

## Annex D (normative)

### Code listings

#### Account reference codes (bit 51)

Table D.1 identifies the account or entity to which the information in a specific dataset instance of the Account owner data is related (see C.3.21.5).

**Table D.1 — Account reference codes**

Code	Description
01	Account type 1 (related to account implied in Processing Code bit 3, positions 3-4, Account type 1)
02	Account Type 2 (related to account implied in Processing Code bit 3, positions 5-6, Account type 2)
03	Account Identification 1 (related to account specified in bit 102, Account identification 1)
04	Account Identification 2 (related to account specified in bit 103, Account identification 2)
05	Payer (related to an entity sending money or payment)
06	Payee (related to an entity receiving money or a payment – e.g. entity specified in bit 98, Payee)

#### Account type codes (bits 3, 54)

Table D.2 lists the Account type codes that are used in the Processing code (see C.3.1) and in Amounts additional (see C.3.22).

**Table D.2 — Account type codes**

Range	Codes	Description
00-0Z Default	00	Default – unspecified
	01-02	Default – reserved for ISO use
	03-07	Default – reserved for national use
	08-09	Default – reserved for private use
	0A-0Z	Default – reserved for ISO use
10-1Z Savings account	10	Savings account – default
	11	Savings account – money market
	12	Savings account – certificate of deposit
	13-15	Savings account – reserved for ISO use
	16-17	Savings account – reserved for national use
	18-19	Savings account – reserved for private use
	1A-1Z	Savings account – reserved for ISO use

20-2Z Cheque account	20	Cheque account – default
	21	Cheque account – money market checking
	22-22	Cheque account – reserved for ISO use
	23-27	Cheque account – reserved for national use
	28-29	Cheque account – reserved for private use
	2A-2Z	Cheque account – reserved for ISO use
30-3Z Credit facility	30	Credit facility – default
	31	Credit facility – line of credit
	32	Credit facility – instalment loan
	33	Credit facility – mortgage loan
	34	Credit facility – home equity loan
	35	Credit facility – Deferred debit
	36	Credit facility – Charge
	37-38	Credit facility – reserved for national use
	39	Credit facility – reserved for private use
	3A-3Z	Credit facility – reserved for ISO use
40-4Z Universal account	40	Universal account – default
	41-42	Universal account – reserved for ISO use
	43-47	Universal account – reserved for national use
	48-49	Universal account – reserved for private use
	4A-4Z	Universal account – reserved for ISO use
50-5Z Investment account	50	Investment account – default
	51	Investment account – stock or bond
	52	Investment account – retirement account
	53	Investment account – revolving loan account
	54-55	Investment account – reserved for ISO use
	56-57	Investment account – reserved for national use
	58-59	Investment account – reserved for private use
	5A-5Z	Investment account – reserved for ISO use
60-6Z Electronic purse card account	60	Electronic purse card account – default
	61-63	Electronic purse card account – reserved for ISO use
	64-66	Electronic purse card account – reserved for national use

	67-69	Electronic card account – reserved for private use
	6A-6Z	Electronic purse card account – reserved for ISO use
70-7Z Benefit account	70	Benefit account – default
	71	Benefit account – general
	72	Benefit account – food
	73	Benefit account – healthcare
	74	Benefit account – fuel
	75	Benefit account – agricultural
	76	Benefit account – pension
	77-7G	Reserved for ISO use
	7H-7Q	Reserved for national use
	7R-7Z	Reserved for private use
80-8Z	80-85	Reserved for ISO use
Reserved	86-87	Reserved for national use
	88-89	Reserved for private use
	8A-8Z	Reserved for ISO use
90-9Z Reserved	90-95	Reserved for ISO use
	96-97	Reserved for national use
	98-99	Reserved for private use
9A-ZZ Reserved	9A-IZ	Reserved for ISO use
	J0-PZ	Reserved for national use
	R0-ZZ	Reserved for private use

### Action codes (bit 39)

Table D.3 lists the action codes.

**Table D.3 – Action codes**

Range	Codes	Description
0000-0999	0000	Approved or completed successfully
Used in 110, 120, 121, 140 210, 220, 221 and 240 messages to indicate that the transaction has been approved	0001	Honour with identification
	0002	Approved for partial amount
	0003	Approved (VIP)
	0004	Approved, update track 3
	0005	Approved, account type specified by card issuer
	0006	Approved for partial amount, account type specified by issuer

	0008	Approved but fees disputed
	0009	Approved with overdraft
	0010	Approved, customer reactivated
	0011	Approved, unable to process online
	0012	Approved, transaction processed offline
	0013	Approved, transaction processed offline after referral
	0014-0084	Reserved for ISO use
	0085	No reason to decline
	0086-0599	Reserved for ISO use
	0600-0799	Reserved for national use
	0800-0999	Reserved for private use
1000-1999 Used in 110, 114, 120, 121, 124, 140 144, 154 and 210, 220, 221 and 240 messages to indicate that the transaction has been processed for authorization or verification by or on behalf of the card issuer and has been denied (not requiring a card pick-up.)	1000	Do not honour
	1001	Expired card
	1002	Suspected fraud
	1003	Card acceptor contact acquirer
	1004	Restricted card
	1005	Card acceptor call acquirer's security department
	1006	Allowable number of PIN tries exceeded
	1007	Refer to card issuer
	1008	Refer to card issuer's special conditions
	1009	Invalid merchant
	1010	Invalid amount
	1011	Invalid card number (no such number)
	1012	PIN data required
	1013	Unacceptable transaction fee
	1014	No account of type requested
	1015	Requested function not supported
	1016	Not sufficient funds
	1017	Incorrect personal identification number
	1018	No card record
	1019	Transaction not permitted to cardholder
	1020	Transaction not permitted to terminal

1022	Security violation
1023	Exceeds withdrawal frequency limit
1024	Transaction cannot be completed; violation of law
1025	Card not effective
1026	Invalid PIN block
1027	PIN length error
1028	Key sync error
1029	Suspected counterfeit card
1030	Currency unacceptable to card issuer
1031	Not authorized and fees disputed
1032	Lost/stolen card
1033	Authorization lifecycle unacceptable
1034	Authorization lifecycle has expired
1035	Closed account, or restricted for closing
1036	Closed savings account, or restricted for closing
1037	Closed credit account or restricted for closing
1038	Closed credit facility cheque account or restricted for closing
1039	Closed cheque account or restricted for closing
1040	Bad debt
1041	From account bad status
1042	To account bad status
1043	Cheque already posted
1044	Information not on file
1045	Verification data failed
1046	Amount not found
1047	PIN change required
1048	New PIN invalid
1049	Bank not found
1050	Bank not effective
1051	Customer vendor not found
1052	Customer vendor not effective
1053	Customer vendor account invalid
1054	Vendor not found
1055	Vendor not effective

1056	Vendor data invalid
1057	Payment date invalid
1058	Personal identification not found
1059	Scheduled transactions exist
1060	Transaction did not complete normally at terminal
1061	Transaction not supported or transaction blocked by the card issuer
1062	Cashback not allowed
1063	Cashback amount exceeded
1064	Declined, transaction processed offline
1065	Declined, unable to process offline
1066	Declined, transaction processed offline after referral
1067	Additional consumer authentication required
1068	Identification number invalid
1069	Driver number invalid
1070	Vehicle number invalid
1071	Digital certificate expired
1072	Surcharge amount not permitted for card product
1073	Surcharge not permitted by selected network
1074	Exceeds pre-authorized amount
1075	Stop payment order – specific pre-authorized payment
1076	Stop payment order – all pre-authorized payments for merchant
1077	Stop payment order – account
1078	Transaction does not fulfil anti-money-laundering requirements
1079	Exceeds withdrawal amount limit
1080	PIN is not allowed for transaction
1081	Message number out of sequence
1082	Original transaction was declined
1083	Transaction blocked by cardholder-contact cardholder
1084-1599	Reserved for ISO use
1600-1799	Reserved for national use

	1800-1999	Reserved for private use
2000-2999 Used in 110, 114, 120, 121, 124, 140 144, 154 and 210, 220, 221 and 240 messages to indicate that the transaction has been processed for authorization or verification by or on behalf of the card issuer and has been denied requiring the card to be picked up	2000	Pick-up
	2001	Expired card
	2002	Suspected fraud
	2003	Card acceptor contact acquirer
	2004	Restricted card
	2005	Card acceptor call acquirer security
	2006	Allowable PIN tries exceeded
	2007	Pick-up card, special condition
	2008	Lost card, pick-up
	2009	Stolen card, pick-up
	2010	Suspected counterfeit card, pick up card
	2011	Daily withdrawal uses exceeded
	2012	Daily withdrawal amount exceeded
	2013-2599	Reserved for ISO use
	2600-2799	Reserved for national use
2800-2999	Reserved for private use	
3000-3999 Used in 314, 324, 325 and 344 messages to indicate the result of the file action	3000	Successful
	3001	File update not supported by receiver
	3002	Unable to locate record on file
	3003	Duplicate file update record, old record replaced
	3004	File update field edit error
	3005	File update file locked out
	3006	File update not successful
	3007	Format error
	3008	Duplicate, new record rejected
	3009	Unknown file
	3010	Invalid card/cardholder number
	3011-3599	Reserved for ISO use
	3600-3799	Reserved for national use
3800-3999	Reserved for private use	

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4000-4999 Used in 430, 432, 440 and 442 messages to indicate the result of the reversal or chargeback	4000	Accepted
	4001-4599	Reserved for ISO use
	4600-4799	Reserved for national use
	4800-4999	Reserved for private use
5000-5999 Used in 510, 512, 530 and 532 messages to indicate the result of a reconciliation	5000	Reconciled, in balance
	5001	Reconcile error
	5002	Amount not reconciled, totals provided
	5003	Totals not available
	5004	Not reconciled, totals provided
	5005-5599	Reserved for ISO use
	5600-5799	Reserved for national use
6000-6999 Used in 6xx messages to indicate the result of an administrative activity	6000	Accepted
	6001-6599	Reserved for ISO use
	6600-6799	Reserved for national use
	6800-6999	Reserved for private use
7000-7999 Used in 720, 721, 740, 722, 723 and 742 messages to indicate the result of a fee collection	7000	Accepted
	7001-7599	Reserved for ISO use
	7600-7799	Reserved for national use
	7800-7999	Reserved for private use
8000-8999 Used in 8xx network management messages to indicate the result of a network management activity	8000	Accepted
	8001	Currently unable to perform request, try later
	8002	Key verification failed; key check value does not match
	8003-8599	Reserved for ISO use
	8600-8799	Reserved for national use
	8800-8999	Reserved for private use



9000-9001 Used in all message types to indicate error or response actions	9000	Advice acknowledged, no financial liability accepted
	9001	Advice acknowledged, financial liability accepted
9002-9099 Used in advice responses to indicate acceptance conditions	9002-9059	Reserved for ISO use
	9060-9079	Reserved for national use
	9080-9099	Reserved for private use
9100-9101 Used in all message types to indicate error or response actions	9100	One or more data element errors (see Message error indicator)
	9101	Reserved for ISO use
9102-9299 Used in request response and advice response messages to indicate transaction could not be processed	9102	Invalid transaction
	9103	Re-enter transaction
	9105	Acquirer bank not supported
	9106	Cut-off is in process (switch ending a day's business and starting the next; transaction can be sent again in a few minutes)
	9107	Issuer or switch is inoperative
	9108	Financial institution or intermediate network facility cannot be found for routing
	9109	System malfunction
	9110	Card issuer signed off
	9111	Card issuer timed out
	9112	Card issuer unavailable
	9113	Duplicate transmission
	9114	No matching original transaction
	9115	Reconciliation cutover or checkpoint error
	9116	MAC incorrect
	9117	MAC key sync error
9118	No communication keys available for use	
9119	Encryption key sync error	
9120	Security software/hardware error – try again	
9121	Security software/hardware error – do not retry	
9122	Message sequence number error	
9123	Request in progress	
9124	Invalid security code	
9125	Database error	

	9126	No such issuer (invalid IIN)
	9126	Perform Stand-In Processing (STIP)
	9128	Customer vendor format error
	9132	Recurring data error
	9133	Update not allowed
	9134-9259	Reserved for ISO use
	9260-9279	Reserved for national use
	9280-9299	Reserved for private use
9300-9399 Used in advice response messages (x3x) to indicate the reason for rejection of the transfer of financial liability	9300-9349	Reserved for ISO use
	9350	Violation of business arrangement
	9351-9359	Reserved for ISO use
	9360-9379	Reserved for national use
	9380-9399	Reserved for private use
9400-9999 Used in all message types to indicate error or response actions	9400-9998	Reserved for ISO use
	9999	Other errors

**Additional identification type codes (bit 49-71)**

Table D.4 lists the additional identification type codes.

**Table D.4 — Additional identification type codes**

Range	Codes	Description
0-9 Indicates the type of additional indication used	0	Driver licence
	1	Passport
	2	National identity card
	3-5	Reserved for ISO use
	6-7	Reserved for national use
	8-9	Reserved for private use

**Additional service result codes (bit 34-04/76)**

Table D.5 contains common result code values used for select fields in Table C.12.

**Table D.5 — Additional service result codes**

Codes	Description
00	Performed
01	Not performed
02	Not supported
03-1Z	Reserved for ISO use
20-3Z	Reserved for national use
40-ZZ	Reserved for private use

**Address verification result codes (bit 49-72)**

Table D.6 lists the address verification result codes.

**Table D.6 — Address verification result codes**

Range	Codes	Description
0-Z Indicates the result of address verification	0-9	Reserved for ISO use
	A	Reserved for private use
	B	Street addresses match; postal code not verified due to incompatible formats
	C	Street address and postal code not verified due to incompatible formats
	D	Reserved for private use
	E-F	Reserved for private use
	G	Address information not verified
	H	Reserved for private use
	I	Address verification service not performed
	J-L	Reserved for private use
	M	Street addresses and postal codes match
	N	No match; neither the street addresses nor the postal codes match
	O	Reserved for private use
	P	Postal codes match; street address not verified due to incompatible formats
	Q	Reserved for private use
	R	Retry, system unable to process
	S	Service not supported
	T	Reserved for private use
	U-V	Reserved for national use

	W-Z	Reserved for private use
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## Amount type codes (bit 54)

Table D.7 lists the amount type codes.

**Table D.7 — Amount type codes**

Range	Codes	Description
00-1Z Account-related balances	00	Reserved for ISO use
	01	Account ledger balance
	02	Account available balance
	03	Amount owing
	04	Amount due
	05	Account available credit
	06	Unknown
	07	Account ledger balance account 2
	08	Account available balance account 2
	09	Credit line
	0A	Points
	10	Amount on hold
	11-1J	Reserved for ISO use
	1K-1R	Reserved for national use
	1S-1Z	Reserved for private use
20-2Z Card-related amounts	20	Amount remaining this cycle
	21-2J	Reserved for ISO use
	2K-2R	Reserved for national use
	2S-2Z	Reserved for private use
30-3Z Account-related amounts	30-3J	Reserved for ISO use
	3K-3R	Reserved for national use
	3S-3Z	Reserved for private use
40-4Z Transaction-related amounts	40	Amount cash
	41	Amount goods and services
	42	Amount, surcharge
	43	Amount, cumulative
	44	Amount, anticipated

	45	Amount, pre-dynamic currency conversion (DCC)
	46	Amount, Dynamic Currency Conversion Fee
	47	Amount, Donation
	48	Amount, Extra
	49	Amount, Foreign Exchange Fee
	4A	Amount, Gratuity
	4B	Amount, Tax
	4C	Amount, Total Authorized
	4D	Amount, Issuer Cardholder Fee
	4E	Amount, requested
	4F	Amount, Requested Cashback
	4G	Amount, Discount
	4H	Maximum Interchang Fee
	4I	Maximum Allowed Amount
	4J	Minimum Allowed Amount
	4K-4R	Reserved for national use
	4S-4Z	Reserved for private use
50-5Z	50	Beginning balance
Benefit amounts	51	Pre-authorized amount
	52	Amount, General benefit
	53	Amount, Meal voucher
	54	Amount, Fuel
	55	Amount, Ecological/Sustainability
	56	Amount, Sports/Culture
	57	Amount, Book/Education
	58	Amount, Philanthropy/Patronage/Consumption
	59	Amount, Gift
	5A	Amount, Total eligible healthcare
	5B	Amount, Transit
	5C	Amount, prescription/Rx
	5D	Amount, Vision/Optical
	5E	Amount, Clinic/Other Qualified Medical
	5F	Amount, Dental
	5G	Amount, Co-payment

	52-5J	Reserved for ISO use
	5K-5R	Reserved for national use
	5S-5Z	Reserved for private use
60-6Z Additional Transaction Related Amount	60	Amount, Base
	61-6J	Reserved for ISO use
	6K-6R	Reserved for national use
	6S-6Z	Reserved for private use
70-7Z Reserved	70-7J	Reserved for ISO use
	7K-7R	Reserved for national use
	7S-7Z	Reserved for private use
80-8Z Reserved	80-8J	Reserved for ISO use
	8K-8R	Reserved for national use
	8S-8Z	Reserved for private use
90-9Z Reserved	90-9J	Reserved for ISO use
	9K-9R	Reserved for national use
	9S-9Z	Reserved for private use
A0-ZZ	A0-IZ	Reserved for ISO use
Reserved	J0-PZ	Reserved for national use
	R0-ZZ	Reserved for private use

**Authorization life cycle codes (bit 57)**

Table D.8 lists the authorization life cycle codes.

**Table D.8 — Authorization life cycle codes**

Range	Codes	Description
Position 1, 0-9 time code	0	Reserved for ISO use
	1	Calendar days
	2	Hours
	3	Minutes
	4-5	Reserved for ISO use
	6-7	Reserved for national use
	8-9	Reserved for private use
	Position 2 & 3, 00-99 time interval	0

	01-99	A value of 01 to 99 indicating the number of reiterations indicated in position 1
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### Auto adjusted amount indicator codes (bit 104-76)

Table D.9 lists the auto adjusted amount indicator codes.

**Table D.9 — Auto adjusted amount indicator codes**

Range	Codes	Description
A-Z Indicates the type of charges provided in Auto amount adjusted	A	Drop-off charges
	B	Delivery charges
	C	Parking expenses
	D	Extra hours
	E	Violations
	F-S	Reserved for ISO use
	T-W	Reserved for national use
	X	Multiple charges of the above types
	Y-Z	Reserved for private use
	Space	Unknown

### Batch/file transfer acknowledgement codes (bit 68)

Table D.10 lists the batch/file transfer acknowledgement codes.

**Table D.10 — Batch/file transfer acknowledgement codes**

Range	Codes	Description
0-Z Indicates if an acknowledgement is required	0	No acknowledgement required
	1	Acknowledgement required
	2	Acknowledgement required, end of transfer
	3	Positive acknowledgement
	4	Reserved for ISO use
	5	Reserved for ISO use
	6	Reserved for ISO use
	7	Negative acknowledgement, repeat requested
	8	Negative acknowledgement, no repeat
	9-I	Reserved for ISO use
	J-R	Reserved for national use
	S-Z	Reserved for private use

## Fee type codes (bits 46, 66, 109, 110)

Table D.11 lists the fee type codes.

**Table D.11 — Fee type codes**

Range	Codes	Description
0-99	0	Transaction fee
	1	Transaction processing fee
	2	Fee collection fee
	3	File action fees
	4	Telex, telephone and cable charges
	5	Auto-telex charges
	6	Lost/stolen card report fees
	7	Card acceptor service fees
	8	Recovered card awards
	9	Invalid chargeback handling fee
	10	Recovery of copy/original fees
	11	Returned guaranteed cheque
	12	Emergency cash disbursement handling fee
	13	Arbitration cash disbursement handling fee
	14	Incorrect card acceptor identification/transaction data handling fee
	15	Currency conversion fee
	16	Special handling fee
	17	Investigation fees
	18	Emergency card replacement fee
	19	Warning bulletin handling fee
	20	Good faith acceptance
	21	Collection letters
	22	Interchange Fee
	23	Minimum Interchange Fee
	24	Maximum Interchange Fee
	25	Cashback Interchange Fee
26-39	Reserved for ISO use	
40-69	Reserved for national use	



	70-99	Reserved for private use
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### Fleet motor fuel prompt codes (bit 104-78)

Table D.12 lists the fleet motor fuel prompt codes.

**Table D.12 — Fleet motor fuel prompt codes**

Range	Codes	Description
0-9 Indicates the type of prompts provided	0	Reserved for ISO use
	1	Prompts for identification number and odometer reading
	2	Prompts for vehicle number and odometer reading
	3	Prompts for driver number and odometer reading
	4	Prompts for odometer reading only
	5	No prompts issued
	6	Reserved for ISO use
	7	Reserved for ISO use
	8	Reserved for national use
	9	Reserved for private use
	Space	Unknown

### Fleet motor fuel service type codes (bit 104-78)

Table D.13 lists the fleet motor fuel service codes.

**Table D.13 — Fleet motor fuel service type codes**

Range	Codes	Description
0-9 Indicates the type of service provided	0	Reserved for ISO use
	1	Self-service
	2	Full service
	3	Only non-fuel products purchased
	4-5	Reserved for ISO use
	6-7	Reserved for national use
	8-9	Reserved for private use
	Space	Unknown

### Function codes (bit 24)

Table D.14 lists the function codes.

Table D.14 — Function codes

Range	Codes	Description
000-099 Reserved for ISO use	000-099	Reserved for ISO use
100-199 Used in 100, 101, 120, 121 and 140 messages to indicate type of authorization or verification transaction	100	Original authorization – amount accurate
	101	Original authorization – amount estimated
	102	Replacement authorization – amount accurate
	103	Replacement authorization – amount estimated
	104	Resubmission – amount accurate
	105	Resubmission – amount estimated
	106	Supplementary authorization – amount accurate
	107	Supplementary authorization – amount estimated
	108	Inquiry
	109	Address verification for billing address
	110	Address verification for ship to address
	111	Certificate request data verification
	112	Cheque verification
	113	Account verification
	114	Final authorization – amount accurate
	115	Completion of a previous authorization – amount now known
	116	Pre-authorisation – time-bound for a maximum amount
117-159	Reserved for ISO use	
160-179	Reserved for national use	
180-199	Reserved for private use	
200-299 Used in 200, 201, 220, 221 and 240 messages to indicate type of financial presentment	200	Original financial presentment request/advice
	201	Previously approved authorization – amount same
	202	Previously approved authorization – amount differs
	203	Resubmission of a previously denied financial presentment request
	204	Resubmission of a previously reversed financial presentment
	205	First representment full amount

	206	Second representment full amount
	207	Third or subsequent representment full amount
	208	Final representment full amount
	209	Incomplete account number on original financial presentment request
	210	Resubmission of a previously submitted financial presentment request
	211	First representment partial amount
	212	Second representment partial amount
	213	Third or subsequent representment partial amount
	214	Final representment partial amount
	215	Aggregation for accumulation transaction
	216	Card issuer backup total for accumulation transaction
	217	Truncation for accumulation transaction
	218	Completion of a time-bound pre-authorization – amount now known
	219-259	Reserved for ISO use
	260-279	Reserved for national use
	280-299	Reserved for private use
300-399	300	Reserved for ISO use
Used in 304, 305, 324, 325 340, 344 350, 354, 362, 364, 372, and 374 messages to indicate file action required; use 302 when fields within a record are being replaced; if the entire record is being changed, code 304 is recommended	301	Add record
	302	Change record
	303	Delete record
	304	Replace record
	305	Inquiry
	306	Replace file
	307	Add file
	308	Delete file
	309	Card administration
	310	Other
	311-359	Reserved for ISO use
	360-379	Reserved for national use
	380-399	Reserved for private use
400-449	400	Full reversal, transaction did not complete as approved
Used in 420, 421 and 440 messages to indicate the function of the reversal	401	Partial reversal, transaction did not complete for full amount

	402-419	Reserved for ISO use
	420-439	Reserved for national use
	440-449	Reserved for private use
450-499 Used in 422, 423 and 442 messages to indicate the function of the chargeback	450	First chargeback, full
	451	Second chargeback, full
	452	Third or subsequent chargeback, full
	453	First chargeback, partial
	454	Second chargeback, partial
	455	Third or subsequent chargeback, partial
	456	Final chargeback, full amount
	457	Final chargeback, partial amount
	458-469	Reserved for ISO use
	470-489	Reserved for national use
	490-499	Reserved for private use
500-599 Used in 500, 501, 502, 503, 520, 521, 522, 523, 540 and 542 messages to indicate type of reconciliation	500	Final reconciliation
	501	Checkpoint reconciliation
	502	Final reconciliation in a specified currency
	503	Checkpoint reconciliation in a specified currency
	504	Request for reconciliation totals
	505-539	Reserved for ISO use
	540-569	Reserved for national use
	570-599	Reserved for private use
600-649 Used in 602, 603, 612, 662, 672, 640 and 650 messages to indicate the type of retrieval data required or provided	600	Hard copy (original document) retrieval
	601	Hard copy (original document) repeat retrieval
	602	Hard copy (original document) retrieval fulfilment
	603	Photocopy (microfilm copy, photocopy or fax copy) retrieval
	604	Photocopy (microfilm copy, photocopy or fax copy) repeat retrieval
	605	Photocopy (microfilm copy, photocopy or fax copy) retrieval fulfilment
	606	Electronic image (photocopy) retrieval fulfilment
	607	Electronic image (photocopy) retrieval fulfilment network generated

	608	Substitute draft retrieval
	609	Substitute draft repeat retrieval
	610	Substitute draft retrieval fulfilment
	611	Electronic image (substitute draft) retrieval fulfilment
	612	Electronic image (substitute draft) retrieval fulfilment network generated
	613	Retrieval not fulfilled
	614-629	Reserved for ISO use
	630-639	Reserved for national use
	640-649	Reserved for private use
650-699 Used in 604, 605, 624, 625 and 644 messages for administrative messages	650	Unable to parse message
	651	MTI not recognized
	652	Message level error
	653	Batch/file level error
	654-669	Reserved for ISO use
	670-689	Reserved for national use
	689-699	Reserved for private use
700-799 Used in 720, 721, 740, 722, 723 and 742 messages to indicate type of fee collection transaction	700	Fee collection message
	701	Fee collection cancellation, full/partial
	702-759	Reserved for ISO use
	760-779	Reserved for national use
	780-799	Reserved for private use
800-809 Used in 804, 805, 824, 825 and 844 messages to indicate system conditions	800	Reserved for ISO use
	801	System condition/sign-on
	802	System condition/sign-off
	803	System condition/target system unavailable
	804	System condition/message originator's system in backup
	805	System condition/special instruction
	806	System condition/initiate alternate routing
	807-809	Reserved for ISO use
810-819 Used in 804, 805, 824, 825 and 844 messages to support system security activity	810	Reserved for ISO use
	811	System security/request key change
	812	System security/security alert
	813	System security/password change

	814	System security/device authentication
	815	System security/ deliver key
	816	System security/ request key verification
	817-819	Reserved for ISO use
820-829	820	Reserved for ISO use
Used in 804, 805, 824, 825 and 844 messages to indicate system accounting	821	System accounting/cutover
	822	System accounting/checkpoint
	823-829	Reserved for ISO use
830-839	830	Reserved for ISO use
Used in 804, 805, 824, 825 and 844 messages to indicate system audit controls	831	System audit control/echo test
	832	System audit control/response received
	833-839	Reserved for ISO use
840-849	840	Reserved for ISO use
Used in 804, 805, 824, 825 and 844 messages to indicate batch/file transfer	841	Start of batch/file transfer
	842	End of batch/file transfer
	843-849	Reserved for ISO use
850-859	850	Reserved for ISO use
Used in 804, 805, 824, 825 and 844 messages to indicate synchronization	851	Exchange control, give token
	852	Clock synchronization
	853-859	Reserved for ISO use
860-879	860-879	Reserved for ISO use
Used in 804, 805, 824, 825 and 844 messages		
880-889	880-889	Reserved for national use
Used in 804, 805, 824, 825 and 844 messages		
890-899	890-899	Reserved for private use
Used in 804, 805, 824, 825 and 844 messages		
900-999	900-939	Reserved for ISO use
Reserved	940-969	Reserved for national use
	970-999	Reserved for private use

### Message error codes (bit 18)

Table D.15 lists the message error codes.

**Table D.15 — Message error codes**

Range	Codes	Description
0000-9999	0001	Required data element missing
	0002	Invalid length
	0003	Invalid value
	0004	Amount format error
	0005	Date format error
	0006	Account format error
	0007	Name format error
	0008	Format error other, e.g. data element format is not valid
	0009	Inconsistent data with POS data code, e.g. no track 1 or track 2 for an indicated magnetic stripe read
	0010	Inconsistent data, does not match original request
	0011	Other inconsistent data
	0012	Recurring data error
	0013	Customer vendor format error
	0014-3999	Reserved for ISO use
	4000-5999	Reserved for national use
6000-9999	Reserved for private use	

## Message reason codes (bit 25)

Table D.16 lists the message reason codes.

**Table D.16 — Message reason codes**

Range	Codes	Description
0000-0999 Reserved for ISO	0000-0999	Reserved
1000-1499 Reason for an authorization/financial presentment advice/notification message rather than a request message	1000	Stand-in processing at the card issuer's option
	1001	Card issuer signed off
	1002	Card issuer timed out on original request
	1003	Card issuer unavailable
	1004	Terminal processed
	1005	ICC processed
	1006	Under floor limit

	1007	Stand-in processing at the acquirer's option
	1008	Stand-in processing at the receiver's option
	1009	Receiver signed off
	1010	Receiver timed out on original request
	1011	Receiver unavailable
	1012-1150	Reserved for ISO use
	1151-1375	Reserved for national use
	1376-1499	Reserved for private use
1500-1999 Reason for an authorization/financial presentment request message rather than an advice/notification message	1500	ICC application unable to process
	1501	Reserved for ISO use
	1502	ICC random selection
	1503	Terminal random selection
	1504	Terminal not able to process ICC
	1505	On line forced by ICC
	1506	On line forced by card acceptor
	1507	On line forced by CAD
	1508	On line forced by terminal
	1509	On line forced by card issuer
	1510	Over floor limit
	1511	Card acceptor suspicious
	1512-1650	Reserved for ISO use
	1651-1775	Reserved for national use
	1776-1999	Reserved for private use
2000-2999 Reason for a representment	2000	Reserved for ISO use
	2001	Invalid acquirer's reference number on chargeback, documentation was received or was not required
	2002	Non-receipt of required documentation to support chargeback
	2003	Correct transaction date provided
	2004	Invalid acquirer's reference number on chargeback, documentation was received



	2005	Correct card acceptor location/description provided
	2006	Reserved for ISO use
	2007	Transaction did not exceed card acceptor floor limit
	2008	Card issuer authorised transaction
	2009	Reserved for ISO use
	2010	Reserved for ISO use
	2011	Credit previously issued
	2012	Reserved for ISO use
	2013	Chargeback remedied, see corresponding documentation
	2014	Duplicate chargeback
	2015	Past chargeback time limit
	2016	Requested transaction documentation provided (hardship variance)
	2017	Invalid member message text
	2018	Correct card acceptor category code provided
	2019	Authorization advised suspicious
	2020	No authorization request required or attempted
	2021	Account not listed on the applicable warning bulletin as of the transaction date
	2022	Documentation received was illegible
	2023	Documentation received was invalid/incomplete
	2024-2399	Reserved for ISO use
	2400-2699	Reserved for national use
	2700-2999	Reserved for private use
3000-3999 Reason for a file action	3000	Lost card
	3001	Stolen card
	3002	Undelivered card
	3003	Counterfeit card
	3004	Other
	3005-3399	Reserved for ISO use
	3400-3699	Reserved for national use
	3700-3999	Reserved for private use

4000-4499 Reason for a reversal	4000	Customer cancellation
	4001	Unspecified, no action taken
	4002	Suspected malfunction
	4003	Format error, no action taken
	4004	Completed partially
	4005	Original amount incorrect
	4006	Response received too late
	4007	Card acceptor device unable to complete transaction
	4008	Deposit out of balance
	4009	No check in envelope
	4010	Payment out of balance
	4011	Deposit out of balance/applied contents
	4012	Payment out of balance/applied contents
	4013	Unable to deliver message to POS
	4014	Suspected malfunction/card retained
	4015	Suspected malfunction/card returned
	4016	Suspected malfunction/track 3 not updated
	4017	Suspected malfunction/no cash dispensed
	4018	Timed-out at taking money/no cash dispensed
	4019	Timed-out at taking card/card retained and no cash dispensed
	4020	Invalid response, no action taken
4021	Timeout waiting for response	
4022-4199	Reserved for ISO use	
4200-4350	Reserved for national use	
4351-4499	Reserved for private use	
4500-4999 Reason for a chargeback	4500	Reserved for ISO use
	4501	Requested transaction information not received
	4502	Requested/required information illegible or missing
	4503-4006	Reserved for ISO use
	4507	Warning bulletin file

4508	Requested/required authorization not obtained
4509-4011	Reserved for ISO use
4512	Account number not on file
4513-4523	Reserved for ISO use
4524	Earlier warning bulletin protection
4525-4030	Reserved for ISO use
4531	Transaction amount differs
4532-4533	Reserved for ISO use
4534	Duplicate processing
4535	Card not valid or expired
4536	Reserved for ISO use
4537	No cardholder authorization
4538-4539	Reserved for ISO use
4540	Fraudulent processing of transaction
4541	Cancelled recurring transaction
4542	Late presentment
4543-4545	Reserved for ISO use
4546	Correct transaction currency code not provided
4547	Exceeds floor limit, not authorised - a fraudulent transaction
4548	Reserved for ISO use
4549	Questionable card acceptor activity
4550	Credit posted as a purchase
4551-4552	Reserved for ISO use
4553	Not as described
4554	Cardholder dispute, not elsewhere classified
4555	Non-receipt of merchandise
4556	Defective merchandise
4557	Card activated telephone transaction
4558	Reserved for ISO use
4559	Services not rendered

4560	Credit not processed
4561	Reserved for ISO use
4562	Counterfeit transaction, magnetic stripe authorization fraud
4563	Non-receipt of required documentation to support representment
4564	Documentation received was illegible
4565	Documentation received was invalid/incomplete
4566	Chargeback contained a valid acquirer's reference number
4567	Invalid acquirer's reference number on representment, documentation was received or was not required
4568	Invalid acquirer's reference number on representment, documentation was received
4569-4572	Reserved for ISO use
4573	Expired card
4574-4577	Reserved for ISO use
4578	Ineligible transaction
4579	Requested transaction receipt not received
4580	Processing error
4581	Missing imprint
4582	Reserved for ISO use
4583	Non-possession of card
4584	Missing signature
4585	Reserved for ISO use
4586	Alteration of amount
4587	Domestic transaction receipt processing violation
4588-4589	Reserved for ISO use
4590	Non-receipt of merchandise, non-receipt of cash at ATM or load transaction value at ATM or load device
4591-4593	Reserved for ISO use
4594	Cancelled guaranteed reservation
4595	Advance lodging deposit

	4596	Transaction exceeds limited amount
	4597-4649	Reserved for ISO use
	4650-4749	Reserved for national use
	4750-4999	Reserved for private use
5000-5999 Reason for a reconciliation	5000-5299	Reserved for ISO use
	5300-5599	Reserved for national use
	5600-5999	Reserved for private use
6000-6499 Reason for a retrieval or retrieval fulfilment	6001-6004	Reserved for ISO use
	6005	Cardholder does not agree with amount billed
	6006-6020	Reserved for ISO use
	6021	Cardholder does not recognize transaction
	6022	ICC transaction certificate and associated data requested
	6023	Cardholder needs information for personal records
	6024-6027	Reserved for ISO use
	6028	Request for copy bearing signature
	6029	Travel and entertainment document request
	6030-6031	Reserved for ISO use
	6032	Copy request because original lost in transit
	6033-6034	Reserved for ISO use
	6035	Written cardholder request for original due to inadequate copy of mail/phone order or recurring transaction receipt
	6036	Legal process request for original, e.g. a subpoena
	6037	Received copy illegible
	6038	Paper/handwriting analysis request
	6039-6040	Reserved for ISO use
	6041	Fraud investigation
	6042	Potential arbitration, chargeback or compliance documentation required

	6043	Retrieval not fulfilled – not able to trace original transaction
	6044	Retrieval not fulfilled – invalid reference number
	6045	Retrieval not fulfilled – reference number/PAN incompatible
	6046	Requested documentation supplied
	6047	Retrieval cannot be fulfilled – required/requested documentation is not available
	6048	Retrieval will not be fulfilled – request for an item that is not required to be provided
	6049	Retrieval cannot be fulfilled – ICC transaction certificate and associated data is not available
	6050-6199	Reserved for ISO use
	6200-6299	Reserved for national use
	6300-6499	Reserved for private use
6500-6999 Reason for an administrative message	6500-6599	Reserved for ISO use
	6600-6799	Reserved for national use
	6800-6999	Reserved for private use
7000-7999 Reason for a fee collection message	7000-7299	Reserved for ISO use
	7300-7599	Reserved for national use
	7600-7999	Reserved for private use
8000-8099 Reason for a network management message	8000	Start batch/file transfer, no recovery procedure
	8001	Start batch/file transfer, recovery procedure
	8002	End batch/file
	8003-8059	Reserved for ISO use
	8060-8069	Reserved for national use
	8070-8099	Reserved for private use
8100-8199 Reason for a key change message	8100	Standard key exchange/activation key life cycle
	8101	Standard key exchange/activation keys out of sync

	8102	Standard key exchange/activation security reasons
	8103	Standard key exchange key deactivation
	8104	Standard key exchange verification key life cycle
	8105	Standard key exchange keys out of sync
	8106-8159	Reserved for ISO use
	8160-8169	Reserved for national use
	8170-8199	Reserved for private use
8200-8999 Reserved	8200-8399	Reserved for ISO use
	8400-8699	Reserved for national use
	8700-8999	Reserved for private use
9000-9999 Reserved	9000-9299	Reserved for ISO use
	9300-9599	Reserved for national use
	9600-9999	Reserved for private use

## Message type identifier codes

### All possible message type identifier codes

The message type identifier is a three-position code. Table D.17 gives the possible values of each position of the message type identifier code.

**Table D.17 — Message type identifiers**

Range	Codes	Description
First position Message class	0	Reserved for ISO use
	1	Authorization
	2	Financial presentment
	3	File action
	4	Reversal/chargeback
	5	Reconciliation
	6	Administrative
	7	Fee collection
	8	Network management

	9	Reserved for ISO use
Second position Message function	0	Request
	1	Request response
	2	Advice
	3	Advice response
	4	Notification
	5	Notification acknowledgement
	6	Instruction
	7	Instruction acknowledgement
	8	Reserved for ISO use
	9	Reserved for ISO use
Third position Transaction originator	0	Acquirer
	1	Acquirer repeat
	2	Card issuer
	3	Card issuer repeat
	4	Other originator
	5	Other originator repeat
	6	Reserved for ISO use
	7	Reserved for ISO use
	8	Reserved for ISO use
	9	Reserved for ISO use

**Allocated message type identifier codes**

The message type identifier is a three-position code. Table D.18 gives the codes allocated within this document.

**Table D.18 — Allocated message type identifiers**

Message class	Originator	Rqs t	Rqst rpt	Rqst resp	Adv c	Advc rpt	Advc resp	Ntn	Ntn ack	Inst	Inst ack
Authorization	Acquirer	100	101	110	120	121	130	140	150		
Verification	Other	104	105	114	124	125	134	144	154		
Financial presentment	Acquirer	200	201	210	220	221	230	240	250		
File action	Acquirer							340	350		
	Card issuer									362	372



	Other	304	305	314	324	325	334	344	354	364	374
Reversal	Acquirer				420	421	430	440	450		
Chargeback	Card issuer				422	423	432	442	452		
Reconciliation	Acquirer	500	501	510	520	521	530	540	550		
	Card issuer	502	503	512	522	523	532	542	552		
Administration	Acquirer							640	650		
	Card issuer	602	603	612						662	672
	Other	604	605	614	624	625	634	644	654		
Fee collection	Acquirer				720	721	730	740	750		
	Card issuer				722	723	732	742	752		
Network management	Other	804	805	814	824	825	834	844	854		
<b>Key</b> Rqst request Rpt repeat Resp response Advc advice Ntn notification Ack acknowledgement Inst instruction											

## Point of service capability (bit 27)

### POS card-reading capability

Table D.19 lists the value attributed to each bit of the 32 bits (four characters) which indicate the card-reading capabilities of the POS.

**Table D.19 — POS card-reading capability**

	B1	B2	B3	B4	B5	B6	B7	B8	B9	B10	B11	B12	B13	B14	B15	B16
Unknown	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Information not taken from card, e.g. RFID	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Physical (key entry or OCR reading of embossing or printed data either at time of transaction or after the event)	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Optical code	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-
Magnetic stripe	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-
ICC	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Account data on file	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-
Reserved for ISO use	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-
Reserved for ISO use	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-
Reserved for ISO use	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-
Reserved for ISO use	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-
Reserved for ISO use	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-
Reserved for ISO use	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-
Reserved for ISO use	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-
Reserved for ISO use	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
	B17	B18	B19	B20	B21	B22	B23	B24	B25	B26	B27	B28	B29	B30	B31	B32
Reserved for ISO use	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Reserved for ISO use	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Reserved for ISO use	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Reserved for ISO use	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-
Reserved for ISO use	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-
Reserved for ISO use	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Reserved for national use	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-
Reserved for national use	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-
Reserved for national use	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-
Reserved for national use	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-
Reserved for national use	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-
Reserved for private use	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-
Reserved for private use	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-

Reserved for private use	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-
Reserved for private use	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-
Reserved for private use	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1

**POS cardholder verification capability**

Table D.20 lists the value attributed to each bit of the 32 bits which indicate the cardholder verification capabilities of the POS.

**Table D.20 — POS cardholder verification capability**

	B1	B2	B3	B4	B5	B6	B7	B8	B9	B10	B11	B12	B13	B14	B15	B16
Unknown	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
None	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Manual signature verification	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Online PIN	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-
Offline PIN in clear	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-
Offline PIN encrypted	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Offline digitized signature analysis	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-
Offline biometrics	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-
Other manual verification, e.g. passport or driver's licence	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-
Offline biographics	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-
Account-based digital signature	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-
Public-key-based digital signature	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-
Reserved for ISO use	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-
Reserved for ISO use	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-
Reserved for ISO use	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-
Reserved for ISO use	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
	B17	B18	B19	B20	B21	B22	B23	B24	B25	B26	B27	B28	B29	B30	B31	B32
Reserved for ISO use	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Reserved for ISO use	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Reserved for ISO use	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Reserved for ISO use	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-
Reserved for ISO use	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-
Reserved for ISO use	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-

Reserved for national use	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-
Reserved for national use	-	-	-	-	-	-		1	-	-	-	-	-	-	-	-
Reserved for national use	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-
Reserved for national use	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-
Reserved for national use	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-
Reserved for private use	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-
Reserved for private use	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-
Reserved for private use	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-
Reserved for private use	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-
Reserved for private use	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1

**Point of service data code (bit 22)**

**Card-reading method used at POS**

Table D.21 lists the value attributed to each bit of the 32 bits (four characters) which indicate the card-reading method actually used by the POS or how account data was obtained for this transaction.

**Table D.21 — Card-reading method used at POS**

	B1	B2	B3	B4	B5	B6	B7	B8	B9	B10	B11	B12	B13	B14	B15	B16
Unknown	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Information not taken from card, e.g. RFID	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Physical (key entry or OCR reading of embossing or printed data either at time of transaction or after the event)	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Optical code	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-
Magnetic stripe	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-
ICC	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Account data on file	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-

Reserved for ISO use	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-
Reserved for ISO use	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-
Reserved for ISO use	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-
Reserved for ISO use	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-
ICC read attempted but failed	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-
Magnetic stripe read attempted but failed	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-
Fallback	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-
Reserved for ISO use	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-
Reserved for ISO use	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
	B17	B18	B19	B20	B21	B22	B23	B24	B25	B26	B27	B28	B29	B30	B31	B32
Reserved for ISO use	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Reserved for ISO use	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Reserved for ISO use	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Reserved for ISO use	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-
Reserved for ISO use	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-
Reserved for ISO use	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Reserved for national use	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-
Reserved for national use	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-
Reserved for national use	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-
Reserved for national use	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-
Reserved for national use	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-
Reserved for national use	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-
Reserved for private use	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-
Reserved for private use	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-
Reserved for private use	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-
Reserved for private use	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1

**Cardholder verification method used at POS**

Table D.22 lists the value attributed to each bit of the 32 bits (four characters) which indicate the cardholder verification method actually used by the POS.

**Table D.22 — Cardholder verification method used at POS**

	B1	B2	B3	B4	B5	B6	B7	B8	B9	B10	B11	B12	B13	B14	B15	B16
Unknown	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
None	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Manual signature verification	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Online PIN	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-
Offline PIN in clear	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-
Offline PIN encrypted	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Offline digitized signature analysis	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-
Offline biometrics	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-
Other manual verification, e.g. passport or driver's licence	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-
Offline biographics	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-
Account-based digital signature	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-
Public-key-based digital signature	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-
Reserved for ISO use	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-
Reserved for ISO use	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-
Reserved for ISO use	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-
Reserved for ISO use	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
	B17	B18	B19	B20	B21	B22	B23	B24	B25	B26	B27	B28	B29	B30	B31	B32
Reserved for ISO use	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Reserved for ISO use	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Reserved for ISO use	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Reserved for ISO use	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-
Reserved for ISO use	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-
Reserved for national use	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Reserved for national use	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-
Reserved for national use	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-
Reserved for national use	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-

Reserved for national use	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-
Reserved for national use	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-
Reserved for private use	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-
Reserved for private use	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-
Reserved for private use	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-
Reserved for private use	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
Reserved for private use	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1

**POS environment**

Table D.23 lists the value attributed to each bit of the 32 bits (four characters) which indicate the POS environment.

**Table D.23 — POS environment**

	B1	B2	B3	B4	B5	B6	B7	B8	B9	B10	B11	B12	B13	B14	B15	B16
Unknown	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Attended POS	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Unattended, details unknown	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Mail order/telephone order	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-
Electronic commerce	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-
Mobile commerce	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Recurring transaction	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-
Stored details	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-
CAT	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-
ATM on bank premises	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-
ATM off bank premises	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-
Deferred transaction	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-
Instalment transaction	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-
Key entered ATM transaction	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-

Recurring payment, first occurrence	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-
Recurring payment, subsequent	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
	B17	B18	B19	B20	B21	B22	B23	B24	B25	B26	B27	B28	B29	B30	B31	B32
Reserved for ISO use	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Reserved for ISO use	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Reserved for ISO use	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Reserved for ISO use	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-
Reserved for ISO use	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-
Reserved for ISO use	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Reserved for national use	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-
Reserved for national use	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-
Reserved for national use	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-
Reserved for national use	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-
Reserved for national use	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-
Reserved for private use	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-
Reserved for private use	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-
Reserved for private use	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-
Reserved for private use	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-
Reserved for private use	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1

**Security characteristics**

Table D.24 lists the value attributed to each bit of the 32 bits (four characters) which indicate the security characteristics.

**Table D.24 — Security characteristics**

	B1	B2	B3	B4	B5	B6	B7	B8	B9	B10	B11	B12	B13	B14	B15	B16
Unknown	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Private network	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Open network (Internet)	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Channel MACing	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-
Pass through MACing	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-
Channel encryption	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
End-to-end encryption	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-
Private algorithm encryption	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-
PKI encryption	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-
Private algorithm MACing	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-
Standard algorithm MACing	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-
Cardholder managed end-to-end encryption	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-
Cardholder managed point-to-point encryption	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-
Merchant managed end-to-end encryption	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-
Merchant managed point-to-point encryption	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-
Acquirer managed end-to-end encryption	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
	B17	B18	B19	B20	B21	B22	B23	B24	B25	B26	B27	B28	B29	B30	B31	B32
Acquirer managed point-to-point encryption	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Reserved for ISO use	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Reserved for ISO use	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Reserved for ISO use	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-
Reserved for ISO use	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-
Reserved for ISO use	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Reserved for ISO use	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-
Reserved for ISO use	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-
Reserved for national use	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-
Reserved for national use	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-

Reserved for national use	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-
Reserved for national use	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-
Reserved for private use	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-
Reserved for private use	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-
Reserved for private use	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-
Reserved for private use	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1

### Shipping indicator codes (bit 34)

Table D.25 lists the Shipping indicator codes.

**Table D.25 — Shipping indicator codes**

Code	Description
01	Ship to cardholder’s billing address
02	Ship to another verified address on file with merchant
03	Ship to address that is different than the cardholder’s billing address
04	“Ship to store”/pick-up at local store (store address shall be populated in shipping address fields)
05	Digital goods (includes online services, electronic gift cards and redemption codes)
06	Travel and event tickets, not shipped
07	Other (e.g. gaming, digital services not shipped, e-media subscriptions)
08	Pick-up and go delivery

### Transaction type codes (bit 3)

Table D.26 lists the Transaction type codes.

**Table D.26 — Transaction type codes**

Range	Codes	Description
00-1Z Debit transactions	00	Goods and service
	01	Cash (ATM)
	02	Adjustment
	03	Cheque guarantee (funds guaranteed)
	04	Cheque verification (funds available but not guaranteed)

	05	Eurocheque (retired)
	06	Traveller cheque
	07	Letter of credit
	08	Giro (postal banking)
	09	Goods and services with cash disbursement
	10	Non-cash financial instrument, e.g. wire transfer
	11	Quasi-cash and scrip
	12	Cash (manual)
	13	Funds withdrawal for electronic purse; unlinked loads to funds issuer
	14	Benefits purchase with cash-back
	15	Benefit cash withdrawal
	16	Benefit cash purchase
	17	Funds withdrawal for electronic purse; unlinked unloads to card issuer
	18-1J	Reserved for ISO use
	1A	Fee Collection
	1B-1J	Reserved for ISO use
	1K-1R	Reserved for national use
	1S-1Z	Reserved for private use
20-2Z Credit transactions	20	Returns
	21	Deposits
	22	Adjustment
	23	Cheque deposit guarantee
	24	Cheque deposit
	25	Deposit with cash-back
	26	Cheque deposit with cash-back
	27	Funds deposit from electronic purse; unlinked unloads to funds issuer
	28	Funds deposit from electronic purse; unlinked loads to card issuer
	29	Original credit e.g. wire transfer, gaming wins
	2A	Goods and services; initiated by issuer for payment to goods and services provider
	2B	Pre-paid load
	2C	Funds Disbursement
	2D-2J	Reserved for ISO use
	2K-2R	Reserved for national use
	2S-2Z	Reserved for private use

30-3Z Inquiry/verification services	30	Available funds inquiry
	31	Balance inquiry
	32	Validate Card-on-File Note: the usage for “Ledger balance inquiry” is discomissioned
	33	Verification inquiry
	34	Statement inquiry
	35	Cleared item inquiry
	36	Cash balance inquiry
	37	Instalment inquiry, e.g. instalment program terms
	38	Fee inquiry, e.g. to determine fee prior to transaction initiation
	39	Eligibility inquiry
	3A	Customer profile inquiry, e.g. inquiry performed by an ATM to retrieve customer preferences
	3B-3J	Reserved for ISO use
	3K-3R	Reserved for national use
	3S-3Z	Reserved for private use
40-4Z Transfer services	40	Cardholder accounts transfer
	41-4J	Reserved for ISO use
	4K-4R	Reserved for national use
	4S-4Z	Reserved for private use
50-5Z Payment services	50	Customer/cardholder generated/initiated bill payment – debit to customer/cardholder
	51	Account verification
	52	Payment return
	53	Billor generated/initiated bill payment – credit to biller
	54-5J	Reserved for ISO use
	5K-5R	Reserved for national use
	5S-5Z	Reserved for private use
60-6Z Electronic purse services	60	Load value; linked loads
	61	Unload value; linked unloads
	62	Transfer value
	63	Administrative
	64	Currency exchange
	65-6J	Reserved for ISO use

	6K-6R	Reserved for national use
	6S-6Z	Reserved for private use
70-7Z Administrative	70	Pin change
	71	PIN verify
	72	Activation
	73	Card update
	74	Card read
	75	Provisioning Request
	76-7J	Reserved for ISO use
	7K-7R	Reserved for national use
	7S-7Z	Reserved for private use
80-8Z Reserved	80-8J	Reserved for ISO use
	8K-8R	Reserved for national use
	8S-8Z	Reserved for private use
90-9Z Reserved	90-9J	Reserved for ISO use
	9K-9R	Reserved for national use
	9S-9Z	Reserved for private use
A0-ZZ Reserved	A0 IZ	Reserved for ISO use
	J0-PZ	Reserved for national use
	R0-ZZ	Reserved for private use

## Identification Type Code (bit 51-75)

Table D.27 lists the Identification type codes.

NOTE, this is shared code with ATICA.

**Table D.27 — Identification type codes**

Codes	Description
CUID	Customer Identification (unspecified)
PRXY	Proxy Identification
NTID	National Identification
SSNB	Social Security Number
PASN	Passport Number
DRLN	Driver License
ARNB	Alien registration number

TXIN	Tax identification
LAWL	Law enforcement identification
MILI	Military identification
TRVL	Travel identification (non-passport)
CPNY	Company registration number
EMAL	email
PHON	Phone number

### Data Encoding Format Code (bit 108)

Table D.28 lists the Data in local language encoding format codes.

**Table D.28 Data encoding format**

Codes	Description
01	UTF-8
02-59	Reserved for ISO use
60-79	Reserved for national use
80-99	Reserved for private use

### Account Identifier Type (bit 51)

Table D.29 lists the codes for the account identifier type.

**Table D.28 Account Identifier Type**

Codes	Description
00	Other
01	Routing transit number (RTN) and bank account
02	IBAN
03	Card account
04	Email
05	Phone Number
06	Bank account number (BAN) and bank identification code (BIC)
07	Wallet Id
08	Social Network Id