AUTHORIZATION DETAIL FILE SPECIFICATION

VERSION 8.6
DECEMBER 27, 2016

Table of Contents

Authorization Detail File Specification

Chapter 1
About this manual

1.1 Introduction

This document describes the format of the Authorization Detail Files for TSYS Acquiring Solutions.

1.1.1 Revisions and additions

Table 1.1 All revisions supporting release 8.6 are marked with change bars.

Chapter	Section	Action	Data
Authorization Detail File	2.6	Update	Updated field 7 in the description for options 2 and 3 no longer a valid position in Section 2.5 and Section 2.12.

Table 1.2 All revisions supporting release 8.5 are marked with change bars.

Chapter	Section	Action	Data
Authorization Detail File	2.6	Add	Added values in the table for Field # 49 in Section 2.6

Table 1.3 All revisions supporting release 8.4 are marked with change bars.

Chapter	Section	Action	Data
Authorization Detail File	2.6	Add	Added new Message Reason Code values for Visa merchant initiated transactions in field 48, added AEVV in field 49 position 14, in field 60 added Mastercard only to definition 73, updated field 97 and added 97.1-97.12 for Mastercard and American Express
	2.7	Add	Added fields 16 and 17 updated field 18 in Table 2.1
	2.7	Add	Added field 13 and updated field 14 in Table 2.2
Appendix A		Add	Added code 10 in Table_A 3
		Add	Added code 6 in Table_A 8 60.1- Position 2, added Amex SafeKey to the definition for code 05 - 60.8-Positions 9-10, and added new values in 60.10 - Position 12
		Remove	Removed 0002- VisaNet in Table_A 9

Table 1.4 All revisions supporting release 8.3 are marked with change bars.

Chapter	Section	Action	Data
Authorization Detail File	2.7	Add	Added fields 14-26 in Table 2.1

Table 1.5 All revisions supporting release 8.2 are marked with change bars.

Chapter	Section	Action	Data
Authorization Detail File	2.6	Update	Updated description for field 109 in Section 2.6

Table 1.6 All revisions supporting release 8.1 are marked with change bars.

Chapter	Section	Action	Data
Authorization Detail File	2.6	Update	Updated description for fields 23, 24 and 25 in Section 2.6
	2.10	Update	Updated description in Section 2.10
	2.11	Update	Updated description in Section 2.11
Appendix A		Update	Updated values 05 and 06 in Table A 8

Table 1.7 All revisions supporting release 8.0 are marked with change bars.

Chapter	Section	Action	Data
Authorization Detail File	2.7	Add	Added value of EX04 in field 2 in Table 2.1
	2.7	Add	Added value 86 in field 5 in Table 2.2
	2.9	Add	Added Lane ID in field 10 and in field 13 added EX04 value in Table 2.3
	2.10	Update	Updated description to include EX04
	2.11	Add	Added Section 2.11

Table 1.8 All revisions supporting release 7.6 are marked with change bars.

Chapter	Section	Action	Data
Authorization Detail File	Section 2.6	Update	Updated the description to clarify field 97 in Section 2.6

©2006-2016, TSYS Acquiring Solutions, L.L.C.   Authorization Detail File Specification

Table 1.9 All revisions supporting release 7.5 are marked with change bars.

Chapter	Section	Action	Data
Authorization Detail File	Section 2.9	Update	Updated field 10 in Section 2.9.2

Table 1.10 All revisions supporting release 7.4 are marked with change bars.

Chapter	Section	Action	Data
Appendix A		Update	Updated field 13 in Table_A 8

Table 1.11 All revisions supporting release 7.3 are marked with change bars.

Chapter	Section	Action	Data
Authorization Detail File	2.10	Update	Updated field 4 and 5 in Section 2.10

Table 1.12 All revisions supporting release 7.2 are marked with change bars.

Chapter	Section	Action	Data
Authorization Detail File	2.6	Update	Updated field 91 and 92 in Section 2.6
	2.7	Update	Updated Table 2.1
	2.7	Update	Updated Section 2.8.1
	2.9.2	Update	Updated Section 2.9.2
	2.10	Add	Added new field 4 and 5 in Section 2.10
Appendix A		Add	Added value 13 to 60.8 in Table_A 8

Table 1.13 All revisions supporting release 7.1 are marked with change bars.

Chapter	Section	Action	Data
Authorization Detail File	2.6	Add	Added TSYS to Token Indicator in Section 2.6
	2.9.2	Update	Updated field 6 in Section 2.9.2
Appendix A		Remove	Removed Alaska Option from Table_A 9
		Add	Added information to description for value S1 in Table_A 12

Table 1.14 All revisions supporting release 7.0 are marked with change bars.

Chapter	Section	Action	Data
Authorization Detail File	2.6	Add	Added information in Section 2.6
	2.7	Update	Updated Section 2.7
	2.7	Add	Added possible values in Section 2.7

Table 1.15 All revisions supporting release 6.2 are marked with change bars.

Chapter	Section	Action	Data
Authorization Detail File	2.6	Add	Added information in field 60 in Section 2.6
	2.7	Update	Updated Section 2.7
	2.7	Update	Updated Section 2.7
	2.9	Update	Updated Section 2.9
	2.10	Add	Added information in Section 2.10

Table 1.16 All revisions supporting release 6.1 are marked with change bars.

Chapter	Section	Action	Data
Authorization Detail File	2.2	Update	Updated Section 2.2
	2.6	Update	Updated fields 110 and 111 in Section 2.6
	2.7	Add	Added Section 2.7
Appendix A		Add	Added value of 09 in Table_A 3
		Update	Updated Table_A 7

Table 1.17 All revisions supporting release 6.0 are marked with change bars.

Chapter	Section	Action	Data
Authorization Detail File	2.6	Update	Updated Section 2.6
	2.7	Update	Updated Section 2.7
Appendix A		Update	Updated Table_A 12

Table 1.18 All revisions supporting release 5.3 are marked with change bars.

Chapter	Section	Action	Data
Appendix A		Update	Updated Table_A 4 and P0 and P1 were removed from Table_A 5

Table 1.19 All revisions supporting release 5.2 are marked with change bars.

Chapter	Section	Action	Data
Authorization Detail File	2.2	Add	Added PayPal to Section 2.2
	2.6	Update	Updated fields 22, 37, 49, 52, 95 and 110 in Section 2.6
	2.7	Update	Updated fields 2 - 7 and 9 in Section 2.7
	2.9	Update	Updated Section 2.9.2
Appendix A		Update	Updated Table_A 3,Table_A 8 and Table_A 12

NOTE: This document has been updated throughout to reflect card product code instead of product type identification.. There are change bars added for these instances.

Table 1.20 All revisions supporting release 5.1 are marked with change bars.

Chapter	Section	Action	Data
Authorization Detail File	2.6	Update	Updated fields 108, 109 and 110 in Section 2.6

Table 1.21 All revisions supporting release 5.0 are marked with change bars.

Chapter	Section	Action	Data
Authorization Detail File	2.6	Update	Updated fields 48, 86 and 107 in Section 2.6
Appendix A		Add	Added value in Table_A 12

Table 1.22 All revisions supporting release 4.3 are marked with change bars.

Chapter	Section	Action	Data
Authorization Detail File	2.6	Update	Updated Section 2.6

Table 1.23 All revisions supporting release 4.2 are marked with change bars.

Chapter	Section	Action	Data
Authorization Detail File	2.2	Update	Updated Section 2.2
	2.6	Add	Added and updated fields in Section 2.6
	2.7	Add	Added and updated fields in Section 2.7
	2.9	Update	Updated field 10 in Section 2.9
	2.10	Add	Added Section 2.10
Appendix A		Update	Updated Table_A 12

Table 1.24 All revisions supporting release 4.1 are marked with change bars.

Chapter	Section	Action	Data
Authorization Detail File	2.6	Add	Added and updated fields 105-108 in Section 2.6

Table 1.25 All revisions supporting release 4.0 are marked with change bars.

Chapter	Section	Action	Data
Authorization Detail File	2.9	Add	Added fields 5-10 in Section 2.9

Table 1.26 All revisions supporting release 3.1 are marked with change bars.

Chapter	Section	Action	Data
Authorization Detail File	2.6	Update	Updated fields 79, 85, 95 and 97 in Section 2.6
	2.7	Update	Updated field 6 in Section 2.7
	2.9	Add	Added fields 3-7 in Section 2.9
Appendix A		Add	Added code 34 to Table_A 5
		Update	Updated Table_A 12

     Authorization Detail File Specification

Table 1.27 All revisions supporting release 3.0 are marked with change bars.

Chapter	Section	Action	Data
Authorization Detail File	2.6	Add	Added new field to Section 2.6

Table 1.28 All revisions supporting release 2.10 are marked with change bars.

Chapter	Section	Action	Data
Authorization Detail File	2.5	Add	Added new value to field 7
	2.10	Add	Added new value to field 7
Appendix A		Add	Added new values to Table_A 5 and Table_A 9

Table 1.29 All revisions supporting release 2.9 are marked with change bars.

Chapter	Section	Action	Data
Authorization Detail File	2.6	Update	Updated description for field 22 and 105 in Section 2.6
	2.9	Add	Added new Section 2.9

Table 1.30 All revisions supporting release 2.8 are marked with change bars.

Chapter	Section	Action	Data
Authorization Detail File	2.6	Update	Updated field 94, 95, 103, 104 and 105 in Section 2.6
Appendix A		Update	Updated Table_A 8

Table 1.31 All revisions supporting release 2.7 are marked with change bars.

Chapter	Section	Action	Data
Authorization Detail File	2.6	Update	Updated field 33, 36, 40, 53, and 59 in Section 2.6
Appendix A		Update	Updated country names for Bolivia, Venezuela and the Republic of Montenegro in Table_A
		Update	Updated Table_A 4
		Add	Added Table_A 11
		Add	Added Table_A 12

Table 1.32 All revisions supporting release 2.6.6 are marked with change bars.

Chapter	Section	Action	Data
Appendix A		Add	Added two new rows in Table_A 9

Table 1.33 All revisions supporting release 2.6.5 are marked with change bars.

Chapter	Section	Action	Data

POS Check is no longer supported effective 4/17/09. All references to POS Check have been removed from the spec.

All references to Diners have been removed from the spec.

| Authorization Detail File | 2.6 | Add

Update | Added two new values in field 34, position 1-2
Added new value to field 71, position 618
Updated the description in field 22 |
| | 2.15 | Add | Added two new values in field 9 |
| Appendix A | | Update

Update | Updated Table_A

Updated Table_A 9 |

Table 1.34 All revisions supporting release 2.6.4 are marked with change bars.

Chapter	Section	Action	Data
Authorization Detail File	2.7	Update	Updated Data Type field from N to AN in field 7 and 9 Section 2.7

Table 1.35 All revisions supporting release 2.6.3 are marked with change bars.

Chapter	Section	Action	Data
Authorization Detail File	2.7	Update	Updated field 3, 4, 5, & 6 in Section 2.7

Table 1.36 All revisions supporting release 2.6.2 are marked with change bars.

Chapter	Section	Action	Data
Appendix A		Remove	Removed reject code 0092 from Table_A 6

       Authorization Detail File Specification

Table 1.37 All revisions supporting release 2.6.1 are marked with change bars.

Chapter	Section	Action	Data
Authorization Detail File	2.6	Update Remove	Update Section 2.6- TD01 - Transaction Detail field 72 and 85 Removed Appendix link from field 35, 36, 43, 45, 50, 51, 57, 68,76, 77, and 80
	2.7	Update	Updated Section 2.7-TD11- Transaction Detail Extension field 4, 5, 6, 7, 8, 9, and 10
	2.14	Update	Updated Section 2.14-TD02-Host Capture Adjustment Transaction Detail field 11
	2.15	Update	Updated Section 2.15-TD03-Host Capture Batch Inquiry Transaction Detail field 11

Table 1.38 All revisions supporting release 2.6 are marked with change bars.

Chapter	Section	Action	Data
Authorization Detail File	2.2	Add	Added new Documentation key
	2.6	Update Add	Updated Section 2.6 field 53 & 85 Added fields 101-104
	2.7	Add	Added Section 2.7-TD11- Transaction Detail Extension
	2.9	Add	Added Section 2.9-EX02- MasterCard Only
	2.13	Add	Added Section 2.13-RH02- Report Header
	2.14	Add	Added Section 2.14-TD02-Host Capture Adjustment Transaction Detail
	2.15	Add	Added Section 2.15-TD03-Host Capture Batch Inquiry Transaction Detail
Appendix A		Update	Updated Table_A

Table 1.39 All revisions supporting release 2.5.2 are marked with change bars.

Chapter	Section	Action	Data
Authorization Detail File	2.6	Add	Added note to the description in field 84 in section 2.6, TD01 - Transaction Detail. Added Discover to field 95 in section 2.6, TD01 - Transaction Detail

Chapter	Section	Action	Data
Appendix A		Add	Added Table_A 11

Table 1.40 All revisions supporting release 2.5.1 are marked with change bars.

Chapter	Section	Action	Data
Authorization Detail File	2.6	Update	Updated field 52,65,70,71, 90 & 94 in section 2.6, TD01 - Transaction Detail
Appendix A		Update	Updated Table_A 4, Table_A 5, Table_A 8,& Table_A 9

Table 1.41 All revisions supporting release 2.4.1 are marked with change bars.

Chapter	Section	Action	Data
Authorization Detail File	2.6	Update	Updated field 89 in section 2.6, TD01 - Transaction Detail

Table 1.42 All revisions supporting release 2.4 are marked with change bars.

Chapter	Section	Action	Data
Authorization Detail File	2.6	Update	Updated field 35 in section 2.6, TD01 - Transaction Detail

Updated field 37 in section 2.6, TD01 - Transaction Detail

Updated field 49 in section 2.6, TD01 - Transaction Detail

Updated field 53 in section 2.6, TD01 - Transaction Detail

Updated field 58 in section 2.6, TD01 - Transaction Detail |
| Appendix A | | Update | Updated table

Updated table 5

Updated table 7

Updated the Note at the end of table 7 |

Table 1.43 All revisions supporting release 2.3.

Chapter	Section	Action	Data
Authorization Detail File	2.6	Update	Updated field 20 in section 2.6, TD01 - Transaction Detail
			Updated field 67 in section 2.6, TD01 - Transaction Detail
			Updated field 86 in section 2.6, TD01 - Transaction Detail
		Remove	Removed ISO Field # 82 from field 95 2.6, TD01 - Transaction Detail

Table 1.44 All revisions supporting release 2.2.

Chapter	Section	Action	Data
Authorization Detail File	2.6	Update	Updated field 34 in section 2.6, TD01 - Transaction Detail
			Updated field 37 in section 2.6, TD01 - Transaction Detail
			Updated field 49 in section 2.6, TD01 - Transaction Detail

Table 1.45 All revisions supporting release 2.1

Chapter	Section	Action	Data
Authorization Detail File	2.6	Update	Updated field 96 in section 2.6, TD01 - Transaction Detail
		Add	Added fields 97-99 in section 2.6, TD01 - Transaction Detail

Table 1.46 All revisions supporting release 2.0

Chapter	Section	Action	Data
Authorization Detail File	2.6	Update	Updated fields 25, 53 and 58 in section 2.6, TD01 - Transaction Detail
		Add	Added fields 89-96 in section 2.6, TD01 - Transaction Detail
Appendix A	Table	Update	Updated -Table , The following table lists the currency code with its associated country name.
	Table 4	Update	Updated -Table 4, Access method definition of values
	Table 5	Update	Updated- Table 5, Line type

1.1.2 Chapter descriptions

This manual contains the following chapters.

Chapter	Title	Description
2	Authorization Detail File	Describes the format of the Authorization Detail Files.
3	Appendix A	Contains tables that are referenced in Chapter 2.

      Authorization Detail File Specification

Chapter 2
Authorization Detail File

2.1 Overview

This document describes the format of the Authorization Detail File.

2.2 Documentation key

Reporting element	Total # bytes	See page
TH01 – Transmission Header	900	page 18
BH01 – BIN Header	900	page 20
RH01 – Report Header	900	page 21
TD01 – Transaction Detail	900	page 23
TD11 – Transaction Detail Extension	200	page 63
EX01 – Discover/ PayPal Extension Record	160	page 67
EX02 – Mastercard Extension Record	160	page 73
EX03 – Additional Detail Data Extension Record	320	page 78
EX04 - Merchant Data Extension Record	160	page 79
RT01 – Report Trailer	900	page 79
RH02 – Report Header	81	page 82
TD02 – Host Capture Adjustment Transaction Detail	120	page 84
TD03 – Host Capture Inquiry Transaction Detail	100	page 87
RT02 – Report Trailer	93	page 89
BT01 –BIN Trailer	900	page 91
TT01 – Transmission Trailer	900	page 92

2.3 TH01 - Transmission Header

> **NOTE:** All date and time fields in the transmission header are based on GMT. For a GMT conversion table, see "GMT conversion chart" on page 115.

Field #	Field name	Length	Position	Data type	Description
1	RECORD TYPE	4	1-4	A/N	Indicates that this record is the Transmission Header. Value = TH01
2	VERSION NUMBER	5	5-9	A/N	Identifies the Report Version Number. Example: 01.00
3	DESTINATION ID	30	10-39	A/N	Identifies the destination client ID from the report registration.
4	FILE TYPE	10	40-49	A/N	Identifies the file type being sent. Value = ADF
5	FILE FREQUENCY	1	50	A/N	Identifies the frequency in which the file is sent. Example: B = Bi-hourly D = Daily W = Weekly
6	PROCESSING YEAR	4	51-54	N	Identifies the year in which the file was created. Example: YYYY
7	PROCESSING MONTH	2	55-56	N	Identifies the month in which the file was created. Example: MM - month number, from 01 to 12
8	PROCESSING WEEK	1	57	N	Identifies the week in which the file was created. The valid value for a week corresponds to the specific week within a month, and can be a 1, 2, 3, or 4. This field will only be used if it is a weekly file. Value Definition 1 Week 1 (day 1 - 7) 2 Week 2 (day 8 - 15) 3 Week 3 (day 16 - 22) 4 Week 4 (day 23 - end of month) If it is not a weekly file, then this field will be left blank.
9	PROCESSING DAY	2	58-59	N	Reserved for TSYS Acquiring Solutions use only.
10	PROCESSING END HOUR	2	60-61	N	Identifies the hour in which the file was created if the file is bi-hourly. If it is not a bi-hourly file, then this field will be left blank. Example: HH, (using a 24 hour clock). Based on GMT.

     Authorization Detail File Specification

Field #	Field name	Length	Position	Data type	Description
11	FILE REFERENCE ID	20	62-81	A/N	Reserved for TSYS Acquiring Solutions use only.
12	FILE CREATION DATE & TIME	19	82-100	A/N	Identifies the date and time (GMT) the file was created. Example: YYYY-MM-DD HH:MM:SS (using a 24 hour clock)
13	RESERVED (internal)	19	101-119	A/N	Reserved for TSYS Acquiring Solutions use only.
14	RESERVED (internal)	19	120-138	A/N	Reserved for TSYS Acquiring Solutions use only.
15	RESERVED (for future use)	762	139-900	A/N	Reserved for future use.

2.4 BH01 - BIN Header

Field #	Field name	Length	Position	Data type	Description
1	RECORD TYPE	4	1-4	A/N	Indicates that this record is the BIN Header. Value = BH01
2	ACQUIRER BIN	6	5-10	A/N	Identifies the financial institution acting as the Acquirer of this customer transaction.
3	RESERVED (for future use)	890	11-900	A/N	Reserved for future use.

     Authorization Detail File Specification

2.5 RH01 - Report Header

NOTE: All date and time fields in the report header are based on GMT. For a GMT conversion table, see "GMT conversion chart" on page 115.

Field #	Field name	Length	Position	Data type	Description
1	RECORD TYPE	4	1-4	A/N	Indicates that this record is the Report Header. Value = RH01
2	ACQUIRER BIN	6	5-10	A/N	Identifies the financial institution acting as the Acquirer of this customer transaction.
3	AGENT	6	11-16	A/N	Identifies the agent filter, if defined, from the report registration. The agent is a six-character value assigned by the merchant's bank or processor. The field is issued by the merchant's member bank or processor for purposes of identifying a specific agent entity of the member bank or processor. Possible values: 6 character agent value NA - then left justified space filled Space filled
4	CHAIN	6	17-22	A/N	Identifies the chain filter, if defined, from the report registration. The Chain is a six-character value assigned by the merchant's bank or processor. The field is issued by the merchant's member bank or processor for purposes of identifying a specific chain of the agent organization. Possible values: 6 character chain value NA - then left justified space filled Space filled
5	EFFECTIVE START DATE & TIME	19	23-41	A/N	Identifies the start date and time (GMT) from the report registration. Example: YYYY-MM-DD HH:MM:SS (using a 24 hour clock)
6	EFFECTIVE END DATE & TIME	19	42-60	A/N	Identifies the end date and time (GMT) from the report registration. Example: YYYY-MM-DD HH:MM:SS (using a 24 hour clock)

Field #	Field name	Length	Position	Data type	Description

7	INCLUDE ERROR TRANSACTION	1	61	A/N	Indicates if error transactions are present in the report.
					
					1 = All
					    Includes all transactions
					2 = Not a valid option
					3 = Not a valid option
					4 = No HV
					    Includes all transactions except Hierarchy Validation errors.
					
					As indicated in field 44 in the Transaction Detail record

8	RESERVED (internal)	20	62-81	A/N	Reserved for TSYS Acquiring Solutions internal use.
9	RESERVED (for future use)	819	82-900	A/N	Reserved for future use.

Authorization Detail File Specification

2.6 TD01 - Transaction Detail

NOTE: In the transaction detail section, brackets ([ ]) represent the position(s) within the ISO 8583 field. Please note that incomplete or rejected transactions may result in blank fields of fields populated with a question mark (?).

Field #	Field name	Length	Position	Data type	Description	Data source
1	RECORD TYPE	4	1-4	A/N	Indicates that this record is the Transaction Detail Header. Value = TD01	TSYS Internal
2	ACQUIRER BIN	6	5-10	A/N	Identifies the financial institution acting as the acquirer of this customer transaction.	ISO Field # 32[1-6]
3	EXT BIN	5	11-15	A/N	Identifies the extra data that is received from the ISO message for the BIN.	ISO Field # 32[7-11]

4	AGENT	6	16-21	A/N	Identifies a six-character value assigned by the merchant's bank or processor. The field is assigned by the merchant's member bank or processor for purposes of identifying a specific agent entity of the member bank or processor.
					
					Possible values:
					    6 character Agent value
					    NA - then left justified space filled
					    Space filled
						TSYS Internal

5	CHAIN	6	22-27	A/N	Identifies a six-character value assigned by the merchant's bank or processor. The field is assigned by the merchant's member bank or processor for purposes of identifying a specific chain of the agent organization.
					
					Possible values:
					    6 character Agent value
					    NA - then left justified space filled
					    Space filled
						TSYS Internal

6	ECONNECTION MERCHANT NUMBER	15	28-42	A/N	Identifies the merchant number that is displayed in the e-Connections Authorization and Capture module.	TSYS Internal
7	STORE NUMBER	4	43-46	A/N	Identifies the store number.	ISO Field # 41[1-4]
8	TERMINAL NUMBER	4	47-50	A/N	Identifies the terminal number.	ISO Field # 41[5-8]

Field #	Field name	Length	Position	Data type	Description	Data source
9	CARD ACCEPTOR ID	15	51-65	A/N	Identifies the name of the card acceptor operating the point of sale or point of service terminal.	ISO Field # 42
10	MERCHANT NAME	25	66-90	A/N	Identifies the name of the merchant. Identifies the name of the Sub-Merchant if the transaction is submitted by a Payment Facilitator.	TSYS Internal
11	CARD ACCEPTOR CITY	18	91-108	A/N	Identifies the city where the cardholder's transaction occurs. Example: Chandler Identifies the City of the Sub-Merchant if the transaction is submitted by a Payment Facilitator.	ISO Field # 43[26-38]
12	CARD ACCEPTOR STATE	2	109-110	A/N	Identifies the state where the cardholder's transaction occurs. Example: AZ Identifies the State of the Sub-Merchant if the transaction is submitted by a Payment Facilitator.	TSYS Internal
13	CARD ACCEPTOR COUNTRY CODE	2	111-112	A/N	Includes the country where the cardholder's transaction occurs. Identifies the Country Code of the Sub-Merchant if the transaction is submitted by a Payment Facilitator.	ISO Field # 43[39-40]
14	COUNTRY CODE PAN EXTENDED	3	113-115	A/N	Identifies a code in the card's magnetic stripe that identifies the country of the card issuer institution.	ISO Field # 20

15	NATIONAL POS GEOGRAPHIC DATA	14	116-129	A/N	Identifies the location of the cardholder transaction.
					
					Identifies the location of the Sub-Merchant if the transaction is submitted by a Payment Facilitator.
					
					State code
					    (ISO Field 59 positions 1-2)
					County code
					    (ISO field 59 positions 3-5)
					Postal code
					    (ISO field 59 positions 6-14)
					
					See "U.S. state codes" on page 95 for a list of state codes.
						ISO Field # 59

16	MCC CODE	4	130-133	N	Identifies a merchant category code that describes a merchant's type of business, product, or service.	ISO Field # 18

     Authorization Detail File Specification

Field #	Field name	Length	Position	Data type	Description	Data source
17	MERCHANT ABA NUMBER	9	134-142	A/N	Identifies the Merchant ABA Number. It consists of zero to nine characters and identifies the merchant to a direct debit switch. This number is provided by the signing member or processor.	ISO Field # 63.10[5-13]
18	CARD ACCEPTOR SETTLEMENT AGENT	4	143-146	A/N	Identifies the financial institution.	ISO Field # 63.10[1-4]
19	ISO SOURCE STATION ID	6	147-152	N	Identifies the originator of ISO request message.	TSYS Internal
20	ACQUIRER BUSINESS ID	8	153-160	A/N	Identifies the VISA assigned Acquirer Business ID.	ISO Field # 63.8
21	ACQUIRER COUNTRY CODE	3	161-163	A/N	Identifies the country of the acquiring institution for the merchant.	ISO Field # 19
22	CARD TYPE	1	164	A/N	Identifies the card plan type. **NOTE** Card-type is unknown or was not identified if a \<space> or a "?" value appears in this field. CREDIT- Identify credit if ADF Field 84 NID="NULL" or if NID="0002" 3 American Express 4 Visa 5 Mastercard 7 JCB 9 Other 8 Discover P PayPal DEBIT- Identify debit if Field 84 NID not ="NULL" and if NID not="0002" See Appendix A Table A. 9 for sharing group and Network ID codes.	TSYS Internal
23	PRIMARY ACCOUNT NUMBER	22	165-186	A/N	Identifies the primary account number. This field will be masked if configured as such.	ISO Field # 2

Field #	Field name	Length	Position	Data type	Description	Data source
24	EXT PAN	28	187-214	A/N	Used for the numeric account numbers or numbers encoded on track 3. May also contain a cardholder identification number that points to one or more cardholder accounts. This field will be masked if configured as such.	ISO Field # 34
25	ACCOUNT ID 1	28	215-242	A/N	This value is used if this is a check transaction, and it may contain identifying information such as driver's license number. For Mastercard transactions this value is used for the PayPass Primary Account Number. This field will be masked if configured as such.	ISO Field # 102, None for MC Pay-Pass #
26	CARD EXPIRA-TION DATE	4	243-246	N	Identifies the card expiration date in yymm format.	ISO Field # 14
27	ISSUING INSTITU-TION STATION ID	6	247-252	A/N	Identifies the endpoint that introduced the message into the network.	ISO Header field 6
28	ISSUING INSTITU-TION ID CODE	11	253-263	A/N	Identifies the Issuer ID of the cardholder's account.	ISO Field # 121
29	JULIAN DAY	3	264-266	N	Identifies the Julian day of the year. The Julian day of the year is a number representing the ordinal position of the transaction date. Format = DDD Example: December 30 in a non-leap year = 364	TSYS Internal
30	TRANSACTION DATE & TIME	19	267-285	A/N	Identifies the date and time stamp of a transaction based on GMT. Example: YYYY-MM-DD HH:MM:SS (using a 24 hour clock)	TSYS Internal
31	SETTLEMENT DATE	4	286-289	N	Identifies the month and the day for when the message becomes part of SMS's settlement between the acquirer and issuer. Example: 0501	ISO Field # 15
32	LOAD DATE & TIME	19	290-308	A/N	Identifies the load date and time (GMT) that a transaction was loaded into the report by a third party only. Example: YYYY-MM-DD HH:MM:SS (using a 24 hour clock)	TSYS Internal

    Authorization Detail File Specification

Field #	Field name	Length	Position	Data type	Description	Data source
33	MESSAGE TYPE	4	309-312	A/N	Defines ISO request type messages. Message types 0100/0200/0400/0420 are messages from an end-point to a card issuer. TSYS Acquiring Solutions uses these for authorization and verification requests to be routed from the endpoint to the card issuer. Message type 0120 messages are AFD advice messages indicating the final amount dispensed.	TSYS Internal
34	PROCESSING CODE	6	313-318	A/N	Identifies the cardholder transaction type and cardholder account types (if any) that are affected by the transaction.	ISO Field # 3

Positions 1 - 2: transaction type	Code	Definition
	00	Goods/Service Purchase POS transaction only
	01	Withdrawal/Cash Advance
	02	Adjustment - Debit
	10	Payment Transaction - Mastercard
	11	Quasi Cash Transaction (POS transaction only) or Online Gambling Transaction
	20	Return - Credit
	21	Deposit (Plus)
	22	Adjustment - Credit
	28	Pre-Paid Card Load
	30	Balance Inquiry
	39	Healthcare Eligibility Inquiry
	40	Cardholder Account Transfer
	50	Bill Payment
	72	Pre-Paid Card Activations

Positions 3 - 4: account type (from)	Code	Definition
	00	Not applicable or not specified
	10	Savings Account
	20	Checking Account
	30	Credit Card Account
	38	Credit Line Account
	39	Corporate
	40	"Universal" Account

Field #	Field name	Length	Position	Data type	Description	Data source
				50	Money Market Investment Account	
				60	Stored Value Account	
				90	Revolving Loan Account	
				96	Cash Benefits Account (for use by Electronic Benefits Transfer transactions only)	
				98	Food Stamps Account (for use by Electronic Benefits Transfer transactions only)	
	Positions 5 - 6: account type (to)			**Code**	**Definition**	
				00	Not applicable	
				10	Savings Account	
				20	Checking Account	
				30	Credit Card Account	
				38	Credit Line Account	
				40	Universal Account	
				50	Money market Investment Account	
				58	IRA Investment Account	
				90	Revolving Loan Account	
				91	Installment Loan Account	
				92	Real Estate Loan Account	
35	ACCESS METHOD	2	319-320	A/N	Identifies the connectivity method utilized to transmit the transaction. This field maps directly to the ASCII Line Type. Refer to Access method definition of values for possible values.	TSYS Internal
36	ASCII BILL CODE	1	321	A/N	Identifies the billing descriptor. It may contain additional billing or reporting information. Refer to Access method definition of values for valid codes.	TSYS Internal
37	TRANSACTION IDENTIFIER	15	322-336	A/N	Identifies a key element that links original authorization and financial requests to subsequent messages.	ISO Field # 62.2 for Visa ISO Field # 62.17 for MC, Discover, PayPal and AMEX

Field #	Field name	Length	Position	Data type	Description	Data source
38	RETRIEVAL REFER-ENCE NUMBER	12	337-348	N	Identifies a number that is used with other key data elements to identify and track all messages related to a given cardholder trans-action.	ISO Field # 37
39	SYSTEMS TRACE AUDIT NUMBER	6	349-354	A/N	Uniquely identifies a cardholder transaction and all the message types it comprises per individual program rules.	ISO Field # 11
40	AUTHORIZED AMOUNT	12	355-366	N	Identifies the transaction amount. Decimal place is implied based on currency.

Message type 0120 advice message amount is the final amount to be settled. | ISO Field # 4 |
| 41 | CARDHOLDER BILLING AMOUNT | 12 | 367-378 | N | Identifies a transaction amount converted to the currency used to bill the cardholder's account. | ISO Field # 6 |
| 42 | APPROVAL CODE | 6 | 379-384 | A/N | Identifies the approval code from the authorizer. | ISO Field # 38 |
| 43 | AUTHORIZATION RESPONSE | 2 | 385-386 | A/N | Identifies the authorization response code from the authorizer.

Refer to ISO field 39 response codes for valid response codes. | ISO Field # 39 |
| 44 | INTERNAL ERROR CODE | 1 | 387 | A/N | Identifies errors not logged in the system prior to September 2006. Field values include:

T = Timeout
G = Standard GEN2 parsing/edit error
S = SARATOGA parsing/edit error
V = VIP ISO reject (This ISO reject condition can only occur for VIP transactions.)
C = Citi GEN2 parsing/edit error
Blank = not timeout or new reject type | TSYS Internal |
| 45 | ISO REJECT CODE | 4 | 388-391 | A/N | Identifies the specific type of reject if an internal error code exists.

Refer to Reject codes, numeric sequence for a list of reject codes. | TSYS Internal |

Field #	Field name	Length	Position	Data type	Description	Data source
46	CVV2 / CVC2 / CID RESPONSE TYPE	1	392	A/N	Identifies the presence of the Card Verification Values. Valid values: 0 = Only the normal response code in ISO field 39 should be returned. 1 = The normal response code in ISO field 39 and the CVV2 result in ISO field 44.10 should be returned.	ISO Field # 126.10[2]
47	CVV2 / CVC2 / CID PRESENCE INDI-CATOR	1	393	A/N	Identifies the presence of card verification values. Valid values: 0 = CVV2 value is deliberately bypassed or is not provided by the merchant. 1 = CVV2 value is present. 2 = CVV2 is on the card but is illegible. 9 = Cardholder states that the card does not have a CVV2 imprint.	ISO Field # 126.10[1]

     Authorization Detail File Specification

Field #	Field name	Length	Position	Data type	Description	Data source
48	MESSAGE REASON CODE	4	394-397	A/N	This field supports multiple usages Reversal Messages If there is no reversal, data will not be present. Possible values for Reversal Messages: **2501 -** Transaction voided by customer **2502 -** Transaction has not completed (Request timed out or POS device malfunctioned) **2503 -** No confirmation from the point of sale **2504 -** POS partial reversal **2516 -** Premature chip card removal (after online request sent before response received) **2517 -** Chip declined transaction after online issuer approved Visa Merchant Initiated Transactions The Message Reason Code field will be used to identify Merchant Initiated Transactions [MIT] for Visa. A MIT is any transaction that relates to a previous consumer-initiated transaction but is conducted without the consumer being present, and without any cardholder validation performed. Possible values for Visa Merchant Initiated Transctions: **3900 -** Incremental Authorization **3901 -** Resubmission **3902 -** Delayed Charges **3903 -** Reauthorization **3904 -** No Show	ISO Field # 63.3

Field #	Field name	Length	Position	Data type	Description	Data source
49	ADDITIONAL RESPONSE DATA	25	398-422	A/N/S	Contains miscellaneous response message data. TSYS Acquiring Solutions uses this field and its sub-fields for the following special codes:	ISO Field # 44

		Length	Position	ISO Field	Description	
		1	398	44.1	Response/Source reason code	
		1	399	44.2	Address verification result code	
		1	400	44.3	Reserved, space filled	
		1	401	44.4	Reserved, space filled	
		1	402	44.5	CVV, CVC1/ CVC3 Results Code	
		2	403-404	44.6	Reserved, space filled	
		1	405	44.7	Reserved, space filled	
		1	406	44.8	Card authentication results code	
		1	407	44.9	Reserved, space filled	
		1	408	44.10	CVV2/CVC2/CID results code	
		2	409-410	44.11	Reserved, space filled	
		1	411	44.12	Check settlement code	
		1	412	44.13	CAVV result code	
		4	413-416	44.14	Merchant Advice Code (MC)	
		4	417-420	44.15	Card Brand Token PAN Last Digits	
		1	421	44.16	Reserved, space filled	
		1	422	N/A	Reserved, space filled	
50	REQUEST ACI	1	423	A/S	Identifies if a transaction requested CPS qualification when it was sent by the merchant. Refer to ISO field 62.1 authoriza-tion characteristics indicators for possible values.	ISO Field # 62.1
51	RETURN ACI	1	424	A/S	Identifies the response to the ACI Request. Refer to ISO field 62.1 authoriza-tion characteristics indicators for possible values.	ISO Field # 62.1

     Authorization Detail File Specification

Field #	Field name	Length	Position	Data type	Description	Data source
52	VALIDATION CODE	4	425-428	A/N	Identifies a Visa calculated code in the authorization message to ensure that key fields match their respective fields in the Visa BASE II clearing message. For Discover and PayPal transactions, contains the Track Data Condition Code utilizing the first 2 bytes of the field.	ISO Field # 62.3
53	PRODUCT TYPE IDENTIFICATION	2	429-430	A/N	Product Type Identification Refer to Appendix A, Table A. 12 for values.	ISO Field # 62.23
54	TRANSACTION SOURCE FLAG	3	431-433	N	Identifies the Telecom provider for authorizations handled through TSYS Acquiring Solutions.	TSYS Internal
55	VAR TRACK ID	10	434-443	A/N	Identifies the Developer ID for the transaction.	TSYS Internal
56	VENDOR ID	5	444-448	N	Identifies the Vendor ID for the transaction.	TSYS Internal
57	POS ENTRY MODE	4	449-452	A/N	Identifies the actual method to capture the account number and expiration date when a terminal is used and the terminal's PIN capture capability. Refer to ISO field 22 POS entry mode codes for values.	ISO Field # 22
58	ISA Charge Indicator	1	453	A/N	Indicates that the Visa ISA charge was assessed	ISO Field #63.21
59	AMEX Cardholder Verification Results	9	454-462	ANS	Bytes 1-5: Verification codes received from AMEX in authorization response. Refer to Appendix A, Table A. 11 for possible values. Bytes 6-9: Reserved. Space filled	ISO Field #116

Field #	Field name	Length	Position	Data type	Description	Data source
60	POS CONDITION CODE	2	463-464	A/N	Identifies transaction conditions at the point of sale or point of service.	ISO Field # 25

Code	Definition
00	Normal transaction of this type
01	Cardholder not present
02	Unattended terminal, customer operated (for example, an Automated Dispensing Machine)
03	Merchant suspicious of transaction (or card)
05	Customer present, card not present
06	Pre-authorization
08	Mail/telephone order (includes Visa Phone and reoccurring transactions)
10	Customer identity verified (used for Check Acceptance only)
51	Request for account number verification without authorization; or request for account number verification and address verification without authorization
59	e-Commerce request (through public network)
71	Card present, magnetic stripe cannot be read (key-entered)
73	Recurring transaction (original transaction was token-based with valid cryptogram; Mastercard only)

Field #	Field name	Length	Position	Data type	Description	Data source
61	ADDITIONAL DATA PRIVATE REQUEST	20	465-484	A/N	The following table defines the usage code key for all private requests for additional data.	ISO Field # 48

Usage	Ind.	Ind. bytes	Notes
2	*	1	Unformatted text in authorization or reversal messages
3	*	1	Error reason text in check acceptance response
4	N/A	0	Network connectivity type messages
5	@	1	Dial terminal information
6	@	1	Check acceptance information
7	N/A		This field should not be used unless instructed by the TSYS Acquiring Solutions Implementation Manager.
10	$	1	Mastercard Corporate Fleet Card data
11	!01	3	Visa Commercial Card request
12	$$	2	Purchasing Card fleet service
14			Reserved for TSYS Acquiring Solutions
32	EB	2	Integrated Food and Consumer Service (FCS) ID
33	VN	2	Voucher Serial Number and EBT FCS ID

Field #	Field name	Length	Position	Data type	Description	Data source
		unk			Future unknown usage	
62	ADDITIONAL DATA PRIVATE RESPONSE	20	485-504	A/N	Mapping is same as ADDITIONAL DATA PRIVATE REQUEST (see above table).	ISO Field # 48
63	SUPPORTING INFORMATION	60	505-564	A/N/S	Private use field with the following usages:	ISO Field # 125

	Usage	Notes
	1	Reserved for future use
	2	Reserved for future use
	3	Reserved for future use
	4	Reserved for future use
	5	Reserved for future use
	7	Reserved for future use

Field #	Field name	Length	Position	Data type	Description	Data source
64	DURATION	2	565-566	A/N	Identifies the number of days (from 01 through 99) anticipated for the auto rental or hotel stay.	ISO Field # 62.5
65	MARKET SPECIFIC DATA INDICATOR	1	567	A/N	Identifies the industry for which market specific data has been provided.	ISO Field # 62.4

	Code	Definition
	A	Auto rental
	H	Hotel
	B	Bill payment
	M	Healthcare
	T	Transit
	N	Failed cps market data edit
	E	eCommerce Transaction Aggregation
	J	B2B Invoice Payments

Field #	Field name	Length	Position	Data type	Description	Data source
66	CASH BACK AMOUNT	12	568-579	N	Identifies the cash back amount.	ISO Field # 61.1[1-12]
67	CARDHOLDER BILLING CONVERSION RATE	9	580-588	N	Identifies a calculated value that represents a factor that may be applied to the transaction amount to obtain the cardholder billing amount.	ISO Field # 10

Field #	Field name	Length	Position	Data type	Description	Data source
68	CARDHOLDER BILLING CURRENCY CODE	3	589-591	A/N	Contains a three character numeric code identifying the currency used by the Issuer to bill the cardholder's account. Refer to Currency Codes for a list of currency codes.	ISO Field # 51
69	REQUEST ADDITIONAL AMOUNT	20	592-611	A/N	Identifies account balance information for ATM balance inquiries, cash disbursements, or available credit balance inquiries. The following is the field layout:	ISO Field # 54

			Position	Byte	Data Value	
				1	Length	
			1-2	2-3	Account type	
			3-4	4-5	Amount type	
			5-7	6-8	Currency code	
			8	9	Amount sign	
			9-20	10-20	Amount	

Field #	Field name	Length	Position	Data type	Description	Data source
70	Mastercard Assigned ID	6	612-617	A/N	Identifies the merchant as participating in Mastercard's private label program or as IIAS compliant for healthcare transactions	TSYS Internal
71	Mastercard IIAS Indicator	1	618	N	0 - Merchant terminal did not verify the purchased items against an IIAS 1 - Merchant terminal verified the purchase items against an IIAS 2- Merchant claims exemption from IIAS based on the 90 percent rule	ISO Field # 126.19
72	RESPONSE ADDITIONAL AMOUNT	20	619-638	A/N	Identifies the response information for account balance information for ATM balance inquiries, cash disbursements, or available credit balance inquiries. Refer to Field 69 Description (above) for field layout.	ISO Field # 54
73	REPLACEMENT AMOUNTS	12	639-650	A/N	Identifies the corrected amount of a transaction if a partial reversal was completed.	ISO Field # 95
74	XID	40	651-690	A/N	Identifies the unique VSEC transaction ID generated by the merchant server to identify the transaction.	ISO Field # 126.8
75	UCAF COLLECTION INDICATOR	1	691	A/N	Applies to Mastercard (MC) transactions. Values map to MC authorization requests, if the Acquirer submits this field.	ISO Field # 126.15

    Authorization Detail File Specification

Field #	Field name	Length	Position	Data type	Description	Data source
76	TRANSACTION CURRENCY CODE	3	692-694	A/N	Identifies a three-character code used to define the currency of the transaction. It is also used to determine the number of decimal places for ISO fields 4, 61.1 and 95.1. Refer to Currency Codes for a list of currency codes.	ISO Field # 49
77	GATEWAY CURRENCY CODE	3	695-697	A/N	Identifies a three-character code used to define the currency code of the gateway. Refer to Currency Codes for a list of currency codes.	TSYS Internal
78	GATEWAY COUNTRY CODE	3	698-700	A/N	Identifies the country code of the gateway that processed the transaction.	TSYS Internal
79	RECEIVING INSTITUTION COUNTRY CODE	3	701-703	N	Identifies the country where the Receiving Institution is located.	Visa ISO Field # 68
80	SHARING GROUP	30	704-733	A/N/S	Optionally used by POS priority selection participants to validate the network access priority and determine the routing of the financial POS requests. Refer to Appendix A Table A. 9 for a list of codes.	ISO Field # 63.12
81	GIV	1	734	A/N	Identifies the Gross Interchange Value and is set by VISA. If flag = @, Transaction has financial impact and will be included in the appropriate settlement accumulation during processing of the request/ response or advice/ advice-response message pair. If flag = is blank, The transaction is ineligible for settlement processing.	TSYS Internal
82	REIMBURSEMENT ATTRIBUTE	1	735	A/N/S	Identifies a code that represents the applicable interchange reimbursement fee for a purchase transaction.	ISO Field # 63.11
83	RECEIVING INSTITUTION ID CODE	11	736-746	A/N	Identifies a message routing code which identifies the institution that should receive a request or advice.	ISO Field # 100

Field #	Field name	Length	Position	Data type	Description	Data source
84	NETWORK ID	4	747-750	N	Identifies the Network ID that was used for the transmission of the message. **NOTE** See Appendix A Table A. 9, for a list of valid values.	ISO Field # 63.1
85	Transaction Data	12	751-762	A/N	Identifies values containing information extracted from the second generation request messages.	TSYS Internal

				Gen2 Position	**Gen2 Definitions For Terminal Capture Mapping**	
					When Field 85 position 1, Format Identifier, is not equal to "H", "S" or "X"	
				1	Format Identifier	
				2	Application type	
				3	Device Code	
				4	Industry Code	
				5-8	Transaction Sequence Number	
				9-10	Transaction Code	
				11	Customer Identification Code (CID)	
				12	Account Data Source (ADSC)	
				SGMF Position	**SGMF Definition For Host Capture Mapping**	
					When Field 85 position 1, Format Identifier, is equal to "H"	
				1	Format Identifier always and exclusively 'H' for host capture	
				2	App type - 0 is single tran, 2 is multi tran, 4 is interleaved	
				3-4	SGMF Transaction code	
				5	SGMF Program code	
				6	SGMF Payment code	
				7-10	Last 4 of TON	
				11-12	Space Filled	
				Apex Position	**Apex Definitions**	
					When Field 85 position 1, Format Identifier, is equal to "S"	
				1	Format Identifier always and exclusively 'S' for Apex	
				2	Header Message Type	

Field #	Field name	Length	Position	Data type	Description	Data source
			3		Header Message Subtype	
			4-5		Header Transaction Code	
			6-7		Header Transmission Number	
			8-11		FID h Sequence Number - last four digits	
			12		FID P Draft Capture Flag	
			Apex XML Position		**Apex XML Definitions**	
					When Field 85 position 1, Format Identifier, is equal to "X"	
			1		Format Identifier always and exclusively 'X' for Apex XML	
			2-12		Reserved	
86	TRANSACTION FEE AMOUNT	9	763-771	A/N	Identifies a destination assessed PIN POS and credit transaction surcharge fee in the transaction amount currency for information only.	ISO Field # 28
87	PRESTIGIOUS PROPERTY INDICATOR	1	772	A	Identifies an indicator used by CPS Acquirers in the VISA USA prestigious lodging program to identify a property floor limit. Valid values:	ISO Field # 62.6
				Code	**Definition**	
				D	Prestigious property with US $500 limit	
				B	Prestigious property with US $1000 limit	
				S	Prestigious property with US $1500 limit	
88	PRE AUTH TIME LIMIT	4	773-776	A/N	Includes the time frame that funds will be held for a pre-authorization transaction before the completion transaction is finished. This field only applies to pre-authorization and completion transactions, otherwise it will be omitted.	ISO Field # 63.2
89	FORWARDING INSTITUTION COUNTRY CODE	3	777-779	A/N	Identifies the country of the forwarding institution.	ISO Field # 21

Field #	Field name	Length	Position	Data type	Description	Data source
90	DIAL PAY AUTHORIZATION CALL TYPE	2	780-781	A/N	Specifies the type of Dial-Pay authorization that was processed. TSYS Acquiring Solutions uses this value to segregate and accumulate Dial-Pay authorizations for merchant billing purposes. Valid values:	TSYS Internal

Code	Description
Blank	not a Dial-Pay Authorization
IV	IVR
VC	VOICE
RF	REFERRAL
OT	OTHER
CR	CREDIT
VD	VOID
BT	BATCH TOTALS
OF'	OFFLINE
DC	DROPPED CALL
BH	BATCH HISTORY
BR	BATCH REVIEW
LT	BATCH FIND

Field #	Field name	Length	Position	Data type	Description	Data source
91	Digital Entity Identifier	5	782-786	A/N	A unique identifier that is assigned by Visa at the time of authorization that identifies transactions that originate from Visa Checkout.	ISO Field # 126.18
92	Reserved	12	787-798	HEX	This field is reverved for internal use only.	ISO Field # 126.18
93	REVERSAL REQUEST CODE	2	799-800	A/N	This value is a code the can be present in the reversal request for Mastercard transaction to signify the reason for a reversal.	None
94	ADDITIONAL POS INFORMATION TEXT	12	801-812	A/N	This value is a code that identifies the terminal's capability to electronically read account numbers and expiration dates from cards. Refer to Appendix A, Table A. 8 for more details.	ISO Field # 60

©2006-2016, TSYS Acquiring Solutions, L.L.C.   Authorization Detail File Specification

Field #	Field name	Length	Position	Data type	Description	Data source
95	ENDPOINT CODE	1	813	A/N	The value of this field is privately used by TSYS Acquiring Solutions and may contain one of the following values. **Endpoint** **Code** Visa V Mastercard M American Express A Discover D Citi Bank C Stored Value Systems S Fifth Third Bank F Not routed Null TSYS Issuing TS2 T ValueLink Y	None
96	MAPPED ACCOUNT EXPIRATION DATE	4	814-817	A/N	This value is the expiration date of the Mapped PayPass card.	ISO Field # 73

Field #	Field name	Length	Position	Data type	Description	Data source
97	POS DATA CODE	12	818-829	A/N	This field consists of 12 subfields that indicate the condition or state of the POS device at the time of the transaction. The fields come in two types, static or dynamic. **Static Fields**: Static fields have the same value for every transaction. They do not typically change once the software and hardware are considered together in the environment in which they are deployed. **Dynamic Values**: Dynamic fields can change based on the transaction scenario. For Mastercard transactions, this field contains the settlement point of sale data that was sent to Mastercard. The list of valid values for Mastercard are shown below. The list of valid values for AMEX are shown next, following the the Mastercard values. For American Express transactions, this field contains the point of sale data that was sent to American Express.	ISO Field # 82

Mastercard POS Data Code Valid Values

Field #	Field name	Length	Position	Data type	Description	Data source
97.1	MC - Card Data Input Capability	1	818	A/N	**Subfield 1 - Terminal Data - Card Data Input Capability** This subfield indicates the highest-level capability of the device and its software used to originate this transaction. The value is static depending on the card data input capabilities in the environment in which it is deployed. **Valid values:** **0 -** Unspecified, data not available **1 -** Manual; no terminal; Voice auth/ARU only **2 -** Magnetic stripe reader capability only **4 -** Optical character reader (OCR) capability **5 -** Integrated circuit card (ICC) capability **6 -** Key entry only capability **A -** PAN auto-entry via contactless magnetic stripe **B -** Magnetic stripe reader and key entry capability **C -** Magnetic stripe reader, ICC, and key entry capability **D -** Magnetic stripe reader and ICC capability **E -** ICC and key entry capability **M -** PAN auto-entry via contactless chip **V -** Other capability	ISO Field #82

Field #	Field name	Length	Position	Data type	Description	Data source
97.2	MC - Cardholder Authentication Capability	1	819	A/N	**Subfield 2 - Terminal Data - Cardholder Authentication Capability** This subfield indicates the highest-level capability of the device and its software used to verify the Cardholder's identity at this terminal. The value is static depending on the terminal cardholder-authentication capabilities in the environment in which it is deployed. **Valid values:** **0 -** No electronic authentication capability **1 -** PIN entry capability **2 -** Electronic signature analysis capability **5 -** Electronic authentication capability is inoperative **6 -** Other **9 -** Unspecified, data not available	ISO Field #82
97.3	MC - Terminal Card Capture Capability	1	820	A/N	**Subfield 3 - Terminal Card Capture Capability** This subfield indicates if the terminal is capable of pulling the card into the device while the transaction is taking place. The value is static depending on the terminal card-capture capabilities in the environment in which it is deployed. **Valid values:** **0 -** No capture capability **1 -** Card capture capability **9 -** Unspecified, data not available	ISO Field #82

     Authorization Detail File Specification

Field #	Field name	Length	Position	Data type	Description	Data source
97.4	MC - Terminal Operating Environment	1	821	A/N	**Subfield 4 - Terminal Operating Environment** This subfield indicates the terminal's location and indicates whether it is attended by the card acceptor. The value is static depending on the terminal's operating capabilities in the environment in which it is deployed. **Valid values:** **0 -** No terminal used; Voice auth/ARU only **1 -** On card acceptor premises; attended terminal **2 -** On card acceptor premises; unattended terminal **3 -** Off card acceptor premises; attended **4 -** Off card acceptor premises; unattended **5 -** On cardholder premises; unattended **6 -** Off cardholder premises; unattended **9 -** Unspecified, data not available	ISO Field #82

Field #	Field name	Length	Position	Data type	Description	Data source
97.5	MC - Cardholder Present Data	1	822	A/N	**Subfield 5 - Cardholder Present Data** This subfield indicates if the Cardholder is present at the point of service and if not, the reason why. The value is dynamic based on the Cardholder presence at the time of the transaction. **Valid values:** **0 -** Cardholder present **1 -** Cardholder not present; unspecified reason **2 -** Cardholder not present; mail transaction **3 -** Cardholder not present; phone transaction **4 -** Cardholder not present; standing (recurring) transaction such as a subscription **5 -** Cardholder not present; electronic commerce	ISO Field #82
97.6	MC - Card Present Data	1	823	A/N	**Subfield 6 - Card Present Data** This subfield indicates if the card is present at the point of service. The value is dynamic based on the card presence at the time of the transaction. **Valid values:** **0 -** Card not present **1 -** Card present	ISO Field #82

     Authorization Detail File Specification

Field #	Field name	Length	Position	Data type	Description	Data source
97.7	MC - Card Data Input Mode	1	824	A/N	**Subfield 7 - Card Data Input Mode** This subfield indicates the method used to capture information from the card. The value is dynamic based on the input mode at the time of the transaction. **Valid values:** **0 -** Unspecified, data not available **1 -** Manual input; no terminal; Voice auth/ ARU only **2 -** Magnetic stripe reader input **6 -** Key entered input **A -** PAN auto-entry via contactless magnetic stripe **B -** Magnetic stripe reader input; track data captured and passed unaltered **C -** Online Chip **F -** Offline Chip **M -** PAN auto-entry via contactless Chip Card (EMV Mode) **R -** PAN Entry via electronic commerce, including remote chip **S -** Electronic commerce **T -** PAN auto entry via server (issuer, acquirer, or third party vendor system)	ISO Field #82

Field #	Field name	Length	Position	Data type	Description	Data source
97.8	MC - Cardholder Authentication Method	1	825	A/N	**Subfield 8 - Cardholder Authentication Method** This subfield indicates the method used for verifying the Cardholder's identity. The value is dynamic based on the Cardholder Authentication Method at the time of the transaction. **Valid values:** **0 -** Not authenticated **1 -** PIN **2 -** Electronic signature analysis **5 -** Manual signature verification **6 -** Other manual verification (such as a driver's license number) **9 -** Unspecified, data not available **S -** Other systematic verification	ISO Field #82

Authorization Detail File Specification

Field #	Field name	Length	Position	Data type	Description	Data source
97.9	MC - Cardholder Authentication Entity	1	826	A/N	**Subfield 9 - Cardholder Authentication Entity** This subfield indicates the component or person who verified Cardholder Identity reported in Cardholder Authentication (Subfield 8). The value is dynamic based on the Entity that performed the Authentication at the time of the transaction. **Valid values:** **0 -** Not authenticated **1 -** ICC - Offline PIN **2 -** Card acceptance device (CAD) **3 -** Online PIN **4 -** Merchant/card acceptor - signature **5 -** Other **9 -** Unspecified, data not available	ISO Field #82
97.10	MC - Card Data Output Capability	1	827	A/N	**Subfield 10 - Card Data Output Capability** This subfield indicates the ability of the terminal and software to update or change the card. The value is static depending on the terminal and software capabilities in the environment in which it is deployed. **Valid values:** **0 -** Unspecified, data not available **1 -** None **2 -** Magnetic stripe write **3 -** ICC **S -** Other	ISO Field #82

Field #	Field name	Length	Position	Data type	Description	Data source
97.11	MC - Terminal Data Output Capability	1	828	A/N	**Subfield 11 - Terminal Data Output Capability** This subfield indicates the ability of the terminal and/or software to print and/or display messages. This value is static depending on the terminal and/or software capabilities in the environment in which it is deployed. **Valid values:** **0 -** Unspecified, data not available **1 -** None **2 -** Printing capability only **3 -** Display capability only **4 -** Printing and display capability	ISO Field #82

Field #	Field name	Length	Position	Data type	Description	Data source
97.12	MC - PIN Capture Capability	1	829	A/N	**Subfield 12 - PIN Capture Capability** This subfield indicates the length of the PIN that the terminal is capable of capturing. The value is static depending on the capability of the terminal in the environment in which it is deployed. **Valid Values:** **0 -** No PIN capture capability **1 -** Unspecified, data not available **2 -** Reserved **3 -** Reserved **4 -** PIN capture capability four characters maximum **5 -** PIN capture capability five characters maximum **6 -** PIN capture capability six characters maximum **7 -** PIN capture capability seven characters maximum **8 -** PIN capture capability eight characters maximum **9 -** PIN capture capability nine characters maximum **A -** PIN capture capability 10 characters maximum **B -** PIN capture capability 11 characters maximum **C -** PIN capture capability 12 characters maximum	ISO Field #82

Field #	Field name	Length	Position	Data type	Description	Data source
				American Express POS Data Code Valid Values		
97.1	Amex- Card Data Input Capability	1	818	A/N	**Subfield 1 - Terminal Data - Card Data Input Capability** This subfield indicates the highest-level capability of the device and its software used to originate this transaction. The value is static depending on the card data input capabilities in the environment in which it is deployed. **Valid values:** **0 -** Unspecified, data not available **1 -** Manual; no terminal; Voice auth/ARU only **2 -** Magnetic stripe read **3 -** Bar Code **4 -** Optical character reader (OCR) **5 -** Integrated circuit card (ICC) **6 -** Key entry only capability	ISO Field #82

Authorization Detail File Specification

Field #	Field name	Length	Position	Data type	Description	Data source
97.2	Amex - Terminal Data - Cardholder Authentication Capability	1	819	A/N	**Subfield 2 - Terminal Data - Cardholder Authentication Capability** This subfield indicates the highest-level capability of the device and its software used to verify the Cardholder's identity at this terminal. The value is static depending on the terminal cardholder-authentication capabilities in the environment in which it is deployed. **Valid values:** **0 -** No electronic authentication capability **1 -** PIN entry capability **2 -** Electronic signature analysis capability **5 -** Electronic authentication capability is inoperative **6 -** Other	ISO Field #82
97.3	Amex - Terminal Card Capture Capability	1	820	A/N	**Subfield 3 - Terminal Card Capture Capability** This subfield indicates if the terminal is capable of pulling the card into the device while the transaction is taking place. The value is static depending on the terminal card-capture capabilities in the environment in which it is deployed. **Valid values:** **0 -** No capture capability or unknown **1 -** Card capture capability	ISO Field #82

Field #	Field name	Length	Position	Data type	Description	Data source
97.4	Amex - Terminal Operating Environment	1	821	A/N	**Subfield 4 - Terminal Operating Environment** This subfield indicates the terminal's location and indicates whether it is attended by the card acceptor. The value is static depending on the terminal's operating capabilities in the environment in which it is deployed. **Valid values:** **0 -** No terminal used; Voice auth/ARU only **1 -** On card acceptor premises; attended terminal **2 -** On card acceptor premises; unattended terminal **3 -** Off card acceptor premises; attended **4 -** Off card acceptor premises; unattended **5 -** On cardholder premises; unattended **9 -** Unspecified, data not available **S -** Electronic delivery of product **T -** Physical delivery of product	ISO Field #82

Authorization Detail File Specification

Field #	Field name	Length	Position	Data type	Description	Data source
97.5	Amex- Cardholder Present Data	1	822	A/N	**Subfield 5 - Cardholder Present Data** This subfield indicates if the Cardholder is present at the point of service and if not, the reason why. The value is dynamic based on the Cardholder presence at the time of the transaction. **Valid values:** **0 -** Cardholder present **1 -** Cardholder not present; unspecified reason **2 -** Cardholder not present; mail transaction **3 -** Cardholder not present; phone transaction **4 -** Cardholder not present; card on file transaction (billing frequency/ amount are variable) **9 -** Cardholder not present; recurring (membership, subscription, etc) **S -** Cardmember not present; electronic transaction	ISO Field #82

Field #	Field name	Length	Position	Data type	Description	Data source
97.6	Amex - Card Present Data	1	823	A/N	**Subfield 6 - Card Present Data** This subfield indicates if the card is present at the point of service. The value is dynamic based on the card presence at the time of the transaction. **Valid values:** **0 -** Card not present **1 -** Card present **W -** Transponder (RFID Token) **X -** Contactless, including ExpressPay **Z -** Digital Wallet - appliction initiated	ISO Field #82

Field #	Field name	Length	Position	Data type	Description	Data source
97.7	Amex - Card Data Input Mode	1	824	A/N	**Subfield 7 - Card Data Input Mode** This subfield indicates the method used to capture information from the card. The value is dynamic based on the input mode at the time of the transaction. **Valid values:** **0 -** Unspecified, data not available **1 -** Manual input; no terminal; Voice auth/ARU only **2 -** Magnetic stripe reader input **3 -** Bar Code **4 -** Optical Character Recognition (OCR) **5 -** Integrated Circuit Card (ICC) **6 -** Key entered input **9 -** Technical fallback - iniated as chip but processed using alternative (such as mag stripe) **S -** Manually entered keyed CID **W -** Swiped transaction with keyed CID	ISO Field #82

Field #	Field name	Length	Position	Data type	Description	Data source
97.8	Amex- Cardholder Authentication Method	1	825	A/N	**Subfield 8 - Cardholder Authentication Method** This subfield indicates the method used for verifying the Cardholder's identity. The value is dynamic based on the Cardholder Authentication Method at the time of the transaction. **Valid values:** **0 -** Not authenticated **1 -** PIN **2 -** Electronic signature analysis **5 -** Manual signature verification **6 -** Other manual verification (such as a driver's license number) **S -** Electronic Ticket Environment	ISO Field #82
97.9	Amex- Cardholder Authentication Entity	1	826	A/N	**Subfield 9 - Cardholder Authentication Entity** This subfield indicates the component or person who verified Cardholder Identity reported in Cardholder Authentication (Subfield 8). The value is dynamic based on the Entity that performed the Authentication at the time of the transaction. **Valid values:** **0 -** Not authenticated **1 -** ICC - Offline PIN **2 -** Card acceptance device (CAD) **3 -** Online PIN **4 -** Merchant/card acceptor - signature **5 -** Other	ISO Field #82

     Authorization Detail File Specification

Field #	Field name	Length	Position	Data type	Description	Data source
97.10	Amex- Card Data Output Capability	1	827	A/N	**Subfield 10 - Card Data Output Capability** This subfield indicates the ability of the terminal and software to update or change the card. The value is static depending on the terminal and software capabilities in the environment in which it is deployed. **Valid values:** **0 -** Unspecified, data not available **1 -** None **2 -** Magnetic stripe write **3 -** ICC	ISO Field #82
97.11	Amex - Terminal Data Output Capability	1	828	A/N	**Subfield 11 - Terminal Data Output Capability** This subfield indicates the ability of the terminal and/or software to print and/or display messages. This value is static depending on the terminal and/or software capabilities in the environment in which it is deployed. **Valid values:** **0 -** Unspecified, data not available **1 -** None **2 -** Printing capability only **3 -** Display capability only **4 -** Printing and display capability	ISO Field #82

Field #	Field name	Length	Position	Data type	Description	Data source
97.12	Amex - PIN Capture Capability	1	829	A/N	**Subfield 12 - PIN Capture Capability** This subfield indicates the length of the PIN that the terminal is capable of capturing. The value is static depending on the capability of the terminal in the environment in which it is deployed. **Valid Values:** **0 -** No PIN capture capability **1 -** Unspecified, data not available **4 -** PIN capture capability four characters maximum **5 -** PIN capture capability five characters maximum **6 -** PIN capture capability six characters maximum **7 -** PIN capture capability seven characters maximum **8 -** PIN capture capability eight characters maximum **9 -** PIN capture capability nine characters maximum **A -** PIN capture capability 10 characters maximum **B -** PIN capture capability 11 characters maximum **C -** PIN capture capability 12 characters maximum	ISO Field #82
98	ABA Number	9	830-838	A/N	ABA Routing Transit Number.	None
99	Check Account Number	19	839-857	A/N	The Customer Deposit Account number.	None
100	Check Serial Number	15	858-872	A/N	The Check Serial Number.	None

Field #	Field name	Length	Position	Data type	Description	Data source
101	Local Transaction Date	4	873-876	N	MMDD This is the month and day on which the cardholder originated the transaction. For recurring payments, the date is the cardholder requested payment date.	ISO Field # 13
102	Local Transaction Time	6	877-882	N	HHMMSS	ISO Field #12
103	Fee Program Indicator	3	883-885	AN	Identifies the fee program assessed on the transaction	ISO field 63.19
104	Visa DCC Indicator	1	886	AN	Visa Dynamic Currency Conversion Indicator **Possible values:** **1 -** DCC transaction **Space -** Not a DCC transaction	ISO field 126.19
105	Encryption Indicator	1	887	AN	Encryption Indicator **Possible values:** **V -** Voltage Encrypted **Space -** Not an encrypted transaction	TSYS Internal
106	TSYS Token Indicator	1	888	AN	TSYS Token Indicator **Possible values:** **Y -** Transaction used Tokens **N -** Transaction did not use Tokens	TSYS Internal
107	Account Funding Source	1	889	AN	Account Funding Source **Possible values:** **C -** Credit **D -** Debit **P -** Prepaid **H -** Charge **R -** Deferred Debit **Space -** N/A	TSYS Internal

Field #	Field name	Length	Position	Data type	Description	Data source
108	Issuing BIN Look-Up	1	890	AN	Indicates the Issuing BIN was looked-up to determine if transaction is credit or debit. **Possible values:** **Y -** Look-Up Performed **N -** No Look-Up	TSYS Internal
109	Fallback Indicator	1	891	AN	Indicates that a transaction initiated with a chip card at a chip card capable terminal failed, resulting in a fallback to a mag-stripe entry mode. **Possible values:** **T -** Technical fallback **E -** Empty Candidate List fallback **Space -** No Fallback	TSYS Internal
110	Spend Qualified Indicator	1	892	AN	This value is optionally sent by Visa in an authorization response message. The merchant's interchange rate may be determined by the value of the Spend Qualified Indicator. **Possible values:** **Space -** Spend processing does not apply. **B -** Base spend assessment threshold has been met. **N -** Spend Qualification Threshold has not been met. **Q -** Spend Qualification Threshold has been met.	ISO Field #62.25
111	Extension Record	8	893-900	AN	**Possible values:** **TD11 -** Transaction Detail Extension record	TSYS Internal

Authorization Detail File Specification

2.7 TD11- Transaction Detail Extension

This record contains additional information about a transaction and will be present on every transaction.

NOTE: The Extension Record value that normally comes at the end of the record is in Field 2 in this record.

NOTE: In the transaction detail extension section, brackets ([ ]) represent the position(s) within the ISO 8583 field. Please note that incomplete or rejected transactions may result in blank fields or fields populated with a question mark (?).

Table 2.1 Transaction Detail Extended

Field #	Field name	Length	Position	Data type	Description	Data source
1	RECORD TYPE	4	1-4	AN	Indicates that this record is the Transaction Detail Extension Record. Value = TD11	TSYS Internal
2	Extension Record	8	5-12	AN	Indicates the record that follows the TD11 Record. **Possible values:** **Space -** no record follows **EX01 -** Discover/PayPal extension record follows **EX02 -** Mastercard extension record follows **EX03 -** Additional detail data extension record follows **EX04 -** Merchant Data extension record follows	TSYS Internal

Field #	Field name	Length	Position	Data type	Description	Data source
3	Merchant Consent Indicator	1	13	AN	Indicates the value of the merchant consent indicator at the time a transaction is processed. This field is specific to merchants processing transactions in Canada, and indicates if the merchant has or has not consented to the Canadian Code of Conduct. Merchants must declare a value for both card present and card not present transactions. **Possible values:** Card Present **1 -** Merchant consented **2 -** Merchant did not consent Card Not Present **3 -** Merchant consented **4 -** Merchant did not consent	TSYS Internal
4	Goods Sold Product Code	4	14-17	AN	This field is used by Card Present merchants to provide an Amex-defined Goods Sold value. **Valid values:** **1000 -** Gift Card Space fill	ISO Field #47[15-18]
5	Card Brand Token Assurance Level	2	18-19	AN	Defined by the token service provider, this Visa, Mastercard or Discover value indicates the assigned confidence level of the token-to-PAN/cardholder binding.	ISO Field #123 Tag 02
6	Account Range Status	1	20	AN	This Visa value is used by the acquirer or processor and indicates the status of the account. **Valid values:** **Space** **R -** Regulated **N -** Non-Regulated	ISO Field #62.26

64   ©2006-2016, TSYS Acquiring Solutions, L.L.C.   Authorization Detail File Specification

Field #	Field name	Length	Position	Data type	Description	Data source
3	Merchant Consent Indicator	1	13	AN	Indicates the value of the merchant consent indicator at the time a transaction is processed. This field is specific to merchants processing transactions in Canada, and indicates if the merchant has or has not consented to the Canadian Code of Conduct. Merchants must declare a value for both card present and card not present transactions. **Possible values:** Card Present **1 -** Merchant consented **2 -** Merchant did not consent Card Not Present **3 -** Merchant consented **4 -** Merchant did not consent	TSYS Internal
4	Goods Sold Product Code	4	14-17	AN	This field is used by Card Present merchants to provide an Amex-defined Goods Sold value. **Valid values:** **1000 -** Gift Card Space fill	ISO Field #47[15-18]
5	Card Brand Token Assurance Level	2	18-19	AN	Defined by the token service provider, this Visa, Mastercard or Discover value indicates the assigned confidence level of the token-to-PAN/cardholder binding.	ISO Field #123 Tag 02
6	Account Range Status	1	20	AN	This Visa value is used by the acquirer or processor and indicates the status of the account. **Valid values:** **Space** **R -** Regulated **N -** Non-Regulated	ISO Field #62.26

Field #	Field name	Length	Position	Data type	Description	Data source
7	Seller ID	20	21-40	AN	This American Express value is the identifier assigned by the Payment Service Provider/Aggregator or OptBlue participant.	ISO Field #83
8	Card Brand Token Requestor ID	11	41-51	AN	This field contains eleven digits that uniquely identify the pairing of the token requestor with the token domain. It is assigned by the token service provider and is unique within the token vault. If present, it should be included in the authorization request.	ISO Field 123
9	Industry SE Number	10	52-61	AN	This American Express value represents the identifier of the Service Establishment/Merchant.	ISO Field 83
10	Seller DBA	30	62-91	AN	This is the merchant's 'Doing Business As' name. It is the common name of the business.	ISO Field 83
11	Payment Facilitator Identifier	11	92-102	AN	This value is assigned by Mastercard during registration via Mastercard Connect for the Service Provider designated as a "Payment Facilitator".	ISO Field 104
12	ISO Identifier	11	103-113	AN	This value is assigned by Mastercard during registration via Mastercard Connect for the Service Provider designated as an "Independent Sales Organization".	ISO Field 104
13	Sub-Merchant Identifier	15	114-128	AN	This value is assigned by the Payment Facilitator or the Acquirer.	ISO Field 104
14	Expanded Billing Class	2	129-130	AN	This field indicates the ingress connectivity method between a client and its respective transaction processing gateway. This field is used for merchant/service specific billing. **Possible value:** V1-V9 [Port Options 1-9]	TSYS Internal
15	Issuer Country Code	3	131-133	AN	Populated for Visa and Mastercard	TSYS Internal
16	Service Code	3	134-136	N	Service code from track data	TSYS Internal

Field #	Field name	Length	Position	Data type	Description	Data source
17	Payment Account Reference [PAR]	35	137-171	AN	Payment Account Reference PAR is a value assigned by the issuer and is associated directly with the cardholder's account.	TSYS ISO Field 56
18	Reserved	29	172-200	AN	Reserved for future use	TSYS Internal

Authorization Detail File Specification

2.8 EX01- Discover/PayPal Only

2.8.1 Overview

The EX01 record contains additional information about a Discover/PayPal transaction. When a TD01/ TD11 record contains Discover transaction data, the EX01 record will always follow the TD11 record.

Table 2.2 EX01 - Discover/PayPal Extenstion Record

Field #	Field name	Length	Position	Data type	Description	Data source
1	Record type	4	1-4	AN	Indicates this record is the Discover/PayPal Extension Record Value = EX01	TSYS Internal
2	Discover/PayPal Acquirer ID	11	5-15	N	A unique identification number assigned by Discover /PayPal Networks to the Acquirer.	TSYS Internal
3	Discover/PayPal Merchant ID	15	16-30	AN	A unique number assigned by Discover/PayPal Networks to the merchant.	TSYS Internal

Field #	Field name	Length	Position	Data type	Description	Data source
4	Discover/PayPal Processing Code	6	31-36	N	Identifies the cardholder transaction type and cardholder account type (if any) that are affected by the transaction. **Transaction Type - Positions 1-2** **00 -** Purchase of Goods / Services **01 -** Withdrawal/Cash Advance **09 -** Purchase of Goods or Services with Cash Over **13 -** Address Verification with a Goods or Service Authorization for Recurring Billing **14 -** Recurring Billing (Automatic Payment)- Goods or Service **15 -** Installment Payment - Goods or Service **18 -** Address Verification Only **20 -** Merchandise Return **28 -** Recharge/Reload **31 -** Balance Inquiry **90 -** Activation **Account Type From - Positions 3-4** **00 -** Not Applicable/Not Specified **10 -** Savings Accounts **20 -** Checking Account **30 -** Credit Card Account **Account Type To - Positions 5-6** **00 -** Not Applicable/Not Specified	ISO Field #3

Field #	Field name	Length	Position	Data type	Description	Data source
5	Discover/PayPal POS Entry Mode	4	37-40	N	Identifies the actual method to capture the account number and expiration date when a terminal is used and the terminal's PIN capture capability. **PAN and Date Entry Mode - Positions 1-2** **00 -** Unknown **01 -** Manual (key entry) Card Present magstripe if defective and cannot be read **02 -** Magnetic Stripe read **03 -** Bar code / Payment Code read **04 -** OCR coding read **05 -** Integrated circuit card reader **07 -** eCommerce request **81 -** Radio Frequency ID indicator - Magnetic Stripe **83 -** Radio Frequency ID indicator - Chip **86 -** Contactless Interface Change **90 -** Voice Authorizations **91 -** Voice Response Unit **92 -** Batch Authorizations **93 -** Batch Authorizations Cash Access **94 -** Biometrics **PIN Entry Capability - Positions 3** **0 -** Unspecified or Unknown **1 -** PIN entry capability	ISO Field #22 and ISO Field #25

Field #	Field name	Length	Position	Data type	Description	Data source
					2 - Terminal (POS) does not have PIN entry capability	
					8 - Terminal (POS) has PIN entry capability, but PIN pad is not currently operative	
					9 - PIN verified by terminal device (POS device)	
					TSYS Reserved - Position 4	
					Space - Reserved for future use	
6	Discover/PayPal Response Code	3	41-43	A/N	Identifies the authorization response code from the authorizer. **Positions 1-2** POS Response Code value (Discover ISO field 39) **Position 3** **Space -** TSYS Reserved	ISO Field # 116
7	Discover/PayPal POS Data Code	13	44-56	AN	Defines specific card information capture conditions present at the time a card transaction took place at the point of service	TSYS Internal
8	Discover Cash Over Amount	12	57-68	N	Identifies the amount of cash over disbursed	ISO Field # 54, Positions 9-20
9	Discover/PayPal AVS Response Code	1	69	AN	This value defines the address verification response code received from Discover /PayPal.	ISO Field #44

     Authorization Detail File Specification

Field #	Field name	Length	Position	Data type	Description	Data source
10	Cardholder Full Name Result Code	1	70	AN	**Possible values:** **B -** Unknown response due to blank input **K -** Unknown **P -** Not processed **M -** First Name and Last Name match **F -** First Name Matches, Last Name does not match **L -** First Name does not match, Last Name matches **N -** Nothing matches **W -** No data from Issuer/ Authorization system **U -** Retry, system unable to process	TSYS ISO Field 126.19
11	Registered User Indicator	1	71	A/N	This field indicates if the cardholder is a registered user on a merchant's website (Discover transactions only). **Y -** The cardholder is a registered user with an online profile and login credentials **N -** The cardholder is not a registered user, and may shop only as a guest	ISO Field 126.19
12	Last Registered User Profile Date Change	8	72-79	NUM	This field defines the date when the cardholder last voluntarily changed their registered profile (Discover transactions only). Format: MMDDYYYY	ISO Field 126.19
13	PAN Reference Identifier [PRI]	35	80-114	AN	Payment Reference Identifier PRI is a value assigned by Discover at the time of token provisioning and is associated with a specific mobile wallet	TSYS ISO Field 56

Field #	Field name	Length	Position	Data type	Description	Data source
14	Reserved	38	115-152	AN	Reserved for future use	TSYS Internal
15	Extension Record Indicator	8	153-160	AN	**Possible values:** **EX03 -** Additional detail data extension record	TSYS Internal

2.9 EX02- Mastercard Only

2.9.1 Overview

The EX02 record contains additional information about a Mastercard transaction. When a TD01/TD11 record contains Mastercard transactions, the EX02 can follow the TD11 record.

2.9.2 Usage

The EX02 extension record contains the advice timestamp data element associated with a Mastercard automated fuel dispenser credit completion advice. If this advice timestamp data element was logged for the transaction, then the EX02 will be present in the ADF following the TD01. In all other transactions, this EX02 will not be present in the ADF.

Table 2.3 EX02 - Mastercard Extension Record

Field #	Field name	Length	Position	Data type	Description	Data source
1	Record type	4	1-4	AN	Indicates this record is the Mastercard Extension Record Value = EX02	TSYS Internal
2	Association Timestamp	10	5-14	AN	Date and time in MMDDhhmmss format	TSYS ISO F116, hex 67
3	EMS Risk Score	3	15-17	NUM	This field is included in the response, and indicates the transaction risk score. Valid Values: 000-999	TSYS ISO F116, hex 67
4	EMS Score Reason Code	2	18-19	AN	Reason Code for the EMS score	TSYS ISO F116, hex 67
5	Domain Server	1	20	N	Valid Values: 1=Issuer Domain 2=Acquirer Domain	TSYS ISO F126.19

Field #	Field name	Length	Position	Data type	Description	Data source
6	Mobile Device Type	2	21-22	N	Valid Values: **00 -** Card (default) **01 -** Mobile Phone or Smartphone with Mobile Network Operator (MNO) controlled removable secure element (SIM or UICC) **02 -** Key Fob **03 -** Watch using a contactless chip or a fixed (non-removable) secure element not controlled by the MNO **04 -** Mobile Tag **05 -** Wristband **06 -** Mobile Phone Case or Sleeve **07 -** Mobile Phone or Smartphone with a fixed (non-removable) secure element controlled by the MNO (such as CDMA) **08 -** Mobile Phone or Smartphone with removable secure element not controlled by the MNO (such as a personalized SD Card) **09 -** Mobile Phone or Smartphone with a fixed (non-removable) secure element not controlled by the MNO	TSYS ISO F126.19

     Authorization Detail File Specification

Field #	Field name	Length	Position	Data type	Description	Data source
					10 - Tablet or E-Book with an MNO controlled removable secure element (SIM or UICC)	
					11 - Tablet or E-Book with a fixed (non-removable) secure element controlled by the MNO	
					12 - Tablet or E-Book removable secure element not controlled by the MNO (such as an SD card)	
					13 - Tablet or E-Book with fixed (non-removable) secure element not controlled by the MNO	
					14 - Mobile Phone or Smartphone with a payment application runing in a host proccessor	
					15 - Tablet or E-Book with a payment application running in a host processor	
					16 - Mobile Phone or Smartphone with a payment application running in the TEE of a host processor	
					17 - Tablet or E-Book with a payment application running in the TEE of a host processor	
					18 - Watch with a payment application running in the TEE of a host processorUse	

Field #	Field name	Length	Position	Data type	Description	Data source
					19 - Watch with a payment application running in a host processor	
					20-99 - Reserved for device types. Any value in this range may occur within devices and transaction data without prior notice.	
7	Transit Transaction Type Indicator	2	23-24	N	This field identifies the type of transit transactions	TSYS ISO F126.19
8	Transportation Mode Indicator	2	25-26	N	This field identifies the mode of transportation used	TSYS ISO F126.19
9	Mastercard Wallet Identifier	3	27-29	AN	This is a Mastercard value that is generated by the Masterpass online platform. This value is passed to the merchant at the time of consumer checkout for ecommerce transactions, and is included in the authorization request.	ISO Field 104
10	Authorization Indicator	1	30	A/N	This field defines the type of authorization request and must be included on all Mastercard authorization request transactions. **Valid values:** **P -** Pre-Authorization A request for an estimated amount **F -** Final Authorization A request for a final amount that may not be canceled once it is approved **U -** Undefined Authorization This indicator may be used when the intent is unknown, and the transaction is neither a pre-authorization, nor a final authorization	ISO Field 126.19
11	Lane ID	8	31-38	NUM	This data uniquely identifies a terminal at the card acceptor location of acquiring institutions or merchant POS systems.	ISO field 104
12	Reserved for future use	114	39-152	AN	TSYS Internal	

     Authorization Detail File Specification

Field #	Field name	Length	Position	Data type	Description	Data source
13	Extension Record Indicator	8	153-160	AN	**Possible values:** **EX04 -** Merchant data extension record **EX03 -** Additional detail data extension record	TSYS Internal

2.10 EX03 - Additional Detail Data Extension Record

This record is currently being used for chip data and is present only if needed. If EX03 is used, it may follow TD11. If EX01, EX02, or EX04 are present, EX03 will follow after EX01,EX02, or EX04.

For example, if the transaction is for Visa and contains chip data, EX03 will follow TD11. If the transaction is for Discover and contains chip data, the record order will be TD11, EX01, EX03. Similarly if the transaction is for American Express (currently EX04 is used only for AMEX) and contains chip data, the order will be TD11, EX04, EX03. The EX03 record always follows whatever other extension records are indicated.

Table 2.4 EX03-Additional Detail Extension Record

Field #	Field name	Length	Position	Data type	Description	Data source
1	Record type	4	1-4	AN	Indicates this record is the Additional Detail Data Extension Record Value = EX03	TSYS Internal
2	Terminal Verification Results	10	5-14	AN	Status of the different functions as seen from the terminal	TSYS Internal
3	Cardholder Verification Method Results	6	15-20	AN	How the cardholder verifies his or her identity	TSYS Internal
4	Form Factor Indicator	8	21-28	A/N	This field defines the type of consumer device used to conduct a contact/contactless transaction.	ISO Field 55 (tag 9F6E)
5	Reserved for future use	292	29-320	A/N	**Possible value:** Space	TSYS Internal

©2006-2016, TSYS Acquiring Solutions, L.L.C.   Authorization Detail File Specification

2.11 EX04 - Merchant Data Extension Record

This record is used for Merchant Data and is present only if needed. If EX04 is used, it may follow TD11. If EX03 is present, EX03 will follow after EX04. The EX03 record always comes after the other extension records. Please refer to the description in Section 2.10 for an example.

Table 2.5 EX04 - Merchant Data Extension Record

Field #	Field name	Length	Position	Data type	Description	Data source
1	Record type	4	1-4	AN	Indicates this record is the Additional Detail Data Extension Record Value = EX04	TSYS Internal
2	PSP Name	20	5-24	AN	Payment Service Provider or Aggregator	ISO Field 83
3	Seller Street Address	25	25-49	AN	Street Address of the Seller	ISO Field 83
4	Seller City	13	50-62	AN	Seller's City	ISO Field 83
5	Seller Postal Code	10	63-72	AN	Seller's Postal Code	ISO Field 83
6	Seller Region Code	3	73-75	AN	Seller's State/Region Code	ISO Field 83
7	Seller Email	40	76-115	AN	Email of the Payment Service Provider's (Aggregator's) or OptBlue participant's Seller.	ISO Field 83
8	Seller Telephone	10	116-125	AN	Telephone number of the Payment Service Provider's (Aggregator's) or OptBlue participant's Seller.	ISO Field 83
9	Reserved	27	126-152	AN	Reserved for future use	TSYS Internal
10	Extension Record Indicator	8	153-160	AN	**Possible values:** **EX03 -** Additional detail data extension record	TSYS Internal

2.12 RT01 - Report Trailer

NOTE: All date and time fields in the report trailer are based on GMT. For a GMT conversion table, see the "GMT conversion chart" on page 115.

Field #	Field name	Length	Position	Data type	Description
1	RECORD TYPE	4	1-4	A/N	Indicates that this record is the Report Trailer. Value = RT01
2	ACQUIRER BIN	6	5-10	A/N	Identifies the financial institution acting as the Acquirer of this customer transaction.
3	AGENT	6	11-16	A/N	Identifies the Agent filter, if defined, from the report registration. The Agent is a six-character value assigned by the merchant's bank or processor. The field is assigned by the merchant's member bank or processor for purposes of identifying a specific agent entity of the member bank or processor. Possible values: 6 character Agent value NA - then left justified space filled Space filled
4	CHAIN	6	17-22	A/N	Identifies the Chain filter, if defined, from the report registration. The Chain is a six-character value assigned by the merchant's bank or processor. The field is assigned by the merchant's member bank or processor for purposes of identifying a specific chain of the agent organization Possible values: 6 character Chain value NA - then left justified space filled Space filled
5	EFFECTIVE START DATE	19	23-41	A/N	Identifies the start date and time (GMT) from the report registration. Example: YYYY-MM-DD HH:MM:SS (using 24-hour clock)
6	EFFECTIVE END DATE	19	42-60	A/N	Identifies the end date and time (GMT) from the report registration. Example: YYYY-MM-DD HH:MM:SS (using 24-hour clock)

©2006-2016, TSYS Acquiring Solutions, L.L.C.   Authorization Detail File Specification

Field #	Field name	Length	Position	Data type	Description
7	INCLUDE ERROR TRANSACTION	1	61	A/N	Indicate if error transactions are present in the report. 1 = All Includes all transactions 2 = Not a valid option 3 = Not a valid option 4= No HV Includes all transactions except Hierarchy Validation errors. As indicated in field 44 in the Transaction Detail record.
8	RESERVED (internal)	20	62-81	A/N	Reserved for TSYS Acquiring Solutions use only.
9	REPORT TOTAL TRANSACTION COUNT	12	82-93	N	Identifies the total number of transactions included in the report.
10	RESERVED (for future use)	807	94-900	A/N	Reserved for future use only.

2.13 RH02- Report Header

Field #	Field name	Length	Position	Data type	Description (if new)
1	RECORD TYPE	4	1-4	A/N	Indicates that this record is the Report Header Value = RH02
2	ACQUIRER BIN	6	5-10	A/N	Identifies the financial institution acting as the Acquirer of this customer transaction.
3	AGENT	6	11-16	A/N	Identifies the agent filter, if defined, from the report registration. The agent is a six-character value assigned by the merchant's bank or processor. The field is issued by the merchant's member bank or processor for purposes of identifying a specific agent entity of the member bank or processor. **Possible values:** • 6 character agent value • NA – then left justified space filled • Space Filled
4	CHAIN	6	17-22	A/N	Identifies the chain filter, if defined, from the report registration. The Chain is a six-character value assigned by the merchant's bank or processor. The field is issued by the merchant's member bank or processor for purposes of identifying a specific chain or the agent organization. **Possible values:** • 6 character agent value • NA – then left justified space filled • Space Filled
5	EFFECTIVE START DATE & TIME	19	23-41	A/N	Identifies the start date and time (GMT) from the report registration. **EXAMPLE** YYYY-MM-DD HH:MM:SS (using 24-hour clock)
6	EFFECTIVE END DATE & TIME	19	42-60	A/N	Identifies the end date and time (GMT) for the report generation. **EXAMPLE** YYYY-MM-DD HH:MM:SS (using 24-hour clock)

     Authorization Detail File Specification

Field #	Field name	Length	Position	Data type	Description (if new)
7	INCLUDE HOST CAPTURE TRANSACTIONS	1	61	A/N	Indicates if host capture adjustment and inquiry transactions are present in the report. **Possible values:** **1 -** All Includes adjustment transaction record (TD02) and inquiry transaction record (TD03). **2 -** Inquiries only includes only batch inquiry transactions in this report. **3 -** Adjustments only includes only adjustment transaction in this report.
8	RESERVED (internal)	20	62-81	A/N	Reserved for TSYS Acquiring Solutions use only.

2.14 TD02-Host Capture Adjustment Transaction Detail

Field #	Field name	Length	Position	Data type	Description	Source
1	RECORD TYPE	4	1-4	A/N	Indicates that this record is the Transaction Detail Header TD02.	TSYS Internal
2	ACQUIRER BIN	6	5-10	A/N	Identifies the financial institution acting as the acquirer of this customer transaction.	ISO Field #32[1-6]
3	EXT BIN	5	11-15	A/N	Identifies the extra data that is received from the ISO message for the BIN.	ISO Field#32[7-11]
4	AGENT	6	16-21	A/N	Identifies the agent filter, if defined, from the report registration. The agent is a six-character value assigned by the merchant's bank or processor. The field is issued by the merchant's member bank or processor for purposes of identifying a specific agent entity of the member bank or processor. **Possible values:** • 6 character agent value • NA – then left justified space filled • Space Filled	TSYS Internal
5	CHAIN	6	22-27	A/N	Identifies the chain filter, if defined, from the report registration. The Chain is a six-character value assigned by the merchant's bank or processor. The field is issued by the merchant's member bank or processor for purposes of identifying a specific chain or the agent organization. **Possible values:** • 6 character agent value • NA – then left justified space filled • Space Filled	TSYS Internal
6	MERCHANT NUMBER	15	28-42	A/N	Identifies the merchant number that is displayed in the e-Connections Authorization and Capture module.	TSYS Internal
7	STORE NUMBER	4	43-46	A/N	Identifies the store number.	ISO Field #41[1-4]

Field #	Field name	Length	Position	Data type	Description	Source
8	TERMINAL NUMBER	4	47-50	A/N	Identifies the terminal number.	ISO Field #41[5-8]
9	RETRIEVAL REFERENCE NUMBER	12	51-62	N	Identifies a number that is used with other key data elements to identify and track all messages related to a given cardholder transaction. This is the RRN of the original authorization.	ISO Field 37
10	TRANSACTION TYPE	3	63-65	N	Identifies the type of adjustment transaction: **Possible values:** • 101 adjustment • 102 tip adjustment • 103 void	SGMF <A10> Transaction Code
11	TRANSACTION DATE & TIME	12	66-77	N	Concatenation of the Local Transaction Date and Local Transaction Time fields. MMDDYYHHMMSS	SGMF Local Transaction Date, SGMF Local Transaction Time of the Adjustment transaction
12	ACCESS METHOD	2	78-79	A/N	Identifies the connectivity method utilized to transmit the transaction. This field maps directly to the ASCII Line Type.	TSYS Internal
13	ASCII BILL CODE	1	80	A/N	Identifies the billing descriptor. It may contain additional billing or reporting information.	This is the value assigned to the original authorization associated with this adjustment.
14	APPLICATION TYPE	1	81	A/N	Describes if the transaction was transmitted via "0" Single Transaction, "2" multi-transaction, or "4" interleaved transaction.	This is the value assigned to the original authorization associated with this adjustment.
15	CARD TYPE	1	82	A/N	Identifies the card plan type of the original authorization. See TD01 field 22 for definitions.	This is the value assigned to the original authorization associated with this adjustment.

Field #	Field name	Length	Position	Data type	Description	Source
16	NETWORK ID	4	83-86	N	Identifies the Network ID that was used for the transmission of the original authorization.	This is the value assigned to the original authorization associated with this adjustment.
17	RESERVED	34	87-120	A/N	For future use	

2.15 TD03-Host Capture Batch Inquiry Transaction Detail

Field #	Field name	Length	Position	Data type	Description	Source
1	RECORD TYPE	4	1-4	A/N	Indicates that this record is the Transaction Detail Header TD03.	TSYS Internal
2	ACQUIRER BIN	6	5-10	A/N	Identifies the financial institution acting as the acquirer of this customer transaction.	ISO Field #32[1-6]
3	EXT BIN	5	11-15	A/N	Identifies the extra data that is received from the ISO message for the BIN.	ISO Field#32[7-11]
4	AGENT	6	16-21	A/N	Identifies the agent filter, if defined, from the report registration. The agent is a six-character value assigned by the merchant's bank or processor. The field is issued by the merchant's member bank or processor for purposes of identifying a specific agent entity of the member bank or processor. **Possible values:** • 6 character agent value • NA – then left justified space filled • Space Filled	TSYS Internal
5	CHAIN	6	22-27	A/N	Identifies the chain filter, if defined, from the report registration. The Chain is a six-character value assigned by the merchant's bank or processor. The field is issued by the merchant's member bank or processor for purposes of identifying a specific chain or the agent organization. **Possible values:** • 6 character agent value • NA – then left justified space filled • Space Filled	TSYS Internal
6	MERCHANT NUMBER	15	28-42	A/N	Identifies the merchant number that is displayed in the e-Connections Authorization and Capture module.	TSYS Internal
7	STORE NUMBER	4	43-46	A/N	Identifies the store number.	ISO Field #41[1-4]

Field #	Field name	Length	Position	Data type	Description	Source
8	TERMINAL NUMBER	4	47-50	A/N	Identifies the terminal number.	ISO Field #41[5-8]
9	TRANSACTION TYPE	3	51-53	N	Identifies the type of adjustment transaction: **Possible values:** • 201 Manual Batch Close • 202 Batch summary inquiry • 203 Batch detail inquiry • 204 Transaction detail inquiry • 205 Low-buffer Batch Summary Inquiry	SGMF Transaction Code
10	TRANSACTION DATE & TIME	12	54-65	N	Concatenation of the Local Transaction Date and Local Transaction Time fields. MMDDYYHHMMSS	SGMF Local Transaction Date, SGMF Local Transaction Time
11	ACCESS METHOD	2	66-67	A/N	Identifies the connectivity method utilized to transmit the transaction. This field maps directly to the ASCII Line Type.	TSYS Internal
12	ASCII BILL CODE	1	68	A/N	Identifies the billing descriptor. It may contain additional billing or reporting information.	This is the value assigned to the original authorization associated with this adjustment.
13	APPLICATION TYPE	1	69	A/N	Describes if the transaction was transmitted via "0" Single Transaction, "2" multi-transaction, or "4" interleaved transaction.	This is the value assigned to the original authorization associated with this adjustment.
14	RESERVED	31	70-100	A/N	For future use	

     Authorization Detail File Specification

2.16 RT02- Report Trailer

Field #	Field name	Length	Position	Data type	Description
1	RECORD TYPE	4	1-4	A/N	Indicates that this record is the Report Header Value = RT02
2	ACQUIRER BIN	6	5-10	A/N	Identifies the financial institution acting as the Acquirer of this customer transaction.
3	AGENT	6	11-16	A/N	Identifies the agent filter, if defined, from the report registration. The agent is a six-character value assigned by the merchant's bank or processor. The field is issued by the merchant's member bank or processor for purposes of identifying a specific agent entity of the member bank or processor. **Possible values:** • 6 character agent value • NA – then left justified space filled • Space Filled
4	CHAIN	6	17-22	A/N	Identifies the chain filter, if defined, from the report registration. The Chain is a six-character value assigned by the merchant's bank or processor. The field is issued by the merchant's member bank or processor for purposes of identifying a specific chain or the agent organization. **Possible values:** • 6 character agent value • NA – then left justified space filled • Space Filled
5	EFFECTIVE START DATE & TIME	19	23-41	A/N	Identifies the start date and time (GMT) from the report registration. **EXAMPLE** YYYY-MM-DD HH:MM:SS (using 24-hour clock)
6	EFFECTIVE END DATE & TIME	19	42-60	A/N	Identifies the end date and time (GMT) for the report generation. **EXAMPLE** YYYY-MM-DD HH:MM:SS (using 24-hour clock)

Field #	Field name	Length	Position	Data type	Description
7	INCLUDE HOST CAPTURE TRANSACTIONS	1	61	A/N	Indicates if host capture adjustment and inquiry transactions are present in the report. **Possible values:** **1 -** All Includes adjustment transaction record (TD02) and inquiry transaction record (TD03). **2 -** Inquiries only includes only batch inquiry transactions in this report. **3 -** Adjustments only includes only adjustment transaction in this report.
8	RESERVED (internal)	20	62-81	A/N	Reserved for TSYS Acquiring Solutions use only.
9	REPORT TOTAL TRANSACTION COUNT	12	82-93	N	Identifies the total number of transaction included in the report.

Authorization Detail File Specification

2.17 BT01 - BIN Trailer

Field #	Field name	Length	Position	Data type	Description
1	RECORD TYPE	4	1-4	A/N	Indicates that this record is the BIN Trailer. Value = BT01
2	ACQUIRER BIN	6	5-10	A/N	Identifies the financial institution acting as the Acquirer of this customer transaction.
3	BIN TOTAL REPORT COUNT	8	11-18	N	Identifies the total number of Report(s) that are included for a particular BIN.
4	BIN TOTAL TRANSACTION COUNT	12	19-30	N	Identifies the total number of transactions that are included for a particular BIN.
5	RESERVED (for future use)	870	31-900	A/N	Reserved for future use.

2.18 TT01 - Transmission Trailer

NOTE: All date and time fields in the transmission trailer are based on GMT. For a GMT conversion table, see the "GMT conversion chart" on page 115.

Field #	Field name	Length	Position	Data type	Description
1	RECORD TYPE	4	1-4	A/N	Indicates that this record is the Transmission Trailer. Value = TT01
2	VERSION NUMBER	5	5-9	A/N	Identifies the Report Version Number. Example: 01.00
3	DESTINATION ID	30	10-39	A/N	Identifies the destination client ID from the report registration.
4	FILE TYPE	10	40-49	A/N	Identifies the file type being sent. Value = ADF
5	FILE FREQUENCY	1	50	A/N	Identifies the frequency in which the file is sent. Example: B = Bi-hourly D = Daily W = Weekly
6	PROCESSING YEAR	4	51-54	N	Identifies the year in which the file was created. Example: YYYY
7	PROCESSING MONTH	2	55-56	N	Identifies the month in which the file was created. Example: MM, month number from 01 to 12
8	PROCESSING WEEK	1	57	N	Identifies the week in which the file was created. The valid value for a week corresponds to the specific week within a month, and can be a 1, 2, 3, or 4. This field will only be used if it is a weekly file. Value Definition 1 Week 1 (day 1 - 7) 2 Week 2 (day 8 - 15) 3 Week 3 (day 16 - 22) 4 Week 4 (day 23 - end of month) If it is not a weekly file, then this field will be left blank.
9	PROCESSING DAY	2	58-59	N	Reserved for TSYS Acquiring Solutions use only.

©2006-2016, TSYS Acquiring Solutions, L.L.C.   Authorization Detail File Specification

Field #	Field name	Length	Position	Data type	Description
10	PROCESSING END HOUR	2	60-61	N	Identifies the hour in which the file was created if the file is bi-hourly. If it is not a bi-hourly file, then this field will be left blank. Example: HH. (using a 24 hour clock) Based on GMT.
11	FILE REFERENCE ID	20	62-81	A/N	Reserved for TSYS Acquiring Solutions use only.
12	FILE TOTAL BIN COUNT	8	82-89	N	Identifies the total number of unique BIN(s) located within the file.
13	FILE TOTAL REPORT COUNT	8	90-97	N	Identifies the total number of unique Report(s) located within the file.
14	FILE TOTAL TRANSACTION COUNT	12	98-109	N	Identifies the total number of transactions located within the transmission.
15	RESERVED (for future use)	791	110-900	A/N	Reserved for future use.

Appendix A

This section contains tables that are referenced in Chapter 3.

The following table lists the U.S. state codes.

Table A.1 U.S. state codes

State name	Code	State name	Code
Alabama	01	Montana	30
Alaska	02	Nebraska	31
Arizona	04	Nevada	32
Arkansas	05	New Hampshire	33
California	06	New Jersey	34
Colorado	08	New Mexico	35
Connecticut	09	New York	36
Delaware	10	North Carolina	37
District of Columbia	11	North Dakota	38
Florida	12	Ohio	39
Georgia	13	Oklahoma	40
Hawaii	15	Oregon	41
Idaho	16	Pennsylvania	42
Illinois	17	Rhode Island	44
Indiana	18	South Carolina	45
Iowa	19	South Dakota	46
Kansas	20	Tennessee	47
Kentucky	21	Texas	48
Louisiana	22	Utah	49
Maine	23	Vermont	50
Maryland	24	Virginia	51
Massachusetts	25	Washington	53
Michigan	26	West Virginia	54
Minnesota	27	Wisconsin	55
Mississippi	28	Wyoming	56
Missouri	29	U.S. military bases, embassies, traveling merchants	99

The following table lists the currency code with its associated country name.

Table A.2 Currency Codes

Currency code	Country name	Currency code	Country name
004	Afghanistan	116	Cambodia
008	Albania	124	Canada
010	Antarctica	132	Cape Verde Is.
012	Algeria	136	Cayman Is.
031	Azerbaijin	144	Sri Lanka
032	Argentina	152	Chile
036	Australia	156	China
036	Christmas Is.	170	Columbia
036	Cocos (Keeling) Is.	174	Comoros
036	Heard and McDonald Is.	188	Costa Rica
036	Kiribati	191	Croatia
036	Nauru	192	Cuba
036	Norfolk Is.	978	Cyprus
036	Tuvalu	203	Czech Republic
040	Austria	208	Denmark
044	Bahamas	208	Faeroe Is.
048	Bahrain	208	Greenland
050	Bangladesh	214	Dominican Rep.
051	Armenia	218	Ecuador
052	Barbados	222	El Salvador
064	Bhutan	230	Ethiopia
068	Bolivia, Plurinational State of	232	Eritrea
072	Botswana	233	Estonia
084	Belize	238	Falkland Is. (Malvinas)
090	Solomon Is.	242	Fiji
096	Brunei Darussalam	262	Dijibouto
104	Myanmar	270	Gambia
108	Burundi	936	Ghana
320	Guatemala	292	Gibraltar
324	Guinea	446	Macau, China
328	Guyana	450	Madagascar
332	Haiti	454	Malawi
340	Honduras	458	Malaysia
344	Hong Kong, China	462	Maldives

©2006-2016, TSYS Acquiring Solutions, L.L.C.   Authorization Detail File Specification

Currency code	Country name	Currency code	Country name
348	Hungary	978	Malta
352	Iceland	478	Mauritania
356	India	480	Mauritius
360	Indonesia	484	Mexico
364	Iran, Islamic Republic of	496	Mongolia
365	Iran Airlines	498	Moldova, Republic of
368	Iraq	504	Morocco
376	Israel	504	Western Sahara
380	Italy	508	Mozambique
388	Jamaica	512	Oman
392	Japan	516	Nambia
398	Kazakhstan	524	Nepal
400	Jordan	532	Netherlands Antilles
404	Kenya	533	Aruba
408	Korea, Democratic People's Republic of (North Korea)	548	Vanuatu
410	Korea, Republic of	554	Cook Is.
414	Kuwait	554	New Zealand
417	Kyrgyzstan	554	Niue
418	Lao People's Democratic Republic	554	Pitcairin
422	Lebanon	554	Tokelau
426	Lesotho	558	Nicaragua
428	Latvia	566	Nigeria
430	Liberia	578	Antarctica
434	Libyan Arab Jamahiriya	578	Bouvet Is.
440	Lithuania	578	Norway
586	Pakistan	578	Svalbard and Jan Mayen Is
590	Panama	752	Sweden
598	Papua New Guinea	756	Liechtenstein
600	Paraguay	756	Switzerland
604	Peru	760	Syrian Arab Rep.
606	Bermuda	764	Thailand
608	Philippines	776	Tonga
624	Guinea-Bissau	780	Trinidad and Tobago
840	Timor-Leste	784	United Arab Emirates
634	Qatar	788	Tunisia

Currency code	Country name	Currency code	Country name
642	Romania	792	Turkey
643	Russian Federation in the Central and Eastern Europe, Middle East and Africa (CEMEA)	800	Uganda
646	Rwanda	804	Ukraine
654	St. Helena	807	Macedonia, The Former Yugoslav Republic of
678	Sao Tome and Principe	810	Russian Federation
682	Saudi Arabia	818	Egypt
690	Seychelles	826	United Kingdom
694	Sierra Leone	826	So. Georgia and So. Sandwich Is.
702	Singapore	834	Tanzania, United Republic of
704	Vietnam	840	American Samoa
705	Slovenia	840	British Indian Ocean Territory
706	Somalia	840	British Virgin Is.
748	Swaziland	840	Guam
840	Turks and Caicos Is.	840	Marshall Islands
840	United States	840	Micronesia
840	U.S. Minor Outlying Islands	840	Northern Mariana Is.
840	U.S. Virgin Islands	840	Palestinian Territory, Occupied
858	Uruguay	840	Palau
860	Uzbekistan	840	Panama
937	Venezuela, Bolivarian Republic of	840	Puerto Rico
876	Wallis and Futuna Is.	952	Cote D' Ivorie (Ivory Coast)
882	Samoa	952	Mali
886	Yemen	952	Niger
978	Republic of Montenegro	952	Senegal
891	Yugoslavia	953	French Polynesia
894	Zambia	953	New Caledonia
901	Taiwan	953	Wallis and Futuna Is.
920	St. Pierre and Miquelon	968	Suriname in the Latin America and Caribbean (LAC)
934	Turkmenistan	972	Tajikistan
945	Azerbaijan Manat	973	Angola
941	Serbian Dinar	974	Belarus
950	Cameroon, United Republic of	976	Democratic Republic of the Congo (Zaire)
950	Central African Republic	977	Bosnia and Herzegovina

    Authorization Detail File Specification

Currency code	Country name	Currency code	Country name
950	Chad	978	Andorra
950	Congo	978	Belgium
950	Equatorial Guinea	978	European Union
950	Gabon	978	Finland
951	Antigua and Barbuda	978	France
951	Anguilla	978	France, Metropolitan
951	Dominica	978	French Guiana
951	Grenada	978	Guadeloupe
951	Montserrat	978	Ireland, Republic of
951	St. Kitts-Nevis	978	Kosovo, United Nations Interim Administration Mission
951	St. Lucia	978	Luxembourg
952	Benin	978	Martinique
952	Burkina Faso	978	Mayotte
975	Bulgaria	978	Monaco
978	Slovakia	978	Netherlands
		978	Portugal
		978	San Marino
		978	Spain
		978	St. Vincent and the Grenadines
		978	Vatican City (Holly See)
		981	Georgia
		985	Poland
		986	Brazil

Table A.3 ISO field 22 POS entry mode codes

Code	Definition
Positions 1 - 2: PAN and Data Entry Mode	
00	Unknown or terminal not used
01	Manual (key entry)
02	Magnetic stripe read. For PLUS transactions, this code also means that the exact track two content is included, and CVV checking is possible.
03	Bar code/Payment code
05	Integrated circuit card read; CVV data reliable.
06	Track One read
07	Account number auto-entry via contactless chip
09	PAN entry via electronic commerce, includes remote chip
10	Indicates transaction was processed using a card on file
80	Chip card was unable to process/mag stripe read default (value of 80 is only valid for Mastercard transactions).
90	Magnetic stripe read and exact content of track one or track two included (CVV check is possible).
91	Account number auto-entry via contactless magnetic stripe
95	Integrated circuit card; CVV data may be unreliable.
Position 3: PIN Entry Capability	
0	Unknown
1	Terminal can accept PINs.
2	Terminal cannot accept PINs.
8	Terminal PIN pad is down.
9	Reserved for future use
Position 4: Fill	
0	Unused

Table A.4 Access method definition of values

Description	Access Method (Field 35)	ASCII Bill Code (Field 36)
ASYNC	AL	A
Dial-Toll-Free Async	DW	B
Reserved	DL	C
Direct Connect	DF	D
Reserved	DI	E
SARATOGA	RM	F
Dial - Europe	EP	G
VirtualNet IP	PG	H
Reserved	LC	I
Dial - Toll - Free Caribbean	JD	J
Internet - VirtualNet SSL	MX	L
Reserved	MD	M
Dial - 950 (Feature Group B) Sync	FS	N
Dial - Toll Free Sync	8S	O
Dial - Toll Free Canada	DV	P
Wireless	MW	Q
USA CDPD	CW	R
Petro Gateway	DC	S
Reserved	EC	T
Batch - CNP Authorization	DG	U
Reserved	XL	V
Reserved	TN	W
Dynamic Currency Conversion (DCC)	FT	Y
Dialpay Transaction	" " (2 Blank Spaces - Field not populated)	Blank (Field not populated)
Reserved	SC	N/A
Reserved	n/a	Z

Table A.5 ISO field 39 response codes

Code	Definition
00	Successful approval/completion
01	Refer to card Issuer
02	Refer to card Issuer, special condition (Discover specific)
03	Invalid merchant or service provider
04	Pick up card
05	Do not honor
06	Error
07	Pick up card, special condition (other than lost/stolen card)
08	Honor with ID (Mastercard specific)
10	Partial Authorization
12	Invalid transaction
13	Invalid amount
14	Invalid account number (no such number)
15	No such Issuer
19	Re-enter transaction
21	No action taken (unable to back out prior transaction)
25	Unable to locate record in file, or account number is missing from the inquiry
28	File is temporarily unavailable
30	Format Error - Decline (Mastercard specific)
34	Mastercard use only , Suspect Fraud (Used in reversal requests only)
39	No credit account (Visa ePay)
41	Pick up card (lost card)
43	Pick up card (stolen card)
51	Insufficient funds
52	No checking account
53	No savings account
54	Expired card
55	Incorrect PIN
57	Transaction not permitted to cardholder
58	Transaction not allowed at terminal
59	Transaction not allowed at merchant
61	Exceeds withdrawal amount limit (activity amount limit exceeded)
62	Restricted card (invalid in region or country)
63	Security violation (source is not correct issuer)
65	Activity count limit exceeded

Authorization Detail File Specification

Code	Definition
75	Allowable number of PIN-entry tries exceeded
76	Reversal: Unable to locate previous message (no match on Retrieval Reference number)
77	Previous message located for a repeat or reversal, but repeat or reversal data are inconsistent with original message
78	Invalid/nonexistent account - Decline (Mastercard specific)
79	Already reversed (by Switch)
80	No financial Impact (Reversal for declined debit). Invalid date (for use in private label card transactions and check acceptance transactions)
81	PIN cryptographic error found (error found by the Visa security module during PIN decryption)
82	Incorrect CVV
83	Unable to verify PIN
84	Invalid Authorization Life Cycle - Decline (Mastercard) Duplicate Transaction Detected (Visa)
85	No reason to decline a request for account number verification or address verification
86	Cannot verify PIN
91	Issuer unavailable or switch inoperative (STIP not applicable or available for this transaction)
92	Destination cannot be found for routing
93	Transaction cannot be completed; violation of law
94	Duplicate Transmission Detected (Integrated Debit and Mastercard)
96	System malfunction
B1	Surcharge amount not permitted on Visa cards or EBT Food Stamps
B2	Surcharge amount not supported by debit network issuer
CV	Card type verification error
EC	CID verification error
N0	Force STIP
N3	Cash service not available
N4	Cash request exceeds Issuer limit
N5	Ineligible for re-submission
N7	Decline for CVV2 failure
N8	Transaction amount exceeds preauthorized approval amount
P2	Invalid biller Information
R0	The transaction was declined or returned because the cardholder requested that payment of a specific recurring or installment payment transaction be stopped.
R1	The transaction was declined or returned because the cardholder has requested that payment of all recurring or installment payment transactions for a specific merchant account be stopped.

Code	Definition
Q1	Card Authentication failed
V1	Daily Threshold Exceeded
XA	Forward to Issuer
XD	Forward to Issuer

©2006-2016, TSYS Acquiring Solutions, L.L.C.   Authorization Detail File Specification

Table A.6 Reject codes, numeric sequence

Code	Field in error	Field name	Reject reason
0001	2	Primary Account Number	Invalid Length (length subfield)
0002	2	Primary Account Number	Invalid Value
0003	H5	Destination Station ID	Invalid Value
0004	H6	TSYS Acquiring Solutions Endpoint ID	Invalid Value
0005	MTI	Message Type Identifier	Invalid Value
0008	3	Processing Code	Invalid Value
0009	4	Transaction Amount	Invalid Value
0010	7	Transmission Date and Time	Invalid Value
0011	11	Systems Trace Audit Number	Invalid Value
0012	H1	Header Length	Invalid Value
0013	H2	Header Flag and Format	Invalid Value
0014	14	Expiration Date	Invalid Value
0015	H3	Text Format	Invalid Value
0016	H4	Total Message Length	Invalid Value
0017	18	Merchant's Type	Invalid Value
0018	25	POS Condition Code	Invalid Value
0019	22	POS Entry Mode Code	Invalid Value: First 2 digits invalid (Field 22=90 but acquirer not certified)
0020	32	Acquiring Institution ID Code	Invalid Value
0021	32	Acquiring Institution ID Code	Invalid Value
	H6	Source Station ID	The message contains a PIN, but the Source Station ID is not certified for PIN processing
0022	H7	Round-Trip Control Information	Invalid Value
0023	H8	Base I Flags	Invalid Value
0024	35	Length subfield of Track 2 Data	Invalid Length (track data too long)
0025	H9	Message Status Flags	Invalid Value
0026	61	Length subfield of Other Amounts	Invalid Length
0027	35	Track 2 Data	Invalid Value (Service Code)
	40	Service Restriction Code	Invalid Value
	45	Track 1 Data	Invalid Value (Service Code)
028	59	National POS Geographic Data	Invalid length (length subfield)
0030	H10	Batch Number	Invalid Value
0033	19	Acquiring Institution Country Code	Invalid Value
	33	Forwarding Institution ID Code	Field Missing
0034	38	Authorization Identification Response	Invalid Value

Code	Field in error	Field name	Reject reason
0035	20	PAN Extended, Country Code	Invalid Value
0037	49	Currency Code, Transaction	Invalid Value
0042	70	Network Management Information Code	Invalid Value
0055	90	Original Data Elements	Invalid Value
0056	33	Forwarding Institution Identification Code	Invalid Length (length subfield)
0057	33	Forwarding Institution Identification Code	Invalid Value
0061	48	Additional Data - Private, position 1	Invalid Value
063	48	Additional Data - Private	Invalid Length (length subfield)
0070	26	Point-of-Service PIN Capture Code	Invalid Value
0071	44	Additional Response Data	Invalid Length (length subfield)
0072	60	POS Entry Capability and Merchant Group Code	Invalid Length (length subfield)
0082	100	Receiving Institution Identification Code	Invalid Length (length subfield)
0087	39	Response Code	Invalid Value
0088	53	Security Related Control Information	Invalid Value
0090	12	Local Transaction Time	Invalid Value
0091	13	Local Transaction Date	Invalid Value
0094	37	First four digits of Retrieval Reference Number	Invalid Value
0095	37	Retrieval Reference Number	Invalid Value
0096	42	Card Acceptor Identification Code	Invalid Value
0100	100	Receiving Institution Identification Code	Invalid Length (length subfield)
0102	45	Track 1 Data	Invalid Length
0103	102	Account Identification 1	Invalid Value
0104	102	Account Identification 1	Invalid Length (length subfield)
0105	60	POS Entry Capability and Merchant Group Code	Invalid Value
0106	61	Other Amounts	Invalid Value
0111	103	Account Identification 2	Invalid Length (length subfield)
0112	103	Account Identification 2	Invalid Value
0118	21	Forwarding Institution Country Code	Invalid Value
0119	68	Receiving Institution Country Code	Invalid Value
0126	95	Replacement Amount	Value not numeric, or field 95 is equal to or greater than field 4

Code	Field in error	Field name	Reject reason
0127	44.2	Additional Response Data	Invalid Value
0129	121	Issuing Institution Identification Code	Invalid length (length subfield)
0142	22	POS Entry Mode Code	Field value = 90, but track data not present
	35	Track 2 Data	Magnetic stripe data missing
	45	Track 1 Data	Magnetic stripe data missing
0148	126.10	CVV2 Authorization Request	Invalid Value
0152	62.1	Authorization Characteristics Indicator	Invalid Value
0180	126.0	Bit Map	Invalid bit map
0185	60	Additional POS Information	Invalid values in position 9 and 10 (e-Commerce)
0189	4	Transaction Amount	Invalid conversion overflow
0251	2	Primary Account Number	Field Missing
0259	H8	Host Flags	Field Missing
0260	H9	Message Status Flags	Field Missing
0270	MTI	Message Type Identifier	Field Missing (located between the header bit map fields and the message data fields)
0274	3	Processing Code	Field Missing
0275	4	Transaction Amount	Field Missing
0276	7	Transmission date and time	Field Missing
0277	11	Systems Trace Audit Number	Field Missing
0279	13	Local Transaction Date	Field Missing
0280	14	Expiration Date	Field Missing
0283	18	Merchant Type	Field Missing
0284	25	POS Condition Code	Field Missing
0285	22	POS Entry Mode Code	Field Missing
0287	32	Acquiring Institution Identification Code	Field Missing
0289	41	Card Acceptor Terminal ID	Field Missing
0291	35	Track 2 Data	Field Missing
0293	38	Authorization Identification Response	Field Missing
0294	39	Response Code	Field Missing
0295	52	Personal Identification Number (PIN)	Field Missing
0306	19	Acquiring Institution Identification Code	Field Missing
0310	37	Retrieval Reference Number	Field Missing

Code	Field in error	Field name	Reject reason
0311	42	Card Acceptor Identification Number	Field Missing
0312	43	Card Acceptor Name/ Location	Field Missing
0313	48	Additional Data, Private	Field Missing
0315	49	Transaction Currency Code	Field Missing
0321	70	Network Management Information Code	Field Missing
334	100	Receiving Institution Identification Code	Field Missing
336	90	Original Data Elements	Field Missing
0359	126	Bit Map	Field Missing
0360	60	Additional POS Information	Field Missing
0384	53	Security Related Control Information	Field Missing
0394	102	Account Identification 1	Field Missing
0397	103	Account Identification 2	Field Missing, or the message contains no account number.
0401	121	Issuing Institution Identification Code	Field Missing
0452	21	Forwarding Institution Identification Code	Field Missing
0483	62.2	Authorization Characteristics Indicator	Field Missing
0488	60.8	Additional POS Information	E-Commerce Indicator (positions 9-10) is missing
0518	54	Additional Amounts	Incorrect usage of field 54
0519	H2	Header Format	Invalid Value
0592	52	Personal Identification Number (PIN)	PIN data present when not allowed. Field 22 or field 25 indicate manual entry or card-not-present transaction.
0643	59	National Point-of Service Geographic Data	Invalid national POS geographic code
0644	59	National Point-of-Service Geographic Data	Invalid national POS ZIP code
0801	47	AMEX ITD/APD	Invalid Length
0802	81	Extended AVS Data	Invalid Length
0803	82	POS Data Group	Invalid Length
0804	83	AMEX Merchant Name/Location	Invalid Length

     Authorization Detail File Specification

Table A.7 ISO field 62.1 authorization characteristics indicators

Endpoint sends ACI	Endpoint receives:		Approved (and MCC not eligible)	Because...
	Qualified	Not qualified		
Y (Transaction requests participation)	A	N	T	Card present; magnetic stripe read and sent; for Retail 2 (key entered) or Commercial Card submissions, the magnetic stripe is not included, but other submission requirements are met; signature obtained; CVV requested if magnetic stripe is present: All CPS market segments.
	B	N	T	Tokenized e-commerce with mobile device.
	E	N	T	Meets requirements for A, plus merchant name and location (enriched name and location data) present; also valid for Retail 2 (key-entered), Commercial Card and Visa Cashback submissions.
	V	N	T	Meets address verification requirements; verification requested for card not present transactions (Direct Marketing, Transport market segments).
	C	N	T	Meets requirements for A, plus merchant name, location present, and cardholder-activated terminal indicator (AFD); but no signature required.
	M	N	T	Meets national payment service requirements with no address verification: Direct Marketing
	F	N	T	Meets qualifications for Visa Account Funding Transactions.
	J	N	T	Card not present, recurring bill payment.
	K	N	T	Card present, unable to read Magnetic Stripe and included an address verification request in the authorization request.
	U	N	T	Meets basic CPS/E-Commerce requirements and VSEC 3-D Secure data is present.
	W	N	T	Meets basic CPS/E-Commerce requirements but transmission was not a verified VSEC 3-D Secure transmission.
R (Recurring payment)	R	N	T	Meets Direct Marketing recurring payment qualification without address verification request.
I (Increment to previously approved transaction)	I	N	T	Incremental authorization qualified for CPS, card may or may not be present: Hotel/Auto Rental.
P (Preferred Customer)	P	N	T	Meets requirements for Preferred Customer, card not present: Hotel/Auto Rental and Transport.

NOTE:	I and P are passed to participating Issuers and returned to Acquirers if not downgraded. Acquirers participating in Mastercard's Premier Service Program can send the value P in original Mastercard point of service transactions. This value is forwarded to Mastercard in its DE48.90. It is possible for the endpoint to also send an 'N' for the requested ACI.

Authorization Detail File Specification

Table A.8 ISO field 60 additional POS information position values

> **NOTE** The terminal must provide subfields 60.1 and 60.2 in a 0100 and 0200 request if an electronic terminal is used for the transaction. The last field populated in field 60 with data sent by the terminal will be followed by space to fill any remaining positions. If this field is not provided in a 0100 or 0400, subfields 60.1 and 60.2 are zero-filled and the remaining positions will be space filled.

Code	Definition
60.1 - Position 1, Terminal Type	
0	Unspecified
1	Limited amount terminal
3	Unattended terminal: Automated dispensing machine or self-service terminal
4	Electronic cash register
5	Home terminals, which includes personal computers, personal digital assistants, interactive televisions, and telephones
7	Telephone device (including Visa dial terminals)
8	Reserved
9	mPOS device
60.2 - Position 2, Terminal Entry Capability	
0	Unknown
1	Terminal not used
2	Magnetic stripe read capability
3	Bar code/Payment code read capability
4	OCR read capability
5	Chip read capability
6	ICC reader and contactless capability (TSYS internal use only). This value should be set to '5' for external purposes.
8	Contactless-read capability
9	Terminal does not read card data
60.3 - Position 3, Chip Condition Code	
0	Default value when subsequent field 60 positions are present or when service code does not begin with 2 or 6.
1	Service code begins with 2 or 6; last read at the chip capable terminal was successful, or was not a chip transaction, or unknown.
2	Service code begins with 2 or 6; last transaction at the chip capable terminal was an unsuccessful chip read.
60.4 - Position 4, Special Condition Code	
0	Default value when subsequent field 60 positions are present
9	Existing debt payment

Code	Definition
60.5 - Positions 5 - 6, Merchant Group Indicator	
00	Not applicable; Default value when subsequent field 60 positions are present.
01	Commercial travel (airline, railway)/T&E
02	Lodging (hotel, cruise ships, and so on)/T&E
03	Automobile rental/T&E
04	Restaurant
05	Mail or telephone order, Electronic Commerce
06	Risky purchase
07	Any other purchase (not previously identified)
08	Any other cash transaction
09	ATM Cash
10	Quasi Cash
11	Medical (includes dental and eye care)
60.6 - Position 7, Chip Transaction Indicator	
0	Non-VSDC transaction or default when subsequent field 60 positions are present.
1	The Acquirer identified transaction as a VSDC transaction
60.7 - Position 8, Chip Authentication Reliability Indicator	
0	Default value when subsequent field 60 positions are present.
1	Endpoint indicates that Card Authentication may not be reliable.
2	Visa indicates Acquirer inactive for Card Authentication
3	Visa indicates Issuer inactive for Card Authentication
60.8 - Positions 9 - 10, Mail Order/Telephone Order/Electronic Commerce Indicator	
00	Not applicable; Default value when subsequent field 60 positions are present.
01	Single transaction for Mail Order/Telephone Order (MO/TO)
02	Recurring transaction
03	Installment payment
04	Unknown classification/other mail order
05	This is used for fully authenticated CAVV Verification transactions for Visa 3-D Secure, Mastercard Online Checkout Service, Amex SafeKey, and Discover Protect Buy.
06	This isused for non-authenticated security transactions at a 3-D Secure-capable merchant. The merchant attemped to authenticate the cardholder using 3-D Secure.
07	Non-authenticated security transaction
08	Non-secure transaction

     Authorization Detail File Specification

Code	Definition
11	Single nonrecurring SecureCode Phone Order transaction
12	First nonrecurring SecureCode Phone Order transaction
13	In-App Authentication (Discover and Mastercard usage only)

60.9 - Position 11, Cardholder ID Method Indicator

Code	Definition
0	Not specified; default value when subsequent field 60 positions are present.
1	Signature
2	PIN
3	Unattended terminal, no PIN pad
4	Mail/Telephone/Electronic Commerce

60.10 - Position 12, Partial Authorization Indicator

Visa, Mastercard, Discover, PayPal, American Express (merchandise only)

Code	Definition
0	Partial Approval Not Supported
1	Partial Approval Supported

Visa only (estimated amount)

Code	Definition
2	Estimated amount
3	Estimated Amount (partial approval supported)

Discover only (merchandise & cash over)

Code	Definition
1	Merchandise can be partially approved Cash Over can be partially approved
2	Merchandise can be partially approved Cash Over must be fully approved or declined
3	Merchandise must be fully approved or declined Cash Over can be partially approved (only if merchandise fully approved)
4	Merchandise must be fully approved or declined Cash Over must be fully approved (if merchandise is approved) or declined

Table A.9 ISO fields 63.1 network ID and 63.12 sharing group codes

Network ID ISO F63.1	Shared Group Code ISO F63.12	Network
0003	G	Interlink
0004	B	Plus ATM
0006	O	Cirrus ATM
0007	J	Mastercard ATM
0008	N	STAR
0009	S	PULSE
0010	W	STAR Southeast
0011	Z	STAR Northeast
0012	Q	STAR West
0013	U	AFFN®
0015	M	STAR
0016	8	Maestro®
0017	L	Pulse®
0018	Y	NYCE
0019	H	PULSE
0020	E	Accel®
0023	P	NETS
0024	C	CU24
0027	F	NYCE
0028	7	Shazam℠ (ITS)
0029	K	EBT
0030	T	EBT ATM
0040	A	Amex ATM
0041	D	Discover ATM
0042	1	AFFN ATM
0053	2	Fifth Third (TSYS assigned value)
0777	5	Visa Check Card II (TSYS assigned value)
1001	!	Evertech (TSYS assigned value)

Table A.10 GMT conversion chart

GMT difference	ATL -4	EST -5	CST -6	MST -7	PST -8	ALA -9	HAW -10
0000	8P	7P	6P	5P	4P	3P	2P
0001	9P	8P	7P	6P	5P	4P	3P
0002	10P	9P	8P	7P	6P	5P	4P
0003	11P	10P	9P	8P	7P	6P	5P
0004	12A Midnight	11P	10P	9P	8P	7P	6P
0005	1A	12A Midnight	11P	10P	9P	8P	7P
0006	2A	1A	12A Midnight	11P	10P	9P	8P
0007	3A	2A	1A	12A Midnight	11P	10P	9P
0008	4A	3A	2A	1A	12A Midnight	11P	10P
0009	5A	4A	3A	2A	1A	12A Midnight	11P
0010	6A	5A	4A	3A	2A	1A	12A Midnight
0011	7A	6A	5A	4A	3A	2A	1A
0012	8A	7A	6A	5A	4A	3A	2A
0013	9A	8A	7A	6A	5A	4A	3A
0014	10A	9A	8A	7A	6A	5A	4A
0015	11A	10A	9A	8A	7A	6A	5A
0016	12P NOON	11A	10A	9A	8A	7A	6A
0017	1P	12P NOON	11A	10A	9A	8A	7A
0018	2P	1P	12P NOON	11A	10A	9A	8A
0019	3P	2P	1P	12P NOON	11A	10A	9A
0020	4P	3P	2P	1P	12P NOON	11A	10A
0021	5P	4P	3P	2P	1P	12P NOON	11A
0022	6P	5P	4P	3P	2P	1P	12P NOON
0023	7P	6P	5P	4P	3P	2P	1P

Table A.11 AMEX cardholder verification results

Byte	Description	Possible values for each byte
Byte 1	Billing ZIP Code	Y=Data Matches
Byte 2	Billing Street Match Code	U=Data Unchecked
Byte 3	Billing Name Match Code	N=No Match
Byte 4	Telephone Number Match Code	S=Service not Allowed
Byte 5	E-mail Address Match Code	R=Retry
Byte 6-9	Reserved	Space=Data not sent

Table A.12 Card product codes

Value (^ = space)	Product description
A^	Visa Traditional
AX	American Express Card
B^	Visa Traditional Rewards
C^	Visa Signature
D^	Visa Signature Preferred
DI	Discover Card
DN	Diners Card
E^	Proprietary ATM
F^	Visa Classic
G^	Visa Business
G1	Visa Signature Business
G2	Reserved
G3	Visa Business Enhanced Visa Platinum Business
G4	Visa Infinite Business Visa Infinite Privilege Business (Canada)
H^	Reserved
I^	Visa Infinite [New Consumer Credit Product]
I1	Visa Infinite Privilege

©2006-2016, TSYS Acquiring Solutions, L.L.C.   Authorization Detail File Specification

Value (^ = space)	Product description
I2	[Ultra High Net Worth]
J^	Reserved
J1	Reserved
J2	Reserved
J3	Visa Healthcare
J4	Reserved
JC	JCB Card
K^	Visa Corporate T & E
K1	Visa GSC Corporate T & E
L^	Electron
M^	Mastercard
N^	Visa Platinum
N1	Visa Rewards
N2	Visa Select
P^	Visa Gold
Q^	Private Label
Q1	Reserved
Q2	Private Label Basic
Q3	Private Label Standard
Q4	Private Label Enhanced
Q5	Private Label Specialized
Q6	Private Label Premium
R^	Proprietary
S^	Visa Purchasing
S1	Visa Purchasing with Fleet (outside of Canada) Visa Fleet (cards issued in Canada)
S2	Visa GSA Purchasing

Value (^ = space)	Product description
S3	Visa GSA Purchasing with Fleet
S4	Commercial Loan
S5	Commercial Transport EBT
S6	Business Loan
S7	Reserved
T^	Reserved
U^	Visa Travel Money
V^	V Pay
V1	Reserved
W^	Reserved
X^	Reserved
Y^	Reserved
Z^	Reserved

NOTE: The new names in brackets ([-]) are tentative; and may be changed with very short notice.

     Authorization Detail File Specification