x	x	1	Administrative

Table A-3 - Additional Terminal Capabilities

---

[15] For the purpose of this specification, an inquiry is a request for information about one of the cardholder's accounts.

[16] For the purpose of this specification, a transfer is a movement of funds by a cardholder from one of its accounts to another of the cardholder's accounts, both of which are held by the same financial institution.

[17] For the purpose of this specification, a payment is a movement of funds from a cardholder account to another party, for example, a utility bill payment.

Byte 2: Transaction Type Capability, continued

b8	b7	b6	b5	b4	b3	b2	b1	Meaning
0	x	x	x	x	x	x	x	RFU
x	0	x	x	x	x	x	x	RFU
x	x	0	x	x	x	x	x	RFU
x	x	x	0	x	x	x	x	RFU
x	x	x	x	0	x	x	x	RFU
x	x	x	x	x	0	x	x	RFU
x	x	x	x	x	x	0	x	RFU
x	x	x	x	x	x	x	0	RFU

Table A-3 - Additional Terminal Capabilities

Byte 3: Terminal Data Input Capability

b8	b7	b6	b5	b4	b3	b2	b1	Meaning
1	x	x	x	x	x	x	x	Numeric keys
x	1	x	x	x	x	x	x	Alphabetic and special characters keys
x	x	1	x	x	x	x	x	Command keys
x	x	x	1	x	x	x	x	Function keys
x	x	x	x	0	x	x	x	RFU
x	x	x	x	x	0	x	x	RFU
x	x	x	x	x	x	0	x	RFU
x	x	x	x	x	x	x	0	RFU

Table A-3 - Additional Terminal Capabilities

Byte 4: Terminal Data Output Capability[18]

b8	b7	b6	b5	b4	b3	b2	b1	Meaning
1	x	x	x	x	x	x	x	Print, attendant
x	1	x	x	x	x	x	x	Print, cardholder
x	x	1	x	x	x	x	x	Display, attendant
x	x	x	1	x	x	x	x	Display, cardholder
x	x	x	x	0	x	x	x	RFU
x	x	x	x	x	0	x	x	RFU
x	x	x	x	x	x	1	x	Code table 10
x	x	x	x	x	x	x	1	Code table 9

Table A-3 - Additional Terminal Capabilities

The code table number refers to the corresponding part of ISO 8859.

---

[18] If the terminal is attended (Terminal Type = 'x1', 'x2', or 'x3') and there is only one printer, the 'Print, attendant' bit shall be set to '1' and the 'Print, cardholder' bit shall be set to '0'.

If the terminal is attended and there is only one display, the 'Display, attendant' bit shall be set to '1' and the 'Display, cardholder' bit shall be set to '0'.

If the terminal is unattended (Terminal Type = 'x4', 'x5', or 'x6'), the 'Print, attendant' and 'Display, attendant' bits shall be set to '0'.

Byte 5: Terminal Data Output Capability, continued

b8	b7	b6	b5	b4	b3	b2	b1	Meaning
1	x	x	x	x	x	x	x	Code table 8
x	1	x	x	x	x	x	x	Code table 7
x	x	1	x	x	x	x	x	Code table 6
x	x	x	1	x	x	x	x	Code table 5
x	x	x	x	1	x	x	x	Code table 4
x	x	x	x	x	1	x	x	Code table 3
x	x	x	x	x	x	1	x	Code table 2
x	x	x	x	x	x	x	1	Code table 1

Table A-3 - Additional Terminal Capabilities

A4. CVM Results

Byte 1: CVM Performed

Last CVM of the CVM List actually performed by the terminal: One-byte CVM Code of the CVM List as defined in the *Integrated Circuit Card Application Specification for Payment Systems* ('3F' if no CVM is performed)

Byte 2: CVM Condition

One-byte CVM Condition Code of the CVM List as defined in the *Integrated Circuit Card Application Specification for Payment Systems*

Byte 3: CVM Result

Result of the (last) CVM performed as known by the terminal:

'0' = Unknown (for example, for signature)
'1' = Failed (for example, for offline PIN)
'2' = Successful (for example, for offline PIN)

A5. Issuer Script Results

Byte 1: Script Result

<u>First nibble:</u> Result of the Issuer Script processing performed by the terminal:

'0' = Script not performed
'1' = Script processing failed
'2' = Script processing successful

<u>Second nibble:</u> Sequence number of the Script Command

'0'   = Not specified
'1' to 'E'   = Sequence number from 1 to 14
'F'   = Sequence number of 15 or above

Bytes 2-5: Script Identifier

Script Identifier of the Issuer Script received by the terminal, if available, zero filled if not. Mandatory if more than one Issuer Script was received by the terminal.

Bytes 1-5 are repeated for each Issuer Script processed by the terminal.

A6. Authorisation Response Code

When transmitted to the card, the Authorisation Response Code obtained from the authorisation response message shall include at least the following:

- Online approved

- Online declined

- Referral (initiated by issuer)

- Capture card

In addition, the terminal shall be able to generate and transmit to the card the following new response codes when transactions are not authorised online:

- Unable to go online, offline approved

- Unable to go online, offline declined

- Offline approved

- Offline declined

- Approval (after card-initiated referral)

- Decline (after card-initiated referral)

The codes are to be set by individual payment systems.

The terminal shall never modify the Authorisation Response Code returned in the response message[19].

---

[19] The card's final decision is reflected in the Cryptogram Information Data and not in the Authorisation Response Code.

Annex B - Terminal-Related Data Table

Table B-1 lists data that may be used by the terminal during transaction processing or for financial transaction interchange. Data transmitted from the terminal to the card are also listed in the *Integrated Circuit Card Specification for Payment Systems*. Table B-1 does not list data transmitted from the card to the terminal: see the *Integrated Circuit Card Specification for Payment Systems* for further description.

Name	Description	Source	Format	Tag	Length
Acquirer Identifier	Uniquely identifies the acquirer within each payment system	Terminal	n 6-11	'9F01'	6
Additional Terminal Capabilities	Indicates the data input and output capabilities of the terminal	Terminal	b	'9F40'	3
Amount, Authorised (Binary)	Authorised amount of the transaction (excluding adjustments)	Terminal	b	'81'	4
Amount, Authorised (Numeric)	Authorised amount of the transaction (excluding adjustments)	Terminal	n 12	'9F02'	6
Amount, Other (Binary)	A secondary amount associated with the transaction representing a cashback amount	Terminal	b	'9F04'	4
Amount, Other (Numeric)	A secondary amount associated with the transaction representing a cashback amount	Terminal	n 12	'9F03'	6
Amount, Reference Currency (Binary)	Authorised amount expressed in the reference currency	Terminal	b	'9F3A'	4
Application Identifier (AID)	Identifies the application as described in ISO/IEC 7816-5	Terminal	b	'9F06'	5-16
Application Version Number	Version number assigned by the payment system for the application	Terminal	b	'9F09'	2