



BASE I Technical Specifications, Volume 1

V.I.P. System

Effective: 1 June 2017



Visa Supplemental Requirements

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About This Manual

V.I.P. System BASE I Technical Specifications contains technical specifications for the VisaNet Integrated Payment (V.I.P.) System, the Visa transaction processing system that receives and processes cardholder transactions for Visa products and services, and for other proprietary cards.

This two-volume manual documents details of V.I.P. transaction processing in the BASE I environment and contains specifications for message formats, field descriptions, codes, and files. (It is designed to be used with *V.I.P. System BASE I Processing Specifications*.)

Audience

These two volumes are intended for technical staff and managers and customer support personnel who help clients solve system and production problems.

Organization

Volume 1

Chapter 1, Message Matching—Provides an overview of the message matching concept, describes types of transaction sets, and identifies key data fields used in the matching process.

Chapter 2, Message Structure—Contains VisaNet and ISO data field reference tables.

Chapter 3, Header Fields—Specifies header field formats, describes header field contents and use, and lists reject codes signifying invalid data in a header field.

Chapter 4, Data Field Descriptions—Contains data field descriptions for V.I.P. online messages.

Indexes—Field name index and subject index.

Volume 2

Chapter 5, Message Tables—Contains BASE I message tables.

Appendix A, Reject Codes—Lists reject codes describing message content errors.

Appendix B, File Maintenance Error Codes—Codes describing file maintenance message content errors.

Appendix C, GMT Conversion—Shows conversion of GMT (Greenwich mean time) to local dates and times.

Appendix D, Country and Currency Codes—Lists country and currency codes.

Appendix E, CRS Return Reason Codes—Lists Chargeback Reduction Service reason codes.

Appendix F, Batch File Maintenance—Explains batch file maintenance for changing records in user-maintained files.

Appendix G, Electronic Reporting—Shows how to get electronic reports.

Appendix H, VSDC Fields—Additional Information—Includes specifications for fields 134 and 142.

Index—Subject index.

Document Conventions

Table 1 Document Conventions

Convention	Purpose
boldface	Extra emphasis (stronger than italics); field values and codes.
EXAMPLE	Identifies what accompanying text describes or explains.
IMPORTANT	Highlights information in text.
<i>italics</i>	Document titles; emphasis; variables; terms or acronyms being defined.
text in quote marks	Section names; first instance of word used in unconventional or technical context.
text in Courier New font	URLs and email addresses.
NOTE	Provides details about preceding topic.
n/a	Not applicable.
shaded illustrations	Systems or procedures not directly involved in process being illustrated.
white boxes in flow diagrams	Represent request messages.
shaded boxes in flow diagrams	Represent response messages.
dotted line boxes in flow diagrams	Illustrate advice messages.

Documentation Descriptions

Table 2 V.I.P. System Manual Descriptions

General Information

Table 2 V.I.P. System Manual Descriptions (continued)

<i>V.I.P. System Overview</i>	
Describes VisaNet and components, connection methods, processing concepts, requirements, and options. Defines V.I.P., BASE I, and SMS, Direct Exchange and Visa Extended Access Servers, issuer and acquirer responsibilities, and Visa Interchange Center operations. Introduces V.I.P. services.	
Doc ID 0851-30	I
<i>V.I.P. System Reports</i>	
Provides samples.	
Doc ID 0852-30	I
<i>V.I.P. System Services, Volume 1</i>	
Describes available services. Descriptions include processing requirements, options, features, key message fields, and message flows.	
Part 1: V.I.P. Basics	
Part 2: Routing Services	
Part 3: Risk Management Services	
Part 4: Visa Secure Electronic Commerce (VSEC) Services	
Part 5: Chip Card Services	
Doc ID 0853A-30	I
<i>V.I.P. System Services, Volume 2</i>	
Describes available services. Descriptions include processing requirements, options, features, key message fields, and message flows.	
Part 6: Authorization Database Files and Services	
Part 7: Authorization Services	
Doc ID 0853B-30	I
BASE I	
<i>V.I.P. System BASE I Processing Specifications</i>	
Describes BASE I processing, including message types, processing considerations, related services, and VisaNet connection methods.	
Doc ID 0847-30	I
<i>V.I.P. System BASE I Technical Specifications, Volume 1</i>	
Defines technical specifications of BASE I processing and fields.	
Doc ID 0844A-31	I
<i>V.I.P. System BASE I Technical Specifications, Volume 2</i>	
Defines technical specifications of BASE I processing, message formats, and file specifications.	
Doc ID 0844B-31	I

Table 2 V.I.P. System Manual Descriptions (continued)**Interlink***V.I.P. System SMS Processing Specifications (U.S.)*

Contains SMS information, including message types, processing considerations, connection methods, and services for Interlink, Visa and Plus ATM, Visa POS, and Visa Electron.

Doc ID 0857-30

V.I.P. System SMS Interlink Technical Specifications

Describes message formats, field descriptions, and file specifications for Interlink.

Doc ID 0866-29

SMS ATM*V.I.P. System SMS Processing Specifications (U.S.)*

Contains SMS information, including message types, processing considerations, connection methods, and services for Visa and Plus ATM, Interlink, Visa POS, and Visa Electron for clients in the U.S. region.

Doc ID 0857-30

V.I.P. System International SMS ATM Processing Specifications

Contains SMS ATM information, including message types, processing considerations, connection methods, and services for clients outside the U.S. region.

Doc ID 0839-30

V.I.P. System SMS ATM Technical Specifications, Volume 1

Contains field descriptions for ATM.

Doc ID 0868A-29

V.I.P. System SMS ATM Technical Specifications, Volume 2

Contains message formats and file specifications for ATM.

Doc ID 0868B-29

SMS POS*V.I.P. System SMS Processing Specifications (U.S.)*

Contains SMS information, including message types, processing considerations, connection methods, and services for Visa POS, Visa Electron, Visa and Plus ATM, and Interlink for clients in the U.S. region.

Doc ID 0857-30

V.I.P. System International SMS POS (Visa & Visa Electron) Processing Specifications

Contains SMS POS information, including message types, processing considerations, connection methods, and services for clients outside the U.S. region.

Doc ID 0835-30

V.I.P. System SMS POS (Visa & Visa Electron) Technical Specifications, Volume 1

Describes fields for Visa POS and Visa Electron.

Doc ID 0869A-30

Table 2 V.I.P. System Manual Descriptions (continued)

V.I.P. System SMS POS (Visa & Visa Electron) Technical Specifications, Volume 2

Describes message formats and file specifications for Visa POS and Visa Electron.

Doc ID 0869B-29

Information Sources

Information is analyzed, rewritten, and reorganized. Technical staff and subject matter experts review and verify updates. Approved comments and change requests received from clients and Visa staff are incorporated.

V.I.P. System Manuals

See [Table 2](#).

VisaNet Business Enhancements Global Technical Letters and Implementation Guides

V.I.P. System BASE I Technical Specifications includes information from the April 2017 and July 2017 *VisaNet Business Enhancements Global Technical Letter and Implementation Guide*, Version 3.0, effective 9 March 2017.

Report Samples

- *V.I.P. System Reports*
- *VisaNet Settlement Service (VSS) User's Guide, Volume 2, Reports*

More Information

Visa provides product and service documentation. Clients get guides from Visa representatives. If you have comments or questions about this document or technical questions about Visa services or capabilities, contact your Visa representative.

Related Publications

Visa Rules

Visa Core Rules and Visa Product and Service Rules contain the Visa Rules.

Qualifying merchants and third-party agents can request the *Interchange Qualification Guide*.

Deferred Clearing Advice File (DCAF) Service

V.I.P. System Services, Volume 2.

PIN Management Requirements

Payment Card Industry PIN Security Requirements Manual: Contains requirements for managing, processing, and transmitting PIN data.

PIN-Entry Device Security Requirements and Management Procedures:

- *Payment Card Industry Encrypting PIN PAD (EPP) Security Requirements Manual*
- *Payment Card Industry POS PIN-Entry Device Security Requirements Manual*

POS Check Service

Visa Core Rules and Visa Product and Service Rules

V.I.P. System Services, Volume 2

V.I.P. System SMS POS (Visa & Visa Electron) Technical Specifications

VisaNet Settlement Service (VSS) User's Guide, Volume 2, Reports

Risk Management Services

Card Recovery Bulletin Service User's Guide

Fraud Reporting System (FRS) User's Guide

Issuer's Clearinghouse Service User's Guide

Risk Management Process Guide

V.I.P. System Services, Volume 1

Visa Fraud Monitoring Program Guide

Visa Risk Manager

Security

Payment Technology Standards Manual—Contains standards for PINs and encoding data on Visa payment form factors.

Visa Extended Access Servers (EA Servers)

Extended Access Administration and Installation Guide

Extended Access Management Installation Guide

Extended Access Management Operators Guide

Extended Access Security Administration Guide

Extended Access Server Endpoint Guide

Visa Extended Access Server Endpoint Guide

Visa Incentive Network (VIN)

Credit Rewards Key Implementation Tasks and Best Practices

Credit Rewards: Visa Incentive Network and Credit Interchange Frequently Asked Questions

Visa Incentive Network Member Implementation Guide

Visa Incentive Network Service Description

Visa Signature Registration Toolkit

Visa Traditional Rewards Registration Toolkit

Visa Resolve Online (VROL)

Visa Resolve Online Administrator's Guide

Visa Resolve Online Bulk Systems Interface Development Guide

Visa Resolve Online Member Implementation Guide

Visa Resolve Online Real-Time Systems Interface Development Guide

Visa Resolve Online Reference Manual

Visa Resolve Online User's Guide

Visa Smart Debit/Smart Credit (VSDC) Service

V.I.P. System Services, Volume 1—Contains service description.

JCB, MasterCard, Visa (EMV) Specifications, EMV '96 Version 3.1.1 and EMV 2000 Version 4.0—Contain industry standards for chip card and terminal interaction:
www.emvco.com.

Visa Integrated Circuit Card Specifications (VIS)—Contains technical specifications for VSDC card application, describing VSDC transaction functionality and flow.

Visa Smart Debit and Credit Member Implementation Guide for Acquirers—Provides guidelines for acquirers implementing VSDC programs.

Visa Smart Debit and Credit Member Implementation Guide for Issuers—Provides guidelines for issuers implementing VSDC programs.

Visa Smart Debit and Credit Planning Guide—Helps clients plan VSDC programs and migration strategies.

Visa Smart Debit and Visa Smart Credit Service Description—Describes VSDC program features and benefits.

Visa Smart Debit/Visa Smart Credit System Technical Manual—Provides information for clients and Visa staff who implement and operate VSDC programs.

Miscellaneous Systems and Services

Authorization Gateway Service Cross-Reference Guide—Includes field-by-field data transfer descriptions between V.I.P.-format dual-message transactions, and American Express- and MasterCard-format transactions.

V.I.P. System Services, Volume 1 and Volume 2

Visa Global ATM Planning Guide—Includes program overview, business requirements, optional services, risk management, processing options, testing procedures, and back-office management for Visa and Plus International ATM Program.

Visa Information System User's Guide

Visa Test System—V.I.P. User's Guide

VisaNet Settlement Service (VSS) User's Guide, Volume 1, Specifications

VisaNet Settlement Service (VSS) User's Guide, Volume 2, Reports

Message Matching

1

V.I.P. System messages generally consist of a pair of messages: a *request message* followed by a *response message*. The V.I.P. System compares information in key data fields to match messages in a transaction set. Message matching is one of the most important concepts in V.I.P. transaction processing. This chapter provides an overview of the message matching concept, describes the types of transaction sets, and identifies the key data fields V.I.P. uses in the matching process.

NOTE

Except for their message designator, repeat (or duplicate) requests (for example, 0101 or 0401 messages) or advices are exact replicas of their originals. Because of this, this manual does not uniquely identify or reference repeat messages. Repeat messages and their key fields are described in ["Repeat Messages and Their Key Fields"](#) in this chapter. The V.I.P. System BASE I Processing Specifications manual also contains information about repeat and duplicate requests.

1.1 Key Data Fields

Key data fields enable V.I.P. to match a response to the message initiator's request. They also enable V.I.P. to associate a subsequent request or advice (and its responses) with the original request message.

Acquirers and issuers submit subsequent requests when they identify a transaction that was processed or posted incorrectly to a cardholder's account. Acquirers and issuers can generate a correction at different times in a transaction life cycle. For instance, the acquirer's system or the POS device itself can generate a reversal.

This chapter describes key data fields for message matching that relate to the following transactions:

- Authorization, reversal, and balance inquiry messages
- File maintenance messages
- Network management messages

The tables in this section show whether the values in the key data fields must match those in previous messages or if new values must be assigned to clearly indicate that a given message is not part of a previous group of messages. The shaded cells in the tables indicate that the values are taken from a previous message. Clients can use additional fields to match messages.

BASE I uses the Intertask Table (ITT) to match key fields between messages. BASE I does not use Field 7—Transmission Date and Time, or Field 11—System Trace Audit Number, to build a transaction's ITT entry for key field matching, although the two fields may in fact be required in certain messages. The system keeps key field information for a transaction in the ITT until the issuer or the V.I.P. stand-in processor (STIP) sends a response.

1.1.1 Authorization Messages

Authorization messages contain originals, reversals, and balance inquiries. Shaded areas in Table 1-1 represent subsequent messages.

1.1.1.1 Originals

The standard 0100 authorization message contains a request and a response. Original authorization transactions include POS purchases, ATM cash disbursements, and balance inquiries. Table 1-1 shows how to use key data fields to match a response to its request.

Table 1-1 Original Authorization Messages

Message Type	Field 32—Acquirer BIN	Field 37—Retrieval Reference Number	Field 41—Card Acceptor Terminal ID	Field 42—Card Acceptor ID
Original Authorization Request: 0100	Use the value for the entity that signed the merchant or dispensed cash.	Assign a new value for this cardholder transaction.	Use the value from the terminal, if applicable.	Use the value that identifies the point of service.
Response: 0110	Use the value from the 0100.	Use the value from the 0100.	Use the value from the 0100.	Use the value from the 0100.

Incremental Authorizations: Issuers must support incremental authorizations for T&E transactions. For a transaction, the original authorization request, the incremental authorization request, and the reversal request are linked by tracing data. Table 1-2 shows these tracing data and related requirements.

Table 1-2 Data Requirements for Incremental 0100 Authorization and 04xx Reversal Messages

Field Number and Name		Required Content
11	System Trace Audit Number	Use the value from the original authorization request message.
37	Retrieval Reference Number	Use the value from the original authorization request message.
62.2	Transaction Identifier	Use the value from the original authorization response message.

NOTE

Incremental authorization is available to CPS acquirers (U.S. only). Issuers in non-CPS countries can identify an incremental authorization originating from a CPS acquirer by the presence of tracing elements that match those from a previous request, including the same value in Field 62.2—Transaction Identifier.

1.1.1.2 Reversals

An acquirer creates a reversal to notify V.I.P. and the issuer of an error condition regarding an earlier-approved financial transaction. Error conditions include:

- An approved transaction is cancelled at the ATM or by the merchant.
- The acquirer does not receive a response to an authorization request.
- The acquirer cannot send an approved response to the ATM.
- The acquirer does not receive a completion or acknowledgment message from the ATM.

Table 1-3 shows how to use key data fields to match a response to its request.

Table 1-3 Reversal Messages

Message Type	Field 32—Acquirer BIN	Field 37—Retrieval Reference Number	Field 41—Card Acceptor Terminal ID	Field 42—Card Acceptor ID
Reversal of 01xx: 0400	Use the value from the original 0100.	Use the value from the original 0100.	Use the value from the terminal, if applicable.	Use the value that identifies the point of service or point of sale.
Reversal Response: 0410	Use the value from the 0400.	Use the value from the 0400.	Use the value from the 0400.	Use the value from the 0400.

Issuers must support authorization reversals and attempt to match them to original transactions. When an issuer receives an authorization reversal and is able to match the reversal to the transaction, the issuer must release the corresponding hold on funds in the cardholder's account.

Reversals and original transactions match if Field 37—Retrieval Reference Number is the same. If present in the original transaction, Field 62.2—Transaction Identifier and Field 38—Authorization Identification Response can also be match criteria.

The dollar amount should not be considered as part of match criteria, due to the possibility of partial reversals and currency conversion.

1.1.1.3 Balance Inquiries

Table 1-4 shows the key fields for balance inquiries. Only a request and a response message are allowed for balance inquiries.

Table 1-4 Balance Inquiry Messages

Message Type	Field 32—Acquirer BIN	Field 37—Retrieval Reference Number	Field 41—Card Acceptor Terminal ID	Field 42—Card Acceptor ID
Balance Inquiry: 0100	Use the value for the POS terminal or ATM terminal that dispensed cash	Assign a new value for this cardholder transaction.	Use the value from the terminal, if applicable.	Use the value that identifies the point of service.
Response: 0110	Use the value from the 0100.	Use the value from the 0100.	Use the value from the 0100.	Use the value from the 0100.

NOTE

STIP does not generate balance inquiry advices for issuer-unavailable conditions, even if the Exception File shows a decline or pick-up code.

1.1.2 Repeat Messages and Their Key Fields

V.I.P. considers a request to be a repeat (or duplicate) of a previous message if the key field values (ITT field values for fields 32, 37, 41, and 42) are the same—the only difference is that the message designator for a repeat always ends in 1, for instance, 0101 or 0401 messages.

NOTE

Repeats are not allowed for BASE I ATM transactions. They are also not allowed for SMS POS or ATM transactions.

V.I.P. responds to repeat messages with the same field 39 response code that was in the original if:

- The repeat message arrives at the same VIC as the original within ten seconds of the original; and
- The original message was approved (field 39 = **00**) by STIP or the issuer.

If these conditions are met, the cardholder's open-to-buy is not affected by the repeat (repeats and originals can affect the cardholder's activity records when STIP processes the transaction). Also, duplicates are discarded if the original is still being processed; that is, the system does not pass the duplicate to the output message editor.

However, if the ten-second time limit is met but the response code was other than an approval, V.I.P. forwards the request to the issuer for the approval or decline decision. If the issuer is not available, the transaction is processed using the issuer unavailable STIP parameters.

Acquirers should send 0101 repeat requests when they do not receive a response to the original 0100 request. Visa recommends limiting repeat message submissions to three per request.

NOTE

If a request has timed out, acquirers must wait at least 60 seconds before initiating 0101 repeat messages because 60 seconds is the minimum default ATR time-out for issuers that are not participating in Assured Transaction Response (ATR). Also, if acquirers receive an 0110 response after they have timed-out the corresponding request, they should use an 0400 reversal request to ensure that the transaction is properly voided.

See *V.I.P. System BASE I Processing Specifications* about repeat messages, timed-out conditions, and retrieval reference numbers in field 37.

1.1.2.1 Discard Message Reason Codes

Discarded messages are those that are identified as not requiring further processing.

1.2 File Maintenance Messages

File maintenance messages are used by acquirers to update and query the VIC-maintained Merchant Central File and by issuers to update or query the VIC-maintained Cardholder Database files.

1.2.1 Merchant Central File

Acquirers use 0300 file maintenance request messages to query or update the Merchant Central File. BASE I returns 0310 responses indicating whether the requested action was performed. The 0310 response contains the fields 7, 11 and 37 values from the 0300 message. Only field 37 is stored in the ITT as a key field.

1.2.2 Cardholder Database

Issuers use 0302 file maintenance request messages to access various Cardholder Database files. V.I.P. responds with 0312 responses indicating whether the requested action was performed.

V.I.P. supports the following files:

- Address Verification file
- Exception file
- PIN Verification
- Risk-Level file
- Portfolio file

Issuers can use [Table 1-5](#) to identify how to use key data fields to build a file maintenance message and how to match a response to the corresponding file maintenance request.

Table 1-5 Cardholder Database File Messages

Message Type	Field 37—Retrieval Reference Number
File Query or Update: 0302	Assign a new value for this transaction.
Response: 0312	Use the value from the 0302.

Issuers determine which file maintenance advice type to use: 0120 advices or 0322 advices. This choice applies to all file maintenance-related activity involving advices. V.I.P. puts advices in the advice queue for issuer retrieval. For 0120 and 0322 file maintenance advices, 0130 and 0332 responses are optional. Clients can use fields 7 and 11 to match the 0120 or 0322 advices with their original 0110 responses.

1.2.3 Automatic Cardholder Database Update (Auto-CDB) Service

V.I.P. uses 0120 or 0322 file maintenance messages to notify an Automatic Cardholder Database Update (Auto-CDB) Service participant that file maintenance was completed because of a card pickup response. The 0120 advice notifies the issuer that an update was made. Participating issuers must complete testing successfully before using the Auto-CDB Service.

1.3 Network Management Messages

Network management messages are used for:

- Signing on to and signing off from the system.
- Advice recovery control.

Acquirers, issuers, and V.I.P. initiate Network Management messages. Clients must be able to respond to Visa-originated messages. [Table 1-6](#) shows the key data fields. Clients can also use Field 70—Network Management Information Code to match messages.

Table 1-6 Network Management Messages

Message Type	Field 37 Retrieval Reference Number	Field 70 Network Management Information Code
Client-Initiated Network Management		
Message: 0800	Assign a new value for this transaction	Assign a new value for this transaction

Table 1-6 Network Management Messages (continued)

Message Type	Field 37 Retrieval Reference Number	Field 70 Network Management Information Code
BASE I returns: 0810	Value from 0800	Value from 0800
Visa-Initiated Network Management		
Message: 0800	Assign a new value for this transaction	Assign a new value for this transaction
Response: 0810	Value from 0800	Value from 0800

1.4 Message Identification

This section contains the Message Type Identifiers and field values that define the various types of messages supported by V.I.P. It also defines the various types of customer and center transactions that V.I.P. can process.

The transaction messages are listed in alphabetical order within the following categories:

- Customer Transaction-Related VisaNet Messages
- Customer Transaction Types, including electronic commerce
- Center Function Messages
- Advices

Not all requirements provided in [Customer Transaction-Related VisaNet Messages](#) are subject to system edits; they represent what is needed to accomplish the intended function.

1.4.1 Customer Transaction-Related VisaNet Messages

[Table 1-7](#) lists the key fields for customer transaction-related BASE I messages.

IMPORTANT

Transactions destined for non-Visa networks through the Authorization Gateway Service (AGS) have field requirements in addition to those outlined in this manual. See the Authorization Gateway Service Cross-Reference Guide for field-level details pertaining to these non-Visa transactions.

Table 1-7 Customer Transaction-Related Message Key Fields

Transaction	Key Field Requirement
Visa AFD Status Check and Acquirer Confirmation Advice	<p>AFD Status Check: In 0100 requests, the following key fields must be present and meet the specified data requirements.</p> <ul style="list-style-type: none"> Field 3—Processing Code, with a value of 00 Field 4—Amount, Transaction, with a value of US\$1.00 Field 18—Merchant Type, with a value of 5542 Field 22—POS Entry Mode Code, with a value of 05, 07, 90, or 91 Field 25—POS Condition Code, with values except 06 Field 32—Acquiring Institution Identification Code Field 37—Retrieval Reference Number Field 41—Card Acceptor Terminal Identification Field 42—Card Acceptor Identification Code Field 43—Card Acceptor Name/Location, with the merchant name, city, and country Field 59—National POS Geographic Data, with a U.S. state Field 60.1—Terminal Type, with a value of 3 (Cardholder-activated terminal) Field 60.2—Terminal Entry Capability, with a value of 2, 5, or 8 Field 62.2—Transaction Identifier <p>AFD Acquirer Confirmation Advice: In 0120 confirmation advices, the following key fields must be present and meet the specified data requirements.</p> <ul style="list-style-type: none"> Field 4—Amount, Transaction, with the transaction amount <p>NOTE: <i>The transaction amount in the 0120 acquirer confirmation advice must match the transaction amount in the TC 05 Draft Data, TCR 0, Source Amount field, positions 77–88.</i></p> <ul style="list-style-type: none"> Field 11—System Trace Audit Number, with a unique value. Although the 0100 Status check and the 0120 Acquirer confirmation advice are related to each other, they are not treated as one cardholder transaction and must have unique values in this field. Field 18—Merchant Type, with a value of 5542 Field 25—POS Condition Code, with values except 06 Field 32—Acquiring Institution Identification Code, with the same value as in the associated status check message Field 37—Retrieval Reference Number, with the same value as in the associated status check message Field 38—Authorization Identification Response, with the same value as in the associated status check response Field 41—Card Acceptor Terminal Identification, with the same value as the one provided by V.I.P. in the status check request message Field 42—Card Acceptor Identification Code, with the same value as the one provided by V.I.P. in the status check request message Field 43—Card Acceptor Name/Location, with the merchant name, city, and country Field 60.1—Terminal Type, with a value of 3 (cardholder-activated terminal) Field 62.2—Transaction Identifier, with the same value as the one provided by V.I.P. in the associated status check response message

Table 1-7 Customer Transaction-Related Message Key Fields (continued)

Transaction	Key Field Requirement
AFD Transaction Matching	<p>Matching AFD Advices to Status Check Requests: Visa recommends that issuers use the following criteria to match fuel authorization advices to associated status check messages:</p> <ul style="list-style-type: none"> Field 2—Cardholder PAN Field 4—Amount, Transaction, with US\$1.00 in the 0100 Authorization advice, and the full transaction amount in the associated 0120 Acquirer confirmation advice Field 32—Acquirer BIN Field 37—Retrieval Reference Number Field 38—Authorization Code Field 62.2—Transaction Identifier <p>NOTE: <i>V.I.P. generates values in field 38 and field 62.2 when the acquirer does not send these fields in the 0120 acquirer confirmation advice, and V.I.P. cannot find the original status check in the transaction history. If this happens, these two fields in the advice may not match the values in the 0100 status check message.</i></p>
Account Verification-Only Request	<p>In field 3, the transaction type in positions 1–2 must be 00 (goods or service purchase), 01 (withdrawal or cash advance) or 11 (quasi-cash transaction).</p> <p>In field 18, the merchant type must not be 6011 (ATM).</p> <p>The POS Condition Code must indicate account verification. Field 25 must be 51.</p> <p>AVS and CVV2 data may be present in fields 123 and 126.10, respectively.</p> <p>Except as noted, account verification requests are always routed to issuers first. If issuers are not available, V.I.P. will process the transaction in STIP.</p> <p>NOTE: <i>If V.I.P. receives an AVS-only account verification request destined for a UK issuer connected to Visa Europe Authorisation Services, V.I.P. will forward the request to Visa Europe Authorisation Services, which can determine whether the message should be processed in its own STIP or forwarded to the issuer.</i></p> <p>Field 39 should be 85 (No Reason to Decline) or 00, if no negative condition is found.</p> <p>AVS and CVV2 validation results (in fields 44.2 and 44.10, respectively) must be present in responses if fields 123 and 126.10 are present in requests.</p>
Address Verification-only Request	<p>Processing Code should indicate a purchase transaction. Field 3 should be 000000.</p> <p>The transaction amount in field 4 must be zero.</p> <p>Merchant type can be a code for a card present or card-not-present transaction.</p> <p>The POS Condition Code must indicate account verification. Field 25 must be 51.</p> <p>Address data must be present in field 123.</p> <p>Field 39 should be 85—No Reason to Decline.</p> <p>Field 44.2—Address Verification Result Code is in the response.</p>

Table 1-7 Customer Transaction-Related Message Key Fields (continued)

Transaction	Key Field Requirement
Authorization Request BASE I or telephone carrier acquirer to BASE I issuer	Processing Code may indicate a purchase, cash transaction, or quasi-cash. Field 3 must be 00xxxx (purchase), 11xxxx (quasi-cash), or 01xxxx (cash) if field 18 is 6010 or 6011 .
	Expiration date is optional. Omit field 14 if not known.
	Field 18 is required.
	POS Condition Code must apply to the transaction.
	Must not indicate account or address-only verification. Field 25 must not be 51 .
	For POS transactions only, if MagnePrint data is included in the request, the field 125 (usage 2) TLV length cannot exceed 256 bytes, and the content data must be 54 bytes.
Authorization Request with Address Verification BASE I or telephone carrier acquirer to BASE I issuer	Processing Code should indicate a card-present or card-not-present purchase transaction. Field 3 should be 00xxxx .
	Expiration date is optional. Omit field 14 if not known or if track data is present.
	Merchant type must be allowed for a card-present or card-not-present transaction.
	The POS Condition Code may indicate normal or mail/phone purchase. Field 25 must be 00 or 08 .
	Address verification data must be present. Field 123 must be included.
	The response includes an Address Verification Result Code in field 44.2.
Authorization Request with Advanced Authorization fields	Visa Advanced Authorization is required for U.S.-issued cards and subscription-based for all others. Issuers must successfully complete testing for this service before they can receive these fields as part of the V.I.P. request message.
	Message must be 0100 authorization, preauthorization, or 0200 financial request; it cannot be POS Check.
	The acquirer does not need to be in the U.S. The field 19 value must match the country code in the BIN record.
	Network must be 0002 , 0003 , or 0004 .
	In field 62.21 of the request, V.I.P. sends the AA score. (Currently, reason codes are not used and are reserved for future use.) V.I.P. also sends field 62.22, which contains risk assessment condition codes, if the issuer elects to receive it.
Authorization Request with CVV/iCVV Validation BASE I or telephone carrier acquirer to BASE I issuer	Expiration date must match that in magnetic stripe.
	The POS Entry Mode Code must indicate that the entire unaltered magnetic stripe contents are included. Field 22 must be 90xx .
	The entire unaltered magnetic stripe contents (field 35 or field 45) must be included.

Table 1-7 Customer Transaction-Related Message Key Fields (continued)

Transaction	Key Field Requirement
Authorization Request with CVV2 Validation—Card Not Present BASE I or telephone carrier acquirer to BASE I issuer	Card-not-present transaction only.
	Processing code should indicate purchase. Field 3 must be 00xxxx .
	Expiration date.
	The request must not include magnetic stripe data; field 35 or 45 must not be present.
	CVV2 information must be included. Field 126.10 is required and must at least include the CVV2 presence indicator (position 1), the response type (position 2), and the CVV2 value (position 3).
Authorization Request with CVV2 Validation—Card Present BASE I or telephone carrier acquirer to BASE I issuer	The response includes the CVV2 result code in field 44.10.
	NOTE: <i>A full reversal is required if the merchant receives an approval response with a field 44.10 CVV2 value of N and does not wish to conclude the transaction with the cardholder.</i>
	Depending on regional participation, the CVV2 may be included in card-present transactions. Issuers within participating regions must successfully complete testing to participate in this optional service.
	Key fields are the same as for card-not-present requests, except that magnetic stripe data is included; field 35 or 45 must be present, and the presence indicator in field 126.10 must be 1 , 2 , or 9 . If these conditions are met, V.I.P. forwards the message including field 126.10 to the participating issuer. V.I.P. does not populate field 44.10 or field 39 in the 0100 request or the 0110 response based on the field 126.10 data.
	The CVV2 card-present service and the CVV2 card-not-present service are mutually exclusive. Issuer BINs cannot have services active simultaneously.
Authorization Request with PIN Verification BASE I or telephone carrier acquirer to BASE I issuer	NOTE: <i>A full reversal is required if the merchant receives an approval response with a field 44.10 CVV2 value of N and doesn't want to conclude the transaction with the cardholder.</i>
	Field 18—Merchant's Type; cannot be mail or telephone order.
	Field 25—Point-of-Service Condition Code; cannot be mail order or telephone order. Field 25 cannot be 01 , 05 , 08 or 51
	Field 26—Point-of-Service PIN Capture Code; maximum PIN-read capacity is included.
	Field 52—Personal Identification Number (PIN) Data must be present.
Authorization Request with POS Balance Return	Field 53—Security-Related Control Information must be present.
	Magnetic stripe data is required. Track 1 or 2 must be present.
	For U.S. region issuers, participation in the Balance Return service is required. For non-U.S. region issuers, participation in the Balance Return service is optional. For all acquirers, participation in the Balance Return service is optional.
	Processing Code may indicate a purchase. Field 3 must be 00xxxx (purchase).
	Field 18 is required.
	PINs are not required; fields 52 and 53 are not present.
	The balance amount is returned in field 54 of the response. Issuers can choose to provide positive or negative account balance information in responses to purchase requests that are approved or declined. V.I.P. drops the balance return set in field 54 from the issuer if the field 39 response code indicates a lost or stolen card (for instance, 04 , pick up card), or if the acquirer is not participating.

Table 1-7 Customer Transaction-Related Message Key Fields (continued)

Transaction	Key Field Requirement
Authorization Request with Product ID and Reward Program ID.	In requests destined for issuers that participate in account-level processing, card-level activity can be tracked by individual account number.
	Field 38—This field is required when the response code is 00 , 10 , or 85 .
	Field 62.23—Using values from the Cardholder Database or the product ID on the account range, Visa inserts this field in all authorization requests, reversal requests, and related advice messages destined for U.S. and Canada issuers. V.I.P. ensures that the same value is present in the response and passes it to the acquirer. The value can be used to track card-level activity by individual account number.
	Support for field 62.23 is mandatory for U.S. issuers and acquirers, which must successfully complete testing before receiving and sending this field. Canada issuers with consumer credit card programs defined at the card level are also required to receive this field.
	Field 62.24—This field contains a program identifier used with field 62.23 and rewards or consumer credit programs. The field identifies the program associated with a card. At the user's option, V.I.P. or the issuer can populate field 62.24 with eligible program identifiers. When V.I.P. populates this field, it uses values from the Cardholder Database.
	Issuers that elect to support card-level identification have the option of having V.I.P. insert the program identifier in 01xx authorization requests and 04xx requests and also having V.I.P. return this value in responses. Alternatively, issuers may forego V.I.P. insertion of the field and populate it in request responses themselves.
Balance Inquiry BASE I acquirer to BASE I issuer or SMS issuer (0100 message converted to 0200) V.I.P. acquirer to Authorization Gateway issuer	Acquirers may optionally elect to receive this field in authorization responses.
	POS or ATM balance inquiries only within the U.S. region.
	<i>Authorization Gateway Transactions—MasterCard:</i> Acquirers of MasterCard transactions can optionally submit POS balance inquiries destined to MasterCard. The 0100/0110 balance inquiry message format used for Visa transactions is also used for MasterCard transactions. See the <i>Authorization Gateway Service Cross-Reference Guide</i> about field mapping between Visa and MasterCard.
	Processing Code must indicate a POS or ATM balance inquiry: Field 3 must be 30xxxx .
	There is no amount in the request. Field 4 is omitted.
	For ATM requests, field 18 must be 6011 .
	POS Entry Mode coding is magnetic stripe-read and PIN-entry possible. Field 22 must be 0210 or 9010 .
	Field 49—Currency Code, Transaction is required.
	For ATM requests, a PIN is required: Fields 52 and 53 must be present. For POS requests, a PIN is not required: Fields 52 and 53 are not present.
	The balance amount is returned in field 54 of the response. V.I.P. drops field 54 from the issuer if the field 39 response code indicates a lost or stolen card, or if the acquirer is not participating.

Table 1-7 Customer Transaction-Related Message Key Fields (continued)

Transaction	Key Field Requirement
Check Acceptance Request BASE I acquirer to check acceptance vendor	Customer ID must be in field 102. Check Acceptance is a U.S. region service only.
	Processing Code must indicate check acceptance. Field 3 must be 030000 .
	NOTE: <i>No 0120 advices are created for Check Acceptance.</i>
	Merchant type may be anything but cash. Field 18 must not be 6010 , 6011 , or a quasi-cash code.
	Acquirer country must be U.S. Field 19 must be 840 .
	POS Condition Code should indicate a normal transaction. Field 25 must be 00 , 03 , or 10 .
	Additional POS information should not indicate unattended terminal. The value in field 60, position 1, should not be 2 .
	Check vendor identification must be in field 100.
PIN Change or Unblock Request	See the VSDC entry in Table 1-8 .
Product Eligibility Inquiry	In field 3, the processing code must be 39 (eligibility inquiry).
	In field 4, the value must be zeros (no amount).
	In field 25, the POS condition code must be 51 (verification).
	Product eligibility inquiries use the 0100 message format. Field 62.23—Product ID will carry the product information in the response. No advice messages are generated for issuers.
Reversal BASE I acquirer (or V.I.P.) to BASE I issuer V.I.P. acquirers to Authorization Gateway issuer	Processing Code must indicate a purchase, cash transaction, quasi-cash, or adjustment. Field 3 must be 00xxxx , 01xxxx , or 11xxxx .
	<i>Authorization Gateway Transactions—MasterCard:</i> Acquirers of MasterCard transactions can optionally submit POS reversal requests destined to MasterCard. The 0400/0410 reversal message format used for Visa transactions is also used for MasterCard transactions. Reversal request messages should only be submitted as full amount reversals of approved original requests. See the <i>Authorization Gateway Service Cross-Reference Guide</i> about field mapping between Visa and MasterCard.
	Field 18 is required.
	Field 38 must be present.
	The original message type is provided. Field 90 = 0100 .
	For partial reversals only, Field 95—Replacement Amounts must be present.
	For multicurrency participants, if field 95 is present, field 61.3 must also be present.

Table 1-7 Customer Transaction-Related Message Key Fields (continued)

Transaction	Key Field Requirement
Status Check	Processing Code must indicate a purchase. Field 3 must be 00xxxx .
BASE I acquirer to BASE I issuer	<p>The amount must be one whole unit of currency, including implied decimals. Field 4 must be 00000000100.</p> <p>NOTE: <i>Partial authorization requests (where field 60.10 = 1) may be included in a status check transaction. The issuer may respond with an amount in field 4 that is the maximum authorized amount for the purchase. Such responses also contain a response code of 10 in field 39.</i></p> <p>Field 18 must be one of the following values, 5542 (Automated fuel dispenser), 8062 (Hospitals) with the merchant located in Latin America, a lodging merchant MCC and Field 62.6—Prestigious Property Indicator of D, B, or S. Each status check transaction must be followed by a corresponding clearing transaction, or an authorization reversal in the case of a cancelled sale or timeout event.</p>

1.4.2 Customer Transaction Types

Table 1-8 lists the key fields for customer transaction types.

IMPORTANT

Transactions destined for non-Visa networks through the Authorization Gateway Service have field requirements in addition to those outlined in this manual. See the Authorization Gateway Service Cross-Reference Guide for field-level details pertaining to these non-Visa transactions.

CPS transactions are not included in this table. See the CPS ATM and CPS POS chapters in *V.I.P. System Services*, and for U.S. CPS programs, the latest edition of the *U.S. Interchange Reimbursement Fee Rate Qualification Guide*.

Table 1-8 Customer Transaction Type Key Fields

Transaction Type	Key Field Requirement
Airline Transaction	<p>Processing code indicates purchase. Field 3 must contain 00xxxx.</p> <p>Merchant type must be airline. Field 18 must contain 3000–3299 or 4511.</p>
ATM Cash Transaction or Automated Cash Transaction	<p>Processing code must indicate cash transaction. Field 3 must contain 01xxxx.</p> <p>Merchant type must indicate automated cash. Field 18 must contain 6011.</p> <p>Card number read from magnetic stripe; PIN provided. Field 22 must contain 0210 or 9010.</p> <p>Transaction occurs at ATM. Field 25 must contain 00 or 02. Field 60 must contain 2x (typically 22).</p> <p>Card acceptor must be completely identified. Field 42 must be present. Field 43 must contain merchant name and location, and country code must be included.</p> <p>Acquirer BIN must be validated. Field 32 must contain acquirer BIN.</p> <p>PIN required. Fields 52 and 53 must be present in original request.</p> <p>Track 1 or Track 2 required. Field 45 or 35 must be present</p>

Table 1-8 Customer Transaction Type Key Fields (continued)

Transaction Type	Key Field Requirement
Automated Fuel Dispenser (AFD) Transaction	Transaction is AFD if:
	Field 60.1 contains 3 , and
	Field 60.2 contains 2 .
Auto-Substantiation	Only U.S. issuers can approve these, which include healthcare over-the-counter (OTC) POS purchases that are covered in full or in part by cards associated with Flexible Spending Accounts (FSAs) and Healthcare Reimbursement Arrangements (HRAs). POS transit purchases are supported. Partial authorizations are available for FSA and HRA cards.
	<i>Authorization Gateway Transactions—MasterCard:</i> Auto-substantiation transactions are supported. For field mapping, see the <i>Authorization Gateway Service Cross-Reference Guide</i> .
	In original requests, field 4 contains request amount. In responses, it can contain transaction amount from request or approved partial amount, in which case, partial authorization processing applies.
	Field 54 contains account type 00 or 40 , amount type 4S (amount healthcare) or 4T (amount transit), currency code of amount, amount sign C , and amount of qualified expense type.
	Field 60.10 must contain 1 for partial authorization.
	Field 62.4 must contain M (healthcare) or T (transit).
	Field 62.20 must contain MVV for SIGIS-certified merchant in healthcare auto-substantiation requests.
Bill Payment (U.S. Only)	Field 3 must contain 50 . Field 60.8 must contain 01 , 02 , 03 , or 05-08 . If transaction is submitted for CPS processing, field 62.1 must contain Y —not R , I , or P . Field 62.4 must contain B .
Cash Transaction, Manual	Processing code must indicate cash transaction. Field 3 must contain 01xxxx .
	Merchant type must indicate manual cash. Field 18 must contain 6010 .
	In-person cash disbursement at client location. Teller may or may not use authorization terminal. Field 25 should not contain 08 .
	Transaction does not occur at ATM. Field 25 must not contain 02 . Field 60 must not contain 2x .
	No track data required. Field 45 or 35 must not be present.
	No PIN required. Fields 52 and 53 must not be present.

Table 1-8 Customer Transaction Type Key Fields (continued)

Transaction Type	Key Field Requirement
CAVV Verification Service Transactions	CAVV Verification Service enables issuers or VisaNet to validate cardholders' CAVVs resulting from issuers' authentication decisions during online Verified by Visa purchase sessions. Authentication requests occur when merchants, acquirers, and issuers all participate in VbV. Aattempt requests occur when cardholders or issuers do not participate. See CAVV Service description in <i>V.I.P. System Services</i> .
	Processing code must indicate purchase of goods or services. Field 3 must contain 00xxxx .
	POS entry mode must indicate manual entry; field 22 must contain 01 .
	POS condition must indicate e-commerce; field 25 must contain 59 .
	Electronic Commerce Indicator must indicate transaction's level of security. Field 60, positions 9–10 (field 60.8) must contain 05 , 06 , or 07 .
	CAVV verification data must be included. Field 126.9, usage 2, is for full authentications; field 126.8 contains Transaction ID (XID). Field 126.9 contains CAVV. Field 126.9, usage 3, is for attempts and full authentications; field 126.8 is not required in requests and CAVV and XID are contained in field 126.9 in compressed format. Which field 126.9 usage used depends on data generated by issuer's ACS and merchant's server during cardholder authentication.
	CAVV validation results are in request and response. Field 44.13 contains CAVV validation code. If VisaNet performs validation, result code is in request forwarded to issuer for approval decision. If issuer performs validation, CAVV validation result code is in response.
	CAVV validation is performed if field 126.9 is present. Whether VisaNet or issuer performs validation depends on issuer participation and STIP parameters.
Contactless Magnetic Stripe Transaction	For online gambling requests, field 18 contains 7995 and field 25 contains 59 .
	Contactless magnetic-stripe transactions (field 22 contains 91) are authenticated using Online CAM, dCVV, iCVV, or CVV (in that order), depending on data availability and issuer options. Transactions should not contain chip values in field 60.2, 60.6, or 60.7.
	Online CAM authentication results are in field 44.5. Issuers that don't use field 44.5 receive failure result codes in field 39.
	Acquirers receive Online CAM results in field 44.5 when their CVV option is to receive results in it.
	Online CAM validation is possible with data in field 55: Tag 9F37, Tag 9F10, Tag 9F10, Tag 9F26, Tag 9F36, and optional Tag 9F02.
Credit Voucher and Merchandise Return Authorization	Clients must complete testing for VSDC Full Data option before sending or receiving chip data in third bitmap. Clients that complete testing can use field 55 or third bitmap.
	These authorizations, supported for U.S. domestic messages only, enable issuer processors to track cardholders' open-to-buy amounts. Acquirers and issuers must complete testing before sending and receiving these messages.
	Field 3 must contain transaction type 20 in authorizations, reversals, and responses.
	Field 62.1 should contain Y , which V.I.P. overlays with T (does not qualify for CPS) before forwarding messages to issuers.
	Authorization requests are approved with response code 00 in field 39. If issuers have not completed testing for this processing, V.I.P. responds with response code 85 (no reason to decline), and doesn't send advices.

Table 1-8 Customer Transaction Type Key Fields (continued)

Transaction Type	Key Field Requirement
Healthcare Eligibility Inquiry (U.S. Only)	Field 4 should contain zero ; otherwise, V.I.P. sets it to zero before sending requests to issuers.
	Field 3 processing code must be 39 .
	Response code in field 39 should be 00 for approvals and 05 for declines.
	Field 54 contains account type 00 , amount type 3S (amount, co-payment), currency code, amount sign C , and amount specified by amount type.
	Field 104, usage 2, is in TLV format and uses dataset 58, tags 01 and 02.
Mail or Phone Order Transaction	Processing code must indicate purchase transaction. Field 3 must contain 00xxxx (cannot be 11xxxx).
	Field 18 must contain MCC listed in MOTO Merchant Category Group. (See Visa Rules.)
	POS condition code must indicate mail or phone order. Field 25 must contain 08 .
	Request must not include PIN. Fields 52 and 53 must not be included.
	Transaction type also applies to recurring transactions (60.8 contains 2) and remote purchases (for instance, from fax machines or home computers). See "Recurring Transactions" in this table.
	Address verification data is required. Field 123 must be present.
Partial Authorization	In 0100 partial authorization transactions between participating clients:
	In requests, field 4 must contain full transaction amount.
	Field 60.10 (partial authorization indicator) identifies whether acquirer supports partial authorizations: 1 indicates terminals can support partial amount approval. When field 60.10 is not present or contains 0 , acquirer doesn't support partial amount approvals.
	STIP processes issuer-unavailable requests as full-amount requests using applicable issuer-specified parameters.
	When field 4 amount in request exceeds cardholder's available funds or prepaid card's remaining balance, and acquirer supports partial authorizations (field 60.10 contains 1)—in 0110 partial authorization response sent to acquirer: <ul style="list-style-type: none"> Field 4 contains authorized partial amount. Field 54 contains set specifying original amount from field 4 in request. Amount can be in any of six sets in field 54, with no embedded empty (null) sets. <p>NOTE: <i>Response can also contain balance return in field 54.</i></p>
	For multicurrency issuers, field 4 in response must be in transaction currency (field 49) of request. Field 6 must contain approved amount in cardholder billing currency (field 51). Original amount in field 54 must be in transaction currency.
	<i>Authorization Gateway Transactions—MasterCard:</i> Partial authorizations are supported. For field mapping, see the <i>Authorization Gateway Service Cross-Reference Guide</i> .

Table 1-8 Customer Transaction Type Key Fields (continued)

Transaction Type	Key Field Requirement
Payment (U.S. Only)	<p>Payment transactions result in credits to issuers and debits to acquirers. These transactions help facilitate private agreements between issuers and merchants supporting unique processing needs for selected programs.</p> <p>Field 3, positions 1–2, must contain 53 when U.S. acquirers identify payment transactions. Source of funds is in field 104, usage 2: 1 (cash), 2 (check), or 3 (card) in dataset Hex 57, Tag 02.</p>
payWave	<p>For Visa payWave transactions between ATM acquirers and issuers:</p> <ul style="list-style-type: none"> Field 18 must contain 6011 for ATM. Field 22, positions 1–2, must contain 07 or 91. Field 55, usage 1, or expanded third bitmap must be included. Field 60.2 must contain 5 or 8.
Preauthorized Payment Cancellation Service (PPCS)	<p>Enables issuers to stop payments on recurring payment transactions. Issuers maintain stop payment orders in Cardholder Database (Portfolio File).</p> <p>The field 18 merchant category code in recurring payment authorization request must be allowed for stop recurring payment orders.</p> <p>If V.I.P. detects recurring payment indicator (field 60.8 contains 2 or field 126.13 contains R), it checks Portfolio File. If match is made, V.I.P. responds with field 39 decline response code R0 (stop a payment), R1 (revoke authorization for further payments), or R3 (cancel all recurring payments for card number).</p>
Original Credit Transaction (OCT)	<p>Although initiation of 0100 OCTs is not allowed, issuers may receive 0100 OCTs that V.I.P. converted from 0200 to 0100 format.</p> <p>Types of OCTs include basic money transfer, enhanced money transfer, and enhanced prepaid OCTs.</p> <p>Field 3 must contain 260000.</p> <p>Field 18 must contain 4829 or 6012 for money transfers. For other enhanced OCTs, MCC cannot be 4829 or 6012.</p> <p>Field 43 data requirements depend on type of OCT. See field description.</p> <p>Field 104, usage 2, is supported for all OCTs. Field requirements are met through Dataset IDs 57, 5F, and 71.</p> <p>Velocity limit checking is supported for all enhanced OCTs. Watch list scoring is supported for enhanced money transfer OCTs only. See field 39 and field 48, usage 37, descriptions.</p> <p>Cross-border transactions from acquirer or originator must include watch list scoring information in field 48, usage 37, if recipient issuer is in U.S. or another country in which watch list scoring is required.</p>

Table 1-8 Customer Transaction Type Key Fields (continued)

Transaction Type	Key Field Requirement
Prepaid Transactions	<i>Activation</i> messages notify issuers that cards with previously defined amounts are purchased and should be activated for cardholder usage on issuer processor systems. <i>Load</i> messages notify issuers of dollar amounts loaded on prepaid cards and also activate cards.
	Multicurrency processing doesn't apply to prepaid load and activation transactions. For Visa regions (but not Visa Europe), prepaid card activation and load transactions can be completed only if merchant location (in field 43), acquirer, and issuer are in same country. Within Visa Europe, all countries within applicable laws are allowed. Transaction currency in field 49 must be same as cardholder billing currency in field 51.
	Field 3 transaction type is 72 for prepaid activation or 28 for prepaid load.
	Field 4 can contain zero for prepaid activation.
	Field 54 can contain card balance amount in prepaid responses.
Product Eligibility Inquiry (U.S. Only)	See Table 1-7 .
Proximity Payment/Contactless Transactions	See "VSDC POS or ATM Transaction" for transactions with processing code 07 . See "Contactless Magnetic Stripe Transaction" for transactions with processing code 91 .
Purchase Transaction or POS Transaction	Processing code must indicate purchase of goods or service. Field 3 must contain 00xxxx .
	Expiration date is required if known. Omit if not known.
	Merchant type must apply to purchase transaction. Field 18 must not contain 6010 , 6011 , or quasi-cash code.
	If MagnePrint data is in request, TLV length and content data must be correct. If field 125, usage 2, is present, length cannot exceed 256 bytes and TLV data element must be 54 bytes.
Quasi-Cash Transaction	Primary account number must be Visa card. Field 2 must contain Visa card number.
	Processing code must indicate quasi-cash transaction. Field 3 must contain 11xxxx . V.I.P. doesn't validate issuer participation, which is mandatory and requires completion of testing.
	Merchant type can be anything including quasi-cash codes. Field 18 cannot contain 6010 or 6011 . (It is 4829 or 6051 for quasi-cash-only merchant.)
	Transaction doesn't occur at ATM. Field 60, position 1, must not contain 2 .
	No PIN required. Fields 52 and 53 not present.

Table 1-8 Customer Transaction Type Key Fields (continued)

Transaction Type	Key Field Requirement
Visa ReadyLink Load Transactions	Full-service acquirers can send, and BASE I issuers can receive, prepaid load data in ReadyLink transactions.
	For ReadyLink Canada Service, acquirer, merchant, and issuer must be in Canada, and acquirer and issuer must participate.
	In U.S. only, Visa ReadyLink Service supports electronic fare load transactions. BASE I issuers can receive token card number, with other prepaid load data, for contactless access to transit system.
	Field 2 must contain number of Visa prepaid card funds are being loaded to. In U.S.-only electronic fare load transactions, must contain account number for transit system.
	Field 3 must contain 28 (prepaid load or activation and prepaid load).
	Field 4 must contain amount of funds to be loaded to Visa prepaid card. In U.S.-only electronic fare load transactions, must contain amount to be loaded to transit system account.
	Field 14 must contain expiration date of Visa prepaid card funds are being added to.
	Field 18 in U.S.-only electronic fare load transactions must contain MCC for merchant.
	Field 63.1: Acquirers must submit 0000 , which V.I.P. converts to 0002 in messages sent to issuers.
Recurring Payment	Field 102—Account Identification 1 in U.S.-only electronic fare load transactions must contain account number of access token chip card for contactless entry to transit system.
	Processing code must indicate purchase of goods or service. Field 3 must contain 00xxxx .
	Field 25 value must be allowed for transaction.
	Recurring payment indicator in field 60.8 must be 2 or field 126.13 must be R . Recurring transactions can be processed in STIP using issuer parameters as if recurring payment was not involved.
	In U.S., if acquirer sends field 126.13 to non-participating issuer, V.I.P. inserts 2 in field 60.8 and drops field 126.13 before forwarding request.
Travel and Entertainment (T&E) Transaction	<i>Authorization Gateway Transactions—MasterCard:</i> Acquirers should use field 60.8 for recurring payment transactions. See <i>Authorization Gateway Service Cross-Reference Guide</i> .
	<p>Processing code must indicate purchase of goods or service. Field 3 must contain 00xxxx.</p> <p>Following Visa clearing rules (SMS and BASE II), merchant type must be airline, car rental company, lodging concern such as hotel, cruise ship, or railroad.</p> <ul style="list-style-type: none"> • For airline, field 18 must contain 3000-3299 or 4511. • For car rental, field 18 must contain 3000-3500 or 7512. • For lodging, field 18 must contain 3501-3999 or 7011. • For cruise ship, field 18 must contain 4411. • For passenger rail, field 18 must contain 4112. <p>According to BASE I Positive Cardholder Authorization Service (PCAS) processing rules, merchant type might also be restaurant if issuer sets unique processing limits for restaurants.</p> <ul style="list-style-type: none"> • For restaurant transaction, field 18 must contain 5811 or 5812.

Table 1-8 Customer Transaction Type Key Fields (continued)

Transaction Type	Key Field Requirement
Unattended Cardholder-Activated, Authorized Transaction	Processing code must indicate purchase of goods or service. Field 3, positions 1–2, must contain 00 .
	Merchant type must apply to purchase transaction. Field 18 must not contain 6010 , 6011 , or quasi-cash code.
	If Online PIN unsupported, position 3 of field 22 must contain 2 ; otherwise, position 3 must contain 1 to indicate Online PIN is supported. If only Offline PIN is supported or there is no PIN support, position 3 must contain 2 .
	In addition, if Online PIN is captured: <ul style="list-style-type: none"> • Field 25 must contain 02. • Fields 52 and 53 must be present in original request.
	Track 1 or Track 2 required. Field 45 or 35 must be present.
Visa Cashback	Position 1 of field 60 must contain 3 .
	Card-present POS transaction with debit card. Must be domestic (merchant, acquirer, issuer all in same country). Contact regional representatives about availability of cashback. <p>NOTE: Issuers cannot partially approve or respond with referral requests for cashback transactions. Additionally, issuers must reply with one response that covers purchase amount and cashback amount. Issuers cannot reply to cashback requests with two responses: one for purchase amount and another for cashback-only amount.</p>
	U.K: for Visa and Visa Electron: Field 61.1 must be present and cashback amount must be less than amount in field 4. <p>NOTE: Contact regional representatives about cashback with Visa Electron card.</p>

Table 1-8 Customer Transaction Type Key Fields (continued)

Transaction Type	Key Field Requirement
VSDC POS or ATM Transaction	Card type must be Visa. Field 2 must contain Visa card number.
0100 Message Type	Processing code must indicate purchase of goods or service, or cash transaction. Field 3 must contain 00 xxxx or 01 xxxx.
	Processing code must be 05 , 07 , or 95 to indicate transaction occurred with chip card.
	If required, transaction must include chip card sequence number when two or more cards have same account number. Field 23 must be numeric.
	Complete, unaltered track content from chip's magnetic stripe image must be in field 35 or 45.
	For ATM transactions, card acceptor name, location, identification code, and (if necessary) terminal ID must be included. Field 43, field 42, and (if necessary) field 41 must be present.
	Chip data must be in field 55 in TLV format or in third bitmap fields 130–149.
	Fully participating acquirers send 5 in field 60.2; 0,1 , or 2 in 60.6; 0 , 1 , 2 , or 3 in field 60.7.
	Chip data related to Issuer Application Data is in field 134 or field 55, tag 9F10, depending on acquirer-specified preference. Content of field can be data conforming to VSDC specifications or personalized by issuer and not used by VisaNet. Depending on type of chip data, field 135 can also be required when data is submitted in third bitmap.
	When using field 134 in third bitmap, two formats are available to acquirers: Standard Format and Expanded Format. Acquirers can use Standard Format, where fields 134 and 135 are used for Issuer Application Data, or Expanded Format, where fields 134 and 135 are combined and sent in field 134; field 135 should not be in messages using Expanded Format.
	If transaction includes cash back, cryptogram cashback amount data element must be populated in field 149 or field 55, tag 9F03, depending on acquirer specifications.

Table 1-8 Customer Transaction Type Key Fields (continued)

Transaction Type	Key Field Requirement
VSDC POS or ATM transaction PIN Change/Unblock Requests	<p>Cardholder PIN Change/Unblock requests can only occur through ATMs. Acquirers and issuers must participate in PIN Verification Service and VSDC. Issuers must be full VSDC participants.</p> <p>Field 3 must contain 70 (PIN change/unblock) or 72 (PIN unblock).</p> <p>Field 18 must contain 6011.</p> <p>Field 22 must contain 05 or 95.</p> <p>Field 25 must contain 00.</p> <p>Field 35 must contain VSDC Track 2 data image.</p> <p>Fields 41, 42, and 43 must be present with ATM information.</p> <p>Fields 52 and 53 must be in request with current PIN block information.</p> <p>For change request, new PIN must be in Secondary PIN Block data element, in field 152, or field 55, tag C0, depending on acquirer specifications. Data element must not be in unblock request.</p> <p>If issuer script data element, field 142 or field 55, tag 71 or tag 72, isn't in response from issuer, V.I.P. rejects response and responds to acquirer with 91. Field 142 or field 55, tag 71 or tag 72, but cannot be present in decline responses.</p> <p>Acquirers must include issuer script results data element in reversals. Depending on acquirer specifications, data is in field 143 or field 55, tag 9F5B.</p>

1.4.3 Network Management and File Maintenance Messages

Table 1-9 lists the key fields for BASE I network management and file maintenance messages.

Table 1-9 Center Function Message Key Fields

Function	Key Field Requirement
Echo Test	The message must be identified as an echo test. Field 70 must be 301 .
0800 Message Type	A BASE I station must respond to the VisaNet Interchange Center (VIC) with an 0810 response to an echo test.
File Inquiry for Address Verification Data	The cardholder account number must be included. Fields 2, 102, or 103 must contain an account number.
0302 Message Type from issuer	<p>The message must be identified as an inquiry. Field 91 must be 5.</p> <p>The file name must specify AVS data in the Address Verification File. Field 101 must be A2.</p> <p>No cardholder data is required in the request (for example, purge date). Fields 73 and 127 must not be included.</p>
File Inquiry for Exception Record	The cardholder account number must be included. Fields 2, 102, or 103 must contain an account number.
0302 Message Type from issuer	<p>The message must be identified as an inquiry. Field 91 must be 5.</p> <p>The file name in field 101 must be E2 (Exception File).</p> <p>No cardholder data is required in the request (for example, purge date or action code). Fields 73 and 127 must not be included.</p>

Table 1-9 Center Function Message Key Fields (continued)

Function	Key Field Requirement
File Inquiry for Merchant Central File Record 0300 Message Type from acquirer	The message must be identified as an inquiry. Field 91 must be 5 .
	The file must be identified as the Merchant Central File. Field 101 must be M9 .
	No cardholder data is required in the request (for example, purge date or action code). Fields 73 and 127 must not be included.
File Inquiry for PIN Verification Data 0302 Message Type from issuer	The cardholder account number must be included. Fields 2, 102, or 103 must contain an account number.
	The message must be identified as an inquiry. Field 91 must be 5 .
	The file name in field 101 must be P2 (PIN Verification File).
	No cardholder data is required in the request (for example, purge date). Fields 73 and 127 must not be included.
File Inquiry for Portfolio Record	Field 127.PF must be present.
	The file update code in field 91 must be 5 .
	The file name in field 101 must be PF .
File Inquiry for Risk-Level Data 0302 Message Type from issuer	Cardholder account number must be included. Fields 2, 102, or 103 must contain an account number.
	The message must be identified as an inquiry. Field 91 must be 5 .
	The file name must be that of the Risk-Level File. Field 101 must be R2 .
	No cardholder data is required in the request (for example, purge date). Fields 73 and 127 must not be included.
File Update for the Address Verification File 0302 Message Type from issuer	The cardholder account number must be included. Field 2, 102, or 103 must contain an account number.
	The type of update must be specified. Field 91 must be 1, 2, 3, or 4 .
	The file name must be that of the Address Verification File. Field 101 must be A2 .
	Cardholder data (for example, purge date) is required to add, change, or replace. Fields 73 and 127 must be included if field 91 is 1, 2, or 4 .
File Update for the Exception File 0302 Message Type from issuer	The cardholder account number must be included. Fields 2, 102, or 103 must contain an account number.
	The type of update must be specified. Field 91 must be 1, 2, 3, or 4 .
	The file name in field 101 must be E2 (Exception File). NOTE: <i>For BASE I and V.I.P., exception file updates are aligned, so updates submitted by BASE I issuers update the Exception File for both systems. VisaNet no longer supports BASE I and V.I.P. exception records.</i>
File Update for the Merchant Central File 0300 Message Type from acquirer	The type of update must be specified. Field 91 must be 1, 2, 3, or 4 .
	The file must be identified as the Merchant Central File. Field 101 must be M9 .

Table 1-9 Center Function Message Key Fields (continued)

Function	Key Field Requirement
File Update for PIN Verification Data	The cardholder account number must be included. Fields 2, 102, or 103 must contain an account number.
0302 Message Type from issuer	The type of update must be specified. Field 91 must be 1 , 2 , 3 , or 4 .
	The file name in field 101 must be P2 (PIN Verification File).
	Cardholder data is required to add, change, or replace. Fields 73 and 127 must be included if field 91 is 1 , 2 , or 4 .
File Update for Maximum Transaction Amount Limit	The cardholder account number must be included. Fields 2, 102, or 103 must contain an account number.
0302 Message Type from issuer	The type of update must be specified. Field 91 must be 1 , 2 , or 4 .
	The file name in field 101 must be TL (Maximum Transaction Amount Limit)
	NOTE: <i>For BASE I and V.I.P., transaction amount limit file updates are aligned, so that updates submitted by issuers connected to BASE I update the Exception File for both systems. VisaNet no longer supports BASE I and V.I.P. exception records.</i>
File Update for Portfolio Record	Field 127.PF is used in a PPCS 0302 add or replace request when the card issuer must add or replace Portfolio Stop Payment data. The field is required in 0302 requests if the file name in field 101 is PF and the requested action in field 91 is 1 (add) or 4 (replace).
	It is also used in record deletion requests (field 91 = 3). When field 127.PF is present in an 0302 request, it is returned in the 0312 response.
	If field 127.PF contains code R0 (revocation of authorization order) or R1 (revocation of all authorizations order), at least one of the following fields must be present in the add or replace message: field 42 (card acceptor ID), field 43 (merchant name), or field 62.20 (MVV).
	If field 127.PF contains code R3 (stop payment order), field 42, 43, or 62.20 cannot be present in the 0302 message.
File Update for the Risk-Level File	The cardholder account number must be included. Fields 2, 102, or 103 must contain an account number.
0302 Message Type from issuer	The type of update must be specified. Field 91 must be 1 , 2 , 3 , or 4 .
	The file name must be that of the Risk-Level File. Field 101 must be R2 .
	Cardholder data is required to add, change, or replace. Fields 73 and 127 must be included if field 91 is 1 , 2 , or 4 .
Prompt for Next BASE I Advice	This function applies to BASE I advices only. Source station must be a BASE I or Common Interface station.
0800 Message Type from issuer	The prompt code must be provided. Field 70 is 066 .
Start Advice Transmission	Request can be initiated by any station.
0800 Message Type from acquirer or issuer	The message must be identified as a request to start advice delivery. Field 70 must be 068 or 078 .
Stop Advice Transmission	Request can be initiated by any station.
0800 Message Type from acquirer or issuer	The message must be identified as a request to stop advice delivery. Field 70 must be 069 or 079 .

Table 1-9 Center Function Message Key Fields (continued)

Function	Key Field Requirement
System Sign-Off	Request can be initiated by any station.
0800 Message Type from acquirer or issuer	The message must be identified as a request to sign off. Field 70 must be 002 or 072 .
Clients should sign off VisaNet before shutting their stations down.	
System Sign-On	Request can be initiated by any station.
0800 Message Type from acquirer or issuer	The message must be identified as a request to sign on. Field 70 must be 001 or 071 .
Clients without Auto Sign-On should sign on their systems to recover from maintenance.	

1.4.4 Advices

Table 1-10 lists the key fields for BASE I advice messages.

Table 1-10 Advice Types

Function	Message Features
0120 Message Type from V.I.P. to issuer	Field 18 is 9700 .
Authorization/AVS Processing by STIP	Field 44.1 has a Response Source Code of 1 , 2 , or 4 , and there is a non-space AVS Result Code in field 44.2.
0120 Message Type from V.I.P. to issuer	
Authorization Processing by BASE I STIP	The Response Source Code in field 44.1 is 1 , 2 , or 4 .
0120 Message Type from V.I.P. to issuer	Fields 44.6 and 44.7 may or may not be present. If they are, field 44.2 is a space. Fields 44.6 and 44.7 are present if Positive Authorization Capacity Management Service (PACM) processing is performed by STIP and issuers choose to receive them. Field 44.6 contains the PACM diversion level, and field 44.7 contains the PACM reason code.
Exception File Update by Visa (Notice of Action Only)	The Authorization Source Code in field 44.1 is 0 .
0120 Message Type from V.I.P. to issuer	The BIN in field 32 identifies the service that initiated the file update.
Exception File Update by Visa (Notice of Action and File Result)	The file name in field 101 is E2 (Exception File)..
0322 Message Type from V.I.P. to issuer	The BIN in field 32 identifies the service that initiated the file update.

1.5 Resolving Transaction Failures

Occasionally, client-initiated transactions fail to process as anticipated; for instance, requests that reject because of invalid field values. Client representatives help resolve such problems.

1.5.1 The Role of V.I.P. Client Representatives

Visa client representatives gather details about transactions and events surrounding them. Client representatives should collect the following (when feasible) before contacting support:

- Time and date (in Greenwich mean time [GMT]) of occurrence. Exact time is preferred but small time range is acceptable.
- Transaction details, for instance, credit, SMS, region, PCR, station, BIN, and logprint of transactions.
- Circumstances surrounding issue, for instance, did client recently perform upgrade, or did incident occur after certain time and date indicating possible trigger.
- Possible patterns, for instance, incident occurs with every transaction, occurs at certain times, or occurs from a BIN.
- Impact, Visa brand, number of transactions, number of transactions per hour, and dollar amounts.

With above items in hand, support teams start analyzing situations immediately instead of gathering above information first.

To resolve events quickly, Visa client representatives should obtain logprints of messages. *Logprints* are message "snapshots" showing fields and field values messages contained when they entered VisaNet, when V.I.P. processed them, and when they were delivered to receiver.

1.5.2 Inovant Global Support Services (IGSS)

If transaction failures cannot be resolved on the regional level, Visa representatives contact Global Client Testing Support by email to itest@visa.com. Global Client Testing Support provides first-level support coverage 24 hours a day, seven days a week, regarding transactional problems for BASE I, BASE II, SMS, and VSS, and for acceptance problems for international ATM and interregional POS locations. Global Client Testing Support also provides testing with the VisaNet Certification Management Service (VCMS), BASE II, and the Visa Test System VTS /3 tool. If Global Client Testing Support is unable to resolve issues, staff escalates problem tickets to the next level support group within Visa for resolution.

Message Structure and Header Fields

This chapter identifies the components of V.I.P. messages and provides descriptions of the header fields. It includes information about ISO compliance and variations, and specifications about message type, bitmaps, and Visa programming rules. Data fields are described in [Chapter 4, Data Field Descriptions](#).

2.1 VisaNet Data Message Structure

V.I.P. online messages are based on Bank Card Organizational Messages—Interchange Message Specifications—Content for Financial Transactions, International Organization for Standardization (ISO) 8583; 1987 (E). V.I.P. online messages have four basic components, as shown in the following table.

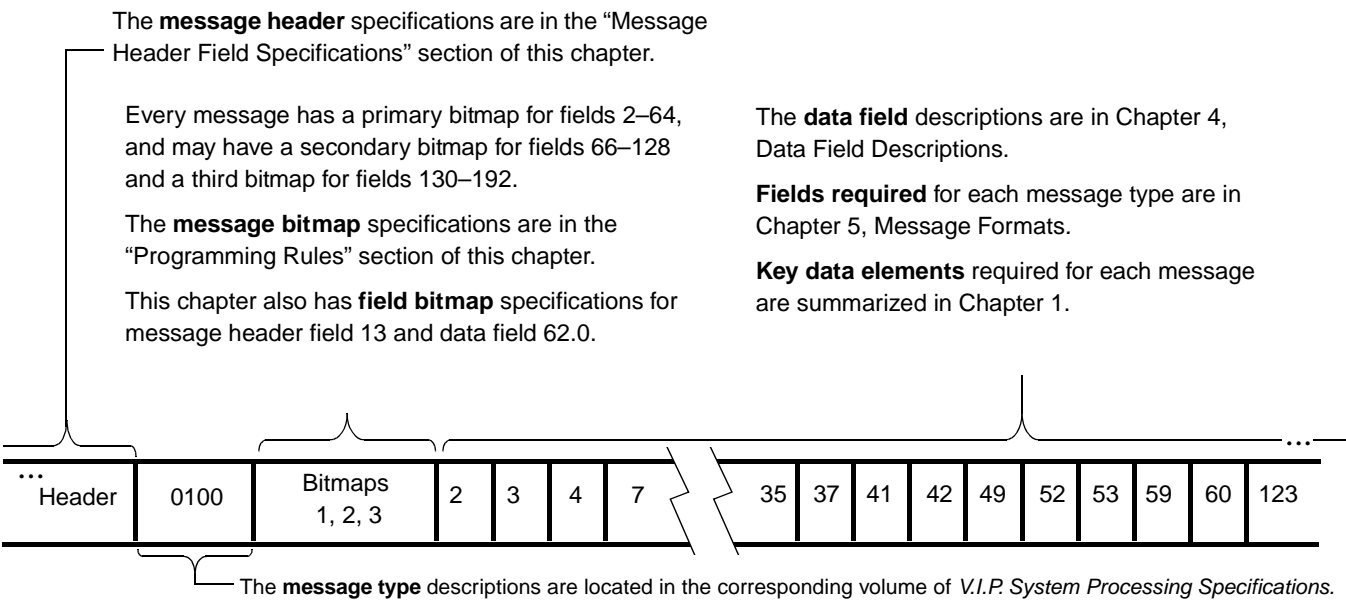
Table 2-1 Data Message Components

Component	Content
Message Header	Contains basic system ID and routing information, message processing control codes and flags. The content is defined by Visa.
Message Type ID	Highest level message type definition. First data element is ISO 8583 message. Specifies general message category (for example, financial or network management).
Bitmap	Specifies which data fields are present. The format is defined by ISO 8583: Bitmap 1 = Fields 2–64 Bitmap 2 = Fields 65–128 Bitmap 3 = Fields 129–192

Table 2-1 Data Message Components (continued)

Component	Content
Data Fields	Comprise the message. Majority of fields are defined by ISO 8583. Other fields are defined by Visa or are used nationally and adopted by Visa. For field requirements, see Chapter 4, Data Field Descriptions.

Figure 2-1 Anatomy of a Message



2.1.1 Header and Data Field Usage Guidelines

This section contains ISO field compliance and variations. It also includes a guide for reading the field descriptions, followed by the definitions and programming specifications for all message data fields transmitted to, from, and within the V.I.P. System. The overall structure of a message looks like this:

Message Header	Message Type ID	Bitmap	Data Fields
		Bitmap 1 = Fields 2–64 Bitmap 2 = Fields 66–128 Bitmap 3 = Fields 129–192	

Visa primarily uses fields defined in ISO 8583, but also defines and uses national-use and private-use fields. All acquirers and issuers must successfully complete testing that they can receive all ISO 8583 fields, even though Visa does not currently use them all or support every value for every ISO-defined field.

2.1.2 Visa Implementation of ISO 8583

The specifications documented here are based on ISO 8583, dated August 1987. Visa uses this standard for bank card and non-bankcard transactions. For example, Visa uses it for transactions on private label, proprietary, and travel and entertainment (T&E) cards, and

for transactions requiring check acceptance authorization. [Table 2-2](#) and [Table 2-3](#) identify where Visa varies from ISO 8583 and which fields have Visa-unique specifications.

Table 2-2 Visa Variations From ISO 8583

Variation	Description
Variable length fields	They have a one-byte length subfield and have a maximum length of 255 bytes.
International currencies	Currencies that Visa supports are listed in the appendix titled "Country and Currency Codes".
Message header	Visa has developed message headers for online V.I.P. messages.
Field 3—Processing Code	Required in BASE I format request responses only for balance inquiries or when the issuer specifies a different account type.
Field 4—Amount, Transaction	Required in BASE I format response messages if the customer transaction is being approved or there is no reason to decline a verification request.
Field 20—PAN Extended, Country Code	VisaNet uses Field 20 to identify issuer country for acquirer.
Field 27—Authorization Identification Response Length	Field 27 is omitted because Visa does not support variable-length approval codes.
Field 44—Additional Response Data	Can be used in forwarding requests and in response messages.
Field 73—Date, Action	Field 73 requires the ISO-defined format <i>yymmdd</i> only in 03xx file updates and inquiries. In other messages, this field can contain a numeric date.

See [Table 2-3](#) for Visa-unique specifications.

Table 2-3 Visa-Unique Specifications

Field	Description
Field 19—Acquiring Institution Country Code	This field is required in all authorization requests for bankcard transactions and related reversals and advices.
Field 41—Card Acceptor Terminal Identification	This field is used in authorization requirements for technology migration programs (for example, CPS/Retail).
Field 42—Card Acceptor Identification Code	This field is used for the name of the acquirer institution owning the ATM.
Field 43—Card Acceptor Name/Location	This field is used for the merchant location, city, and country.
Field 53—Security-Related Control Information	This field is used in messages containing a PIN (field 52). It describes the PIN block format used by the acquirer or issuer.
Field 63—V.I.P. Private-Use Field	VisaNet uses field to convey acquirer and issuer information.
Field 102—Account Identification 1	This field is used for all check acceptance messages, even when the customer ID is an account number. This field is also used for nonstandard account numbers that do not meet the requirements for Field 2—Primary Account Number.

2.1.3 National-Use and Private-Use Fields

Table 2-4 lists the fields defined by Visa for national (domestic) and private (according to Visa requirements) use.

Table 2-4 National/Private-Use Fields

Field	National Use	Private Use
Field 48—Additional Data—Private		✓
Field 59—National Point-of-Service Geographic Data ¹	✓	
Field 60—POS Terminal Entry Capability Code		✓
Field 61—Other Amount		✓
Field 62—Custom Payment Service Fields		✓
Field 63—V.I.P. Private-Use Field		✓
Field 117—National Use	✓	
Field 118—Intra-Country Data	✓	
Field 121—Issuing Institution Identification Code		✓
Field 123—Verification Data		✓
Field 125—Supporting Information		✓
Field 126—Visa Private Use Fields		✓
Field 127—File Records—Action and Data		✓
Fields 130–139, 142–149—Visa Smart Debit and Visa Smart Credit (VSDC)		✓

1. Visa has adopted the American National Standards Institute (ANSI) definition for Field 59—National Point-of-Service Geographic Data for messages that originate at a point of sale or service within the United States and Canada.

2.1.4 Programming Rules

This section specifies the Visa rules concerning encoding and transmitting data messages and bitmap specifications.

2.1.4.1 Message Length

A message cannot exceed 800 bytes. Incoming reject messages created by VisaNet can be longer because of the header. See the description of Header Field 4—Total Message Length.

2.1.4.2 Data Representation

VisaNet treats ISO 8583 numeric fields as 4-bit BCD (unsigned packed) fields. In this specification they are shown as:

n N, 4-bit BCD (unsigned packed)
fixed length, *x* bytes

VisaNet treats ISO 8583 alphanumeric (AN) fields as EBCDIC (character) fields. In this specification they appear as:

n AN, EBCDIC
fixed length, *x* bytes

In some cases, even though the field is defined as alphanumeric, the field content may be limited to numeric values, as is the case for Field 37—Retrieval Reference Number.

Alphanumeric fields labeled “ANS” means that special characters such as dash, slash, and so on are also allowed in addition to alphabetic and numeric characters.

NOTE

Acquirers must not populate symbols, superscripts, and subscripts in ANS fields, as they are not special characters.

NOTE

Japan uses an extension of the EBCDIC character set called EBCDIC-K. The K refers to the EBCDIC 7 bit code definition for Japanese Katakana characters which are used to describe names, places and words of non-Japanese origin. Japan uses an extension of the EBCDIC character set called EBCDIC-K. The K refers to the EBCDIC 7 bit code definition for Japanese Katakana characters which are used to describe names, places and words of non-Japanese origin. Field 118 is used for Japan Domestic transactions and can contain EBCDIC-K characters.

2.1.4.3 Field Alignment

All fields are aligned on a byte boundary. Some fields, such as Field 90—Original Data Elements have subfields with lengths that involve half bytes.

2.1.4.4 Field Lengths

No field can exceed **255** positions. This requirement is a variation from the ISO standard, in which variable-length fields can be 999 positions long. The field descriptions in this specification give the maximum length in bytes of each variable-length field. Length restriction applies to the entire field, that is, it covers the length subfield and the data subfields that follow.

All length subfields must be encoded in 1-byte binary code. The value in a length subfield never includes its own length. Length subfields are referenced as position 0, and data subfields begin with position 1.

How length is specified depends on the type of field, as follows:

ISO-Defined Field: The length is determined by the number of positions in the field. Positions can be characters, digits, or bits depending on the attributes of the field. The leading zero needed to pad the first half-byte of an odd-length, 4-bit BCD value is not counted in the length.

ISO-Defined TLV (Tag-Length-Value) Field: See “[The ISO TLV Format](#)”.

Private-Use Field: The length is determined by the number of bytes in the field. This convention permits other networks and systems to bypass these fields correctly. Private-use fields are those associated with bits 48, 60–63, and 120–127.

All bit-string fields (for instance, bitmap and PIN), must be constructed according to the bit string, which is an integral number of 8-bit bytes. All binary fields have lengths that are integrals of full bytes.

Example of an ISO-Defined Numeric Field

In the field descriptions, length information is given for Field 2—Primary Account Number.

Attributes

1 byte, binary +
19 N, 4 bit BCD

maximum: 11 bytes

Because account number digits are encoded as 4-bit BCD values, a 19-digit account number would require **11** bytes, but these bytes would be shown in the length subfield as 19 for the number of positions:

Byte:	1	2	3	4	5	6	7	8	9	10	11
	19	01	23	45	67	89	01	23	45	67	89

- Byte 1 for the length (the binary representation of 19)
- Bytes 2 through 11 for the account number with a leading zero to pad the first unused half-byte

A 16-digit account number would require 9 bytes:

Byte:	1	2	3	4	5	6	7	8	9
	16	12	34	56	78	90	12	34	56

- Byte 1 for the length (the binary representation of 16)
- Bytes 2 through 9 for the account number

Example of ISO-Defined Character Field

In the field descriptions, length information is given for Field 44—Additional Response Data, Private:

Attributes

variable length
1 byte, binary +
25 ANS, EBCDIC
maximum: 26 bytes

When a request includes a CVV or iCVV Results Code (field 44.5), but none of the other field 44 subfields, this field requires **5** bytes:

Byte:	1	2	3	4	5
					2

- Byte 1 for the length (the binary representation of 5)
- Bytes 2 through 4 are blank; not applicable
- Byte 5 for the CVV or iCVV Results Code

Example of a Private-Use Numeric Field

In the field descriptions, length information is given for Field 60—Additional POS Information.

Attributes

variable length
1 byte, binary +
2N, 4-bit BCD (unassigned packed); 2 bytes total

When an acquirer generates this field for an 0200 request, 2 bytes are required. The length subfield value is the number of bytes, not positions:

Byte:	1	
	Pos 1	Pos 2
	2	2

- One byte for the length (the binary representation of 1)
- One byte for the terminal type and terminal capability

2.1.4.5 Padding Unused Positions

These conventions apply to fixed-length fields when the data entered does not fill the field:

- If the field is numeric, left zero-fill is required.
- If the field is not numeric, right space-fill is required.

Odd-length numeric values in fixed and variable-length fields must contain a leading **zero**. The exception is the coding in Field 22—POS Entry Mode Code, which has a trailing rather than a leading **zero**.

2.1.4.6 Message Transmission

Messages are encoded in a combination of binary, 4-bit BCD (unsigned packed), and EBCDIC characters; therefore, all messages must be transmitted in EBCDIC transparent mode. Processors communicating with V.I.P. must use a transparent communication protocol.

2.1.4.7 Fields With Optional Subfields

Some fields are divided into subfields. Not all of them may be required in a message. The presence or absence of a subfield is identified in the field's bitmap. The field's bitmap must be present if field subfields are required.

2.2 Message Header Field Specifications

This section describes the Visa-developed message header that is required in all online messages processed by VisaNet.

Message Header	Message Type ID	Bitmap	Data Fields
Bitmap 1 = Fields 2–64 Bitmap 2 = Fields 66–128 Bitmap 3 = Fields 129–192			

This header length is variable. It contains 12 mandatory, fixed-length header fields, plus a bitmap in the 13th header field that specifies the number of fields present after that bitmap. Currently, only one optional header field has been defined, reserved for Visa use in reject headers. There are two types of headers:

- A standard header contains 12 header fields (22 bytes) that specify lengths, routing IDs, and other system-related processing data.
- A reject message header, generated only by VisaNet, contains 14 header fields (26 bytes). This includes the 22-byte standard header plus four additional bytes for the bitmap and reject information.

Visa can modify the header to accommodate new flags for VisaNet.

Visa counts bits from left to right, starting with 1.

Bit 1	Bit 2	Bit 3	Bit 4	Bit 5	Bit 6	Bit 7	Bit 8
One byte							

IMPORTANT

Under no circumstance should a processor adopt for its own use what may appear to be an unused bit in the header.

2.2.1 Standard Message Header

Figure 2-2 illustrates the standard message header fields. The processor generates this header for all outgoing messages.

Figure 2-2 Standard Message Header Fields

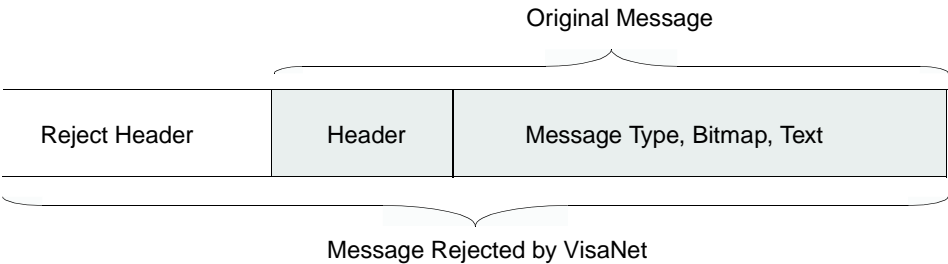
Header Field 1	Header Field 2	Header Field 3	Header Field 4	Header Field 5	Header Field 6	Header Field 7
Header Length	Header Format	Text Format	Total Message Length	Destination ID	Source ID	Round-Trip Control Info
Byte 1	Byte 2	Byte 3	Bytes 4–5	Bytes 6–8	Bytes 9–11	Byte 12

Header Field 8	Header Field 9	Header Field 10	Header Field 11	Header Field 12
BASE I Flags	Message Status Flags	Batch Number: Not Used	Reserved for Visa Internal Use	User Info
Bytes 13–14	Bytes 15–17	Byte 18	Bytes 19–21	Byte 22

2.2.2 Reject Message Header

VisaNet generates the reject message header when V.I.P. finds a syntax or message-construction error. An incoming rejected message contains the reject message header followed by the original message header and data, as shown in Figure 2-3.

Figure 2-3 Structure of a Rejected Message



The reject message header has two extra header fields: a bitmap, and a reject data group field that contains a 4-digit reject code describing the error. To determine if an incoming message contains a reject message header, the processor must check two header fields as follows:

- Header field 1 length must be **26** or higher.
- Header field 13 bit one must be **1** (which means that the header includes header field 14).

A processor never creates a reject header but should be prepared to receive it in incoming messages. Although the Plus Switch can reject transactions to SMS, the reject header is not used. [Figure 2-4](#) illustrates the reject message header fields.

Figure 2-4 Reject Message Header Fields

Header Field 1	Header Field 2	Header Field 3	Header Field 4	Header Field 5	Header Field 6	Header Field 7
Header Length	Header Format	Text Format	Total Message Length	Destination ID	Source ID	Round-Trip Control Info
Byte 1	Byte 2	Byte 3	Bytes 4–5	Bytes 6–8	Bytes 9–11	Byte 12
Header Field 8	Header Field 9	Header Field 10	Header Field 11	Header Field 12	Header Field 13	Header Field 14
BASE I Flags	Message Status Flags	Batch Number: Not Used	Reserved	User Info	Bitmap	Reject Data Group
Bytes 13–14	Bytes 15–17	Byte 18	Bytes 19–21	Byte 22	Bytes 23–24	Bytes 25–26

This header is followed by the header from the original message that was rejected.

2.2.3 Constructing Message Headers

The message header is built using the information for the data message being sent. When a processor receives a request or advice, it must preserve certain information in the header and return in the response. This involves header fields 5, 6, 7, 8, 9, 10, 11, and 12.

Header information from the incoming request or advice must be returned in the response (or advice response):

- Switch the information in Header Field 5—Destination Station ID and Header Field 6—Source Station ID—unless the reply is being returned from a station other than the one that received the request. In that case, Header Field 6—Source Station ID must contain the ID of the station that transmits the reply.
- Return the following header fields unchanged:
 - Header Field 7—Round-Trip Control Information
 - Header Field 8—Base I Flags
 - Header Field 9—Message Status Flags
 - Header Field 10—Batch Number
 - Header Field 11—Reserved
 - Header Field 12—User Information
- Return the settings of all bits in Header Field 9—Message Status Flags unchanged.
- Create the values for the remaining header fields.

2.3 Message Data Field Specifications

This section describes the message type identifier and explains how message types are used.

Message Header	Message Type ID	Bitmap	Data Fields
Bitmap 1 = Fields 2–64			
Bitmap 2 = Fields 66–128			
Bitmap 3 = Fields 129–192			

The message type identifier is four BCD digits (two bytes) long. It is required in every message and is located between the message header and the primary bitmap.

2.3.1 Visa-Unique Specifications

ISO message types are defined in terms of sources and destinations. The ISO standard applies to acquirer messages going to an issuer and issuer messages going to an acquirer.

The ISO standard does not take into account systems (such as VisaNet), which act as an intermediary between end points. To bridge this gap, Visa uses ISO-defined message types as follows:

- Message type 0100 is a message from an acquirer to a card issuer. Visa uses this for authorization and verification requests to be routed from the acquirer to the card issuer or STIP. Visa also uses 0100 messages for BASE I balance inquiries.
- Message type 0120 is a message from an acquirer to a card issuer. Visa uses this for authorization advices.
- Message types 0302 and 0322 are messages passed between an issuer and an acquirer. Visa has adopted these file-related messages for use between an issuer and the VIC file management function.

The message type identifier precedes the primary bitmap and the data fields of a message and immediately follows the message header. See [Table 2-5](#) for the message type identification structure.

Table 2-5 Message Type Identifier Structure

Component Label	Type of Information
Attributes	4 N, 4-bit BCD (unsigned packed) fixed length, 2 bytes
Description	The message type identifies the highest level identifier of the type of message and its processing requirements and is an indicator of the content of the message.
Usage	This message component must be present in every message. The value must comply with the requirements described here and in the <i>BASE I Processing Specifications</i> manual.
Field Edits	The message type identifier must be numeric and must be one of the codes defined in the <i>BASE I Processing Specifications</i> manual.
Reject Codes	0005 = Invalid value 0270 = Field missing 0400 = Parse error (for example, invalid length, missing code)

2.3.2 Bitmap Specifications

The message text segment of all VisaNet messages is variable length. Bitmaps specify which fields are present and which are not.

Message Header	Message Type ID	Bitmap	Data Fields
		Bitmap 1 = Fields 2–64 Bitmap 2 = Fields 66–128 Bitmap 3 = Fields 129–192	

Every message contains one or more of the three bitmaps currently available. The combinations of bitmaps in a VisaNet message are:

- The first bitmap.
- The first and second bitmap.
- The first, second and third bitmap.

The header field 13 bitmap and the data field 62 bitmap, which indicate which information is present in those fields, are also explained in this section.

2.3.2.1 First, or Primary, Bitmap

Every message includes the first bitmap. It is a control field consisting of 64 bits (8 bytes) located after the message type identifier. Except for the first bit, each bit relates to the corresponding data field (fields 2–64). The value in the bit indicates whether the data field is present in the message:

- If a bit is **0**, the field related to that bit is not present in the message.
- If a bit is **1**, the field related to that bit is present in the message.

Data field number 1 does not exist. The first bit of the primary map is used to indicate if another bitmap, called the second bitmap (see the next section) immediately follows this primary one.

Example of Primary Bitmap illustrates the location and function of the primary bitmap. In this example, the first bit is **0**, meaning that no bitmap follows. The second, third, and fourth bits are **1**, meaning that fields 2, 3, and 4 are present in the message. The fifth and sixth bits are **0**, meaning that fields 5 and 6 are not present. The seventh bit is **1**, meaning that field 7 is present, and so forth.

2.3.2.2 Second Bitmap

The first bit of the first bitmap indicates the presence or absence of a second map called the second bitmap.

Like the primary map, the secondary map is a control field consisting of 64 bits (8 bytes). It can be considered an extension of the primary map because it is associated with fields 66 through 128. Data field 65 does not exist. This position, like that of field 1 in the primary map, is used to indicate the presence of another bitmap. A **1** in this position indicates the presence of a third bitmap.

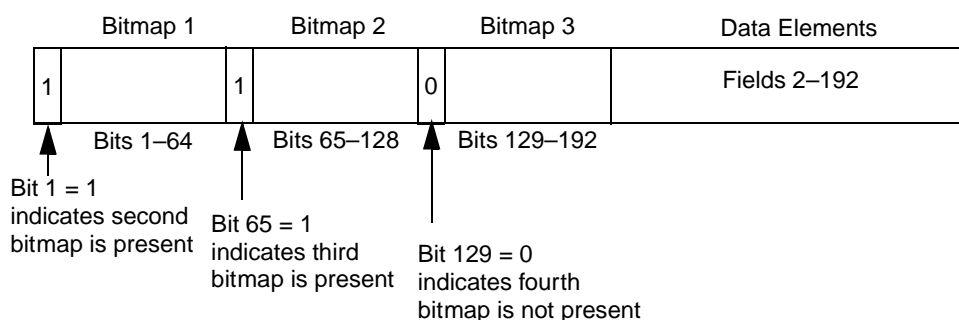
The second bitmap is present only when the message contains information in fields from 66 through 128. When present, the secondary map immediately follows the primary bitmap and precedes the data fields.

Example of Secondary Bitmap illustrates the location and function of the secondary bitmap. In this example, the message includes field 90, in addition to those shown in **Example of Primary Bitmap**. The first bit of the first map is **1**, meaning that another map follows. In the second map, the bit in position 90 is **1**, meaning that field 90 is present.

2.3.2.3 Third Bitmap

The third bitmap includes VSDC data in fields 130–139 and 142–149. This new data, referred to as the audit trail, includes cryptograms and the fields required to generate them.

A **1** in the first bit of the second bitmap (bit 65) indicates the presence of the third bitmap. The third bitmap is aligned at the beginning of the message, directly following the current two bitmaps. The data elements follow the bitmaps.



2.3.3 Field Bitmaps

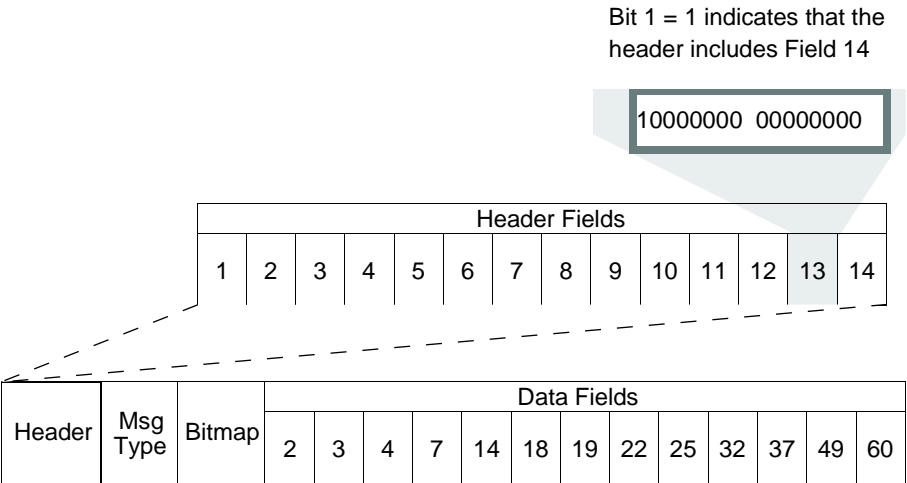
Bitmaps can be used also to describe the content of a field within the message. BASE I currently includes two bitmap fields, header field 13, and data field 62 for message text.

2.3.3.1 Header Field 13

Field 13 of the Message Header is defined as a bitmap consisting of 16 bits (2 bytes). This bitmap indicates how many optional header fields follow the map. Currently, only one optional field (Header Field 14—Bitmap, Reject Code) has been established.

Figure 2-5 illustrates the location and function of the bitmap. This bitmap and the field after it are system-generated. Users may not insert this information in message headers. Only VisaNet can create reject messages.

Figure 2-5 Header Field 13 Bitmap

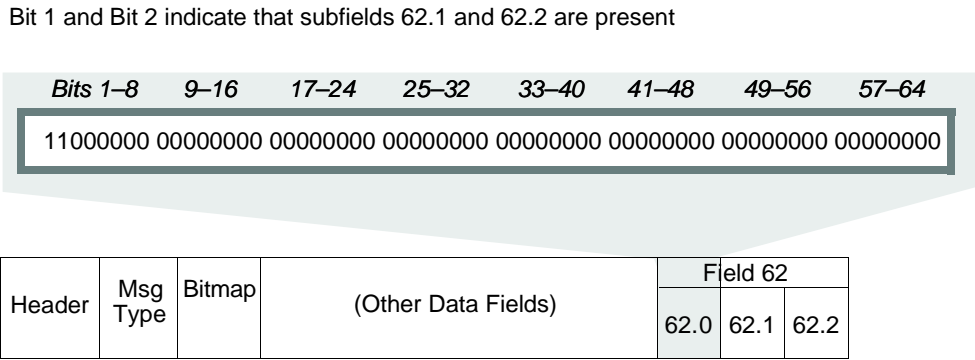


2.3.3.2 Data Field 62.0

Field 62—Custom Payment Service Fields is a variable length field consisting of two or more fixed-length subfields for a 13-byte total length. Each subfield has its own number and its presence or absence is indicated through a bitmap in field 62.0, which contains 64 bits and is 8 bytes in length.

Figure 2-6 illustrates the bitmap location and function. This field is required in every Custom Payment Service message.

Figure 2-6 Field 62 Bitmap Example



2.3.3.3 Data Field 63

Field 63—V.I.P. Private-Use Field is a variable-length field consisting of 256 bytes maximum. There is a length subfield and a bitmap, and each subsequent subfield has its own number.

2.3.3.4 Data Field 130

Field 130—Terminal Capability Profile is a fixed-length VSDC field consisting of 3 bytes. Each byte contains several subfields. For details, see the “Field 130” field description in this book.

2.3.3.5 Data Field 131

Field 131—Terminal Verification Results is a fixed-length VSDC field consisting of 5 bytes. Each byte contains several subfields. For details, see the “Field 131” field description.

2.3.3.6 Data Field 134.3

Field 134.3—Card Verification Results (CVR) is a variable-length VSDC bitmap subfield with a maximum of 4 bytes. Each byte contains several subfields. For details, see the “Field 134” field description.

2.3.3.7 Data Field 138

Field 138—Application Interchange Profile is a fixed-length VSDC field consisting of 2 bytes. Each byte contains several subfields. For details, see the “Field 138” field description.

2.3.3.8 Data Field 143

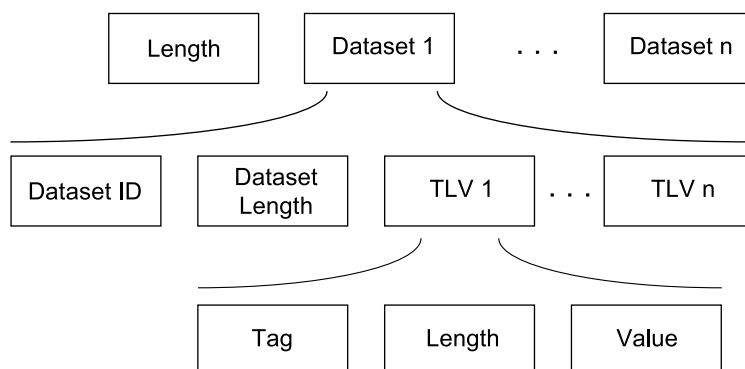
Field 143—Issuer Script Results is a variable-length VSDC field with a maximum of 21 bytes. The length subfield specifies the number of bytes present in this field, and each byte contains one or more subfields. For details, see the “Field 143” field description.

2.3.4 The ISO TLV Format

In the Basic Encoding Rules (BER), the Tag-Length-Value (TLV) format is an ISO convention that treats field content as datasets. Visa supports the ISO 8583, 2003 Standard for TLV format, which applies to composite fields. These fields also conform to the ISO 8825 tag structure for TLV dataset identifiers 01–70. Visa does not support dataset identifiers 71–FE in bitmap format (although Visa does support Dataset ID 71 in TLV format for field 104, usage 2).

The following figure shows the structure of a composite TLV field that supports multiple dataset IDs and multiple tags within each dataset.

Figure 2-7 Example of Composite TLV Field Structure



The elements of a TLV-formatted field are defined as follows.

- **Length subfield:** This is a one-byte binary subfield that contains the number of bytes in the field after the length subfield. This number includes the total length of all dataset IDs and dataset lengths, along with the lengths of the TLV elements. It does not describe the length of each TLV dataset.
- **Dataset ID:** This is a one-byte binary identifier given to each dataset within a TLV-formatted field. The Dataset ID is the first component in a dataset. A TLV-formatted field can contain a maximum of 256 different datasets.

NOTE

The data associated with a Dataset ID depends on the field in which the dataset is used. For example, Dataset 01 in field 14 contains different information than Dataset 01 in field 55.

- **Dataset Length:** This is a two-byte binary subfield that contains the total length of the TLV elements within the dataset.
- **Dataset TLV elements** (TLV1, TLV2, and so on).

Each TLV element consists of the following fields:

- The Tag field contains a variable-length hexadecimal code, or ID, that identifies the content of the Value field. Visa currently assigns tags that are one or two bytes in length. For example, C0 = 1-byte tag; DF01 = 2-byte tag.

NOTE

The type of data specified by a tag ID depends on the dataset in which the tag is used. For example, a tag of 01 that specifies a given type of data in one dataset can specify a different type of data in another dataset.

- The Length field is a variable-length field that defines the length of the Value field. Visa currently supports Length fields that are one to three bytes long.
- The Value field is a variable-length field that contains the data specified by the tag.

Determining the Number of Bytes in the Tag Field: The Tag field, which identifies the data represented by a given TLV element, consists of one or more bytes. The right-most 5 bits of the first byte are used to specify whether a tag consists of more than one byte: If all five bits are on, the tag is greater than one byte in length.

When the tag is greater than one byte in length, the left-most bit of each subsequent byte of the tag is set to one (**1**) unless it is the last byte of the tag.

In the following example, the low-order bits b5 through b1 are set to **1**, indicating that the next byte is part of the tag.

Table 2-6 Example of Tag Code Binary Settings

b8	b7	b6	b5	b4	b3	b2	b1	Meaning
0	0							Universal class
0	1							Application class
1	0							Context-specific class
1	1							Private class
		0						Primitive object
		1						Constructed object

Table 2-6 Example of Tag Code Binary Settings (continued)

b8	b7	b6	b5	b4	b3	b2	b1	Meaning
			1	1	1	1	1	See next byte (which will be part of the tag)
			Other value					Tag number

Determining the Number of Bytes in the Length Field: The Length field, which represents the number of bytes in the Value field, is one or more bytes long and uses the short or long form. The first bit of the Length field indicates the form in which the Length field is structured.

Short Form: When the left-most bit is *off*, it indicates that the Length field is expressed in short form. In this form, the Length field will consist of one byte in which the right-most 7 bits contain the number of bytes in the Value field, as an unsigned binary integer. This form of the Length field supports data lengths of 127 bytes.

For example, a Length value of **126** can be encoded as binary **01111110** (hexadecimal equivalent of **7E**).

Long Form: When the left-most bit is *on*, it indicates that the Length field is expressed in long form. In this form, the Length field will consist of an initial byte and one or more subsequent bytes. The right-most 7 bits of the initial byte contain the number of subsequent bytes in the Length field, as an unsigned binary integer. All bits of the subsequent bytes contain an unsigned binary integer equal to the number of bytes in the Value field. The following are examples of different long-form length values:

- A Length value of **254** can be encoded as binary 10000001 **11111110** (hexadecimal equivalent of **81FE**).
- A Length value of **382** can be encoded as binary 10000010 **00000001 01111110** (hexadecimal equivalent of **82017E**).
- A Length value of **510** can be encoded as binary 10000010 **00000001 11111110** (hexadecimal equivalent of **8201FE**).

TLV Dataset Example: An example of a TLV dataset used in address verification is shown below. The example address is 800 METRO,94404.

F123 Length	Data-set ID	Data-set length	Postal TLV			Address TLV		
			Tag Postal Code	Length	Value	Tag address	Length	Value
15	66	0012	C0	05	F9F4F4F0F4	CF	09	F8F0F040D4C5E3D9D6

Values of the fields in this example are:

Length: one byte binary value **21** (shown as hex 15)

Dataset ID: one byte binary value **66**

Dataset length: 2 bytes binary value **18** (shown as hex 12)

Tag Postal Code: one byte binary value **C0**

Length: one byte binary value **5**

Value: 5 bytes hex value **F9F4F4F0F4**

Tag Address: one byte binary value **CF**

Length: one byte binary value **9**

Value: 9 bytes hex value **F8F0F040D4C5E3D9D6**

The TLV format is designed for flexibility. The format illustrated above is only an example. TLV dataset structures can be constructed in simple “tokenized” or abbreviated form.

2.3.4.1 TLV Processing

Endpoints must consider the following to correctly process TLV fields:

- A TLV-format field can contain multiple dataset IDs.
- Dataset IDs in a composite field can occur in any order.
- A TLV-format field can contain multiple occurrences of the same dataset and tags. For example, a message that contains an itemized statement may contain multiples of the same dataset ID, each of which may have the same TLV elements for each line item of a statement or receipt. The value information for each of the tags will be unique to each specific line-item detail.
- Endpoints should ignore received dataset IDs they do not recognize or expect and continue processing the remaining dataset IDs in the field.
- TLV elements within a dataset can occur in any order.
- Endpoints should ignore tags they do not recognize or expect and continue processing the remaining tags within a dataset.
- Tag identifiers are not unique across datasets. For example, field 104, usage 2 has several dataset IDs, and each of these may have a tag 01. The information in each tag 01 will be different and unique to its associated dataset ID. The tag and dataset ID combined define the data element.

2.3.4.2 Current VisaNet BER-TLV Applications

Following are fields that support the TLV format:

- Field 55, Usage 1—VSDC Chip Data
- Field 55, Usage 2—Chip Card Data
- Field 104, Usage 2—Transaction-Specific Data
- Field 116—Card Issuer Reference Data
- Field 123—Verification Data
- Field 125, Usage 2—Supporting Information
- Field 127.L1—ALP Product File Maintenance
- Field 127.MCF—Merchant Central File
- Field 127.PF—Portfolio File

2.4 Header Field Descriptions

This section specifies header field formats, describes header field contents and use, and gives the reject code that signifies invalid data in a header field. The values for certain header fields are set by the user; values for other header fields are determined by Visa.

- Header fields 1 through 12 are mandatory.
- Header fields 13 and 14 are conditional.

2.5 Header Field 1—Header Length

2.5.1 Attributes

1B (binary)
1 byte

2.5.2 Generated by

Header field 1 is generated by the processor, V.I.P., or a VisaNet connection.

2.5.3 Description

Header field 1 specifies the number of bytes in this header in hexadecimal.

2.5.4 Usage

Rather than coding header lengths explicitly, such as 22 or 26, users should check the value in this field to find the start of the message text. This practice permits future expansion of the header with minimal software impact.

NOTE

*Do not assume that this header field is a reject header based on the content of this field alone. In a reject header, the length must be **26** or higher, and the first bit of header field 13 must be **1**.*

2.5.5 Field Edits

The field edits must be between 22 and 32 bytes.

2.5.6 Reject Codes

0012 = Invalid value

2.5.7 Valid Values

16 = Normal message header

1A = Reject message header

2.6 Header Field 2—Header Flag and Format

2.6.1 Attributes

8 N, bit string
1 byte

2.6.2 Generated by

Header field 2 is generated by the processor, V.I.P., or a VisaNet connection.

2.6.3 Description

Header field 2 specifies the presence or absence of a message header following this header field, and the format of this message header.

The first bit is a flag:

0 = No header follows this one

1 = Another header follows this one

The last seven bits contain a binary value that identifies the format of this message header:

1 = The VisaNet format, as specified in this chapter. (Additional codes may be assigned by Visa, if necessary.)

2.6.4 Usage

None.

2.6.5 Field Edits

In all processor-generated outgoing messages, field 2 must be the binary value **0000 0001**.

In an incoming reject message, field 2 must be the binary value **1000 0001**.

2.6.6 Reject Codes

0013 = Invalid value

0519 = Invalid header format

2.7 Header Field 3—Text Format

2.7.1 Attributes

1B (binary)
1 byte

2.7.2 Generated by

Header field 3 is generated by the processor, V.I.P., or a VisaNet connection.

2.7.3 Description

Header field 3 is a code that specifies the message data field format. The following codes, or flags, apply:

1 = V.I.P. Text Format: Debit ISO format.

2 = V.I.P. Text Format: Field 62, if present, is in bitmap format.

x'**1A**' = V.I.P. Text Format: Expanded Variable Length Format. (Field 62, if present, is in bitmap format.)

2.7.4 Usage

For the initiator of a request or advice, V.I.P. will return the header field 3 value from the request in the response. For example, if the value in the request is **2**, the value in the response sent back to the initiator will be **2**.

For an endpoint that is receiving a request or advice, V.I.P. determines the value to be used in the message by the option specified in the endpoint's PCR. In the associated reply, an endpoint must return the value that it received in the request or advice. For example, if the endpoint receives a **2** in the request or advice, it must return a **2** in the response.

In requests and responses that use text format **1**, the endpoint must be configured for message text format.

In requests and responses that include field 62, an endpoint must use text format **2** or hexadecimal **1A** (x'**1A**'). The endpoint should use the value in all request and advice messages that it originates, including messages that do not contain field 62.

When header field 3 is set to **2** or x'**1A**', field 62 and all its subfields may be present, as indicated in the bitmap, and acquirers and issuers must be able to receive the subfields in messages that carry them.

Header field 3 is a retain-and-return field. Acquirers and issuers must return the value received in header field 3 in response messages.

2.7.5 Field Edits

The value in this field must be **1**, **2** or x'**1A**'. Otherwise, V.I.P. rejects the message.

2.7.6 Reject Codes

0015 = Invalid value

2.7.7 Valid Values

Table 2-7 describes the text format codes for header field 3.

Table 2-7 Header Field 3 Text Format Codes

Code	Definition
1	Debit ISO format
2	Visa implementation of the ISO standard format: <ul style="list-style-type: none">• Field 62 bitmap format (or not present)
x'1A'	Visa ISO expanded variable length format.

I

2.8 Header Field 4—Total Message Length

2.8.1 Attributes

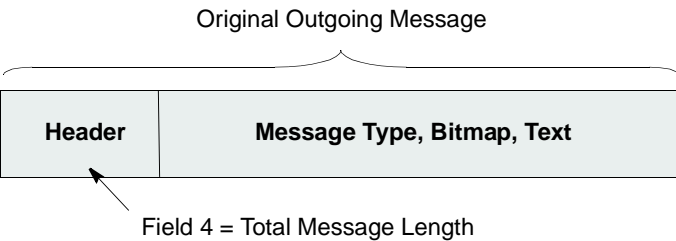
2B (binary)
2 bytes

2.8.2 Generated by

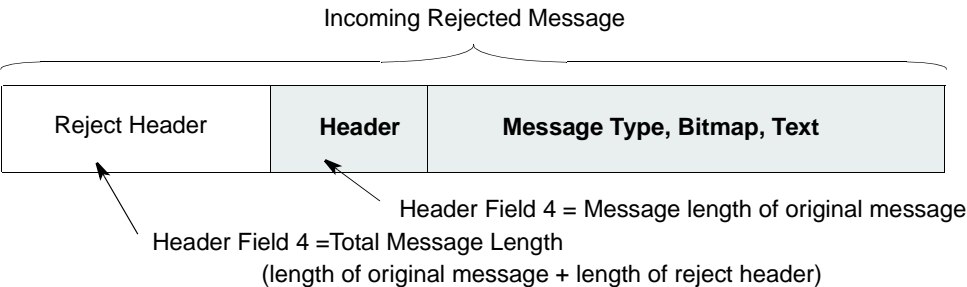
Header field 4 is generated by the processor, V.I.P., or a VisaNet connection.

2.8.3 Description

Header field 4 specifies the total number of bytes in this message and reflects the length of this message from the start of this header to the end of the message, as shown below.



If this is a reject message header (followed by the original standard message header and text), header field 4 of the reject message header reflects the length of the entire message. The value in header field 4 in the original message header reflects the original length.



2.8.4 Usage

There is no usage for header field 4.

2.8.5 Field Edits

In standard VisaNet (non-reject) messages, the value must be greater than 32 and not more than 800.

An incoming reject message can be longer and $n + 26$, where n is the original outgoing message length and **26** is the length of the reject header created by VisaNet.

2.8.6 Reject Codes

0016 = Invalid value

2.9 Header Field 5—Destination Station ID

2.9.1 Attributes

6 N, 4-bit BCD (unsigned packed)
3 bytes

2.9.2 Generated by

The header field 5 is generated by the processor, V.I.P., or a VisaNet connection.

2.9.3 Description

Header field 5 identifies the station to which the message is routed.

2.9.4 Usage

When a processor creates a request or advice, it zero-fills this field. The client's VisaNet connection, along with VisaNet, replaces the **zeros** with the station ID.

When a processor replies to a request or advice, the processor inserts the ID from Header Field 6—Source Station ID of the incoming message.

When a VisaNet connection returns a message to VisaNet as undeliverable, fields 5 and 6 must not be switched.

2.9.5 Field Edits

In outgoing user-created requests and advices, the value must be zeros.

In all responses and advice responses, the field must contain a station ID.

2.9.6 Reject Codes

0003 = Invalid value

0163 = VCMS reject: at least one station specified in a loopback router sign on request is not a VCMS-only station

0524 = Destination station in the header is not zero.

2.10 Header Field 6—Source Station ID

2.10.1 Attributes

6 N, 4-bit BCD (unsigned packed)
3 bytes

2.10.2 Generated by

Header field 6 is generated by the processor, V.I.P., or a VisaNet connection.

2.10.3 Description

Header field 6 identifies the station that introduced the message into the network. The station may or may not be the station that initially collected the transaction data.

2.10.4 Usage

Normally, when the station receiving an incoming request or advice creates a reply, the ID in Header Field 5—Destination Station ID is preserved as the source station ID in the reply.

If a different station is creating the reply, header field 6 contains the source station ID of the station creating the reply. In this instance, however, the ID from header field 5 of the request is not used.

2.10.5 Field Edits

Every outgoing message must contain a ID that reflects the station that is the last one polled by VisaNet. The source station must be signed on. If the source station ID does not identify a network endpoint, the message is logged and no further processing occurs.

2.10.6 Reject Codes

0004 = Invalid value; source station ID in header

0163 = VCMS reject: at least one station specified in a loopback router sign-on request is not a VCMS-only station

0164 = VCMS reject: source station in loopback router sign-on or sign-off not found in the BASE I system tables

2.11 Header Field 7—Round-Trip Control Information

2.11.1 Attributes

8 N, bit string
1 byte

2.11.2 Generated by

Header field 7 is generated by V.I.P. or a VisaNet connection only.

2.11.3 Description

Header field 7 is reserved for Visa use and is set by VisaNet. It contains additional information that must be returned in a reply.

2.11.4 Usage

The processor does not code this header field when it generates a request or advice. When a request or advice is received, the center *must preserve the value received in this field and return that value unchanged* in the response message. If the values in a response are zeros rather than the value received, the message is not rejected, but it cannot be routed back to the requestor.

In an incoming request or advice, this field identifies where the request originated.

2.11.5 Field Edits

In center-generated outgoing requests and advices, the value must be zeros.

2.11.6 Reject Codes

0022 = Invalid value in request

2.12 Header Field 8—BASE I Flags

2.12.1 Attributes

16 N, bit string
2 bytes

2.12.2 Generated by

Header field 8 is generated only by V.I.P. or a VisaNet connection.

2.12.3 Description

As defined and used by BASE I and V.I.P.

2.12.4 Usage

When a processor generates outgoing requests or advices, it sets this field to binary zeros.

The values received in this field of the request must be preserved and returned unchanged in the response.

2.12.5 Field Edits

Although this field is not edited, Visa will monitor transactions for endpoint compliance.

2.12.6 Reject Codes

There are no reject codes for header field 8.

2.13 Header Field 9—Message Status Flags

2.13.1 Attributes

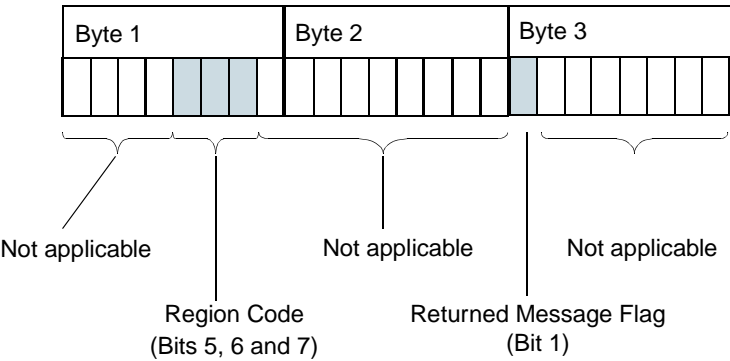
24-bit string
3 bytes

2.13.2 Generated by

Header field 9 is generated by the processor, V.I.P. or a VisaNet connection.

2.13.3 Description

Header field 9 is used to control processing of the message. The flags (currently defined) are shaded in the illustration below. All other bits are reserved for future use or are under VisaNet control.



Byte 1, Bits 5, 6 and 7, Corporate Region Code: V.I.P. sets these bits to the acquirer's region code in messages routed to or from a BASE I endpoint. The region code is used in computing International Service Assessments (ISAs).

Byte 3, Bit 1, Returned Message Flag: This flag is set to **1** by a VisaNet connection or V.I.P. to identify a message being returned because the destination is unavailable.

2.13.4 Usage

When a client's processing center generates a normal request or advice, this entire field should be filled with **zeros**.

When a client's processing center generates a normal response or advice response, this field must contain the values received in the corresponding request or advice.

When a front end processor must return a message because it cannot deliver it to the center host, it must set the Returned Message Flag to **1** and return every other bit unchanged.

2.13.5 Field Edits

Header field 9 is required in all processor-generated messages. The value must be all **zeros**.

If header field 9 of a response does not match the value in the request, Visa will reject the response with reject code **0025**. This edit applies to 01xx, 03xx, 04xx, and 08xx messages.

2.13.6 Reject Codes

0025 = Invalid value

0260 = Field missing

2.14 Header Field 10—Batch Number

2.14.1 Attributes

1B (binary)
1 byte

2.14.2 Generated by

Header field 10 is generated by V.I.P. only.

2.14.3 Description

This field contains the VisaNet-assigned batch number for this message. As each new request or advice is received at VisaNet, the current reconciliation batch number is inserted in this field.

2.14.4 Usage

When clients' processing centers generate outgoing requests or advices, they set this field to **zeros**. Client processing centers receive non-zero values in this field for all incoming messages.

The values received in this field of the request must be preserved and returned unchanged in the response.

2.14.5 Field Edits

Although this field is not edited, Visa will monitor transactions for endpoint compliance.

2.14.6 Reject Codes

There are no reject codes for header field 10.

2.15 Header Field 11—Reserved

2.15.1 Attributes

3B (binary)
3 bytes

2.15.2 Generated by

Header field 11 is generated only by V.I.P. or a VisaNet connection.

2.15.3 Description

Header field 11 is used internally by VisaNet. Byte 1, bits 2 through 8, are used for routing information. Bytes 2 and 3 are used by the VisaNet connection.

2.15.4 Usage

When processors generate outgoing requests or advices, they set this field to **zeros**.

The value received in this field of the request or advice must be preserved and returned unchanged in the response.

2.15.5 Field Edits

In processor-generated requests, this field must be zero-filled.

In a processor-generated response, this field must contain the values received in the corresponding request.

2.15.6 Reject Codes

0031 = Invalid value

2.16 Header Field 12—User Information

2.16.1 Attributes

1B (binary)
1 byte

2.16.2 Generated by

Header field 12 is generated by the client processor.

2.16.3 Description

Header field 12 is an acquirer-defined value that can be used, as needed, to facilitate client center processing. For instance, this value could identify the source of a request such as a CPU identifier or a dial-up line identifier.

This value is for internal use only by the processor. The value has no meaning in the network or for other processors.

2.16.4 Usage

In an outgoing request, this field contains the user-defined value at the processor's discretion. If user information is not required, this field must be zero-filled. For an outgoing response, a processor must preserve this field from the request and return it unchanged in the response.

2.16.5 Field Edits

There are no field edits for header field 12.

2.16.6 Reject Codes

There are no reject codes for header field 12.

2.17 Header Field 13—Bitmap

2.17.1 Attributes

16 N, bit string
2 bytes

2.17.2 Generated by

Header field 13 is generated only by V.I.P. or a VisaNet connection.

2.17.3 Description

Specifies if header field 14 is present, that is, if this is a reject message header that contains a reject code in header field 14.

Header field 13 is included only in VisaNet-generated reject message headers. When present, bit 1 is set to **1**, indicating that header field 14 follows.

2.17.4 Usage

Client processors must omit this field in all outgoing messages.

2.17.5 Field Edits

There are no field edits for header field 13.

2.17.6 Reject Codes

There are no reject codes for header field 13.

2.18 Header Field 14—Bitmap, Reject Data Group

2.18.1 Attributes

4 N, 4-bit BCD (unsigned packed)
2 bytes

2.18.2 Generated by

Header field 14 is generated only by V.I.P. or a VisaNet connection.

2.18.3 Description

When an error in a message prevents it from being sent to its usual destination, the message is returned to the originator, and this field is used to identify the reason for the return.

When a header includes this header field (header field 14), the text after the header consists of the original message header and message text in error. Header field 2 of the reject message header must indicate that another message header follows.

Reject reason codes are listed in the appendix titled “System Reject and Response Codes” and also in applicable field descriptions.

2.18.4 Usage

None.

2.18.5 Field Edits

There are no field edits for header field 14.

2.18.6 Reject Codes

There are no reject codes for header field 14.

Field Description Components and Message Field Summaries

This chapter summarizes the information components and topics for the header and data field descriptions. It also includes tables that list header and data fields in alphabetical order and ascending numerical sequence with attributes.

3.1 Header and Data Field Descriptions

Each field description contains several information components and topics within those components.

Table 3-1 Field Description Information Components

Component	Type of Information
Attributes	Field length and format.
Generated by	Entities that can set nonzero values for the field: a processor bitmap or Visa.
Description	Field content and code definitions when applicable.
Usage	Special field processing considerations.
Comments	Additional information.
Field Edits	Field content and presence rules; failure to comply results in message rejection.
Reject Code	Codes that appear in reject message headers when this field is in error.
Decline Response	STIP responses.
Valid Values	Allowable field values.
File Edits	Formats 1 and 2 file maintenance field content and presence rules.
File Error Codes	Content error codes for Formats 1 and 2 file maintenance messages.

Table 3-2 lists the different topic labels.

Table 3-2 Field Description Topic Labels

Topic	Definition
Auto-CDB	Specifies Auto-CDB-only processing requirements.
Check Acceptance	Specifies check acceptance-only processing requirements.
CPS	Specifies Custom Payment Service (CPS)-only processing requirements.
CVV	Specifies magnetic stripe-based Card Verification Value (CVV)-only processing requirements.
CVV2	Specifies Card Verification Value 2 (CVV2)-only processing requirements.

Table 3-2 Field Description Topic Labels (continued)

Topic	Definition
iCVV	Specifies chip-based Card Verification Value-only processing requirements (Alternate chip CVV)
E-Commerce	Specifies e-commerce transactions over an open or public network, for example, the Internet, that include the CAVV Verification processing requirements.
File Processing	Specifies file update-only processing requirements.
Authorization Gateway Transactions—	Specifies Authorization Gateway Service processing requirements for messages destined to other networks such as American Express, Discover, Diners Club, JCB and MasterCard. Transactions destined for non-Visa networks through the Authorization Gateway Service have field requirements in addition to those outlined in this manual. See the <i>Authorization Gateway Service Cross-Reference Guide</i> for field-level details pertaining to these non-Visa transactions.
Plus	Specifies Plus Switch-only ATM transactions processing requirements.
Verification Services	Specifies verification processing requirements. If no service (for example, Account Verification) is listed, the statement is assumed to apply to all BASE I verification services: Address, Account, and PIN.
Visa Card	Specifies Visa card-only transaction processing requirements. These rules do not apply to non-Visa cards processed according to Visa rules (for example, MasterCard).
Visa Cashback	Specifies Visa Cashback service-only transaction processing requirements.
VisaNet	Specifications for transactions on Visa and on other cards processed according to Visa card rules.
VSDC	Specifies Visa Smart Debit and Visa Smart Credit chip card processing requirements.

Table 3-3 lists message type field requirement labels.

Table 3-3 Message Type Field Requirement Labels

Advice Type	Requirement
STIP and Switch advices	Specifies field presence.
0120 file update advices	Specifies field presence and identifies file content.
0322 file update advices	Specifies field presence and identifies file content.

The following terms have special, precise meaning in the context of the field descriptions that appear in and [Chapter 4, Data Field Descriptions](#).

Key Word or Phrase	Meaning
Positions	When this word is used to describe the length of a subfield or some part of a field, it refers to digits, characters, or bits.
Verification Services	BASE I verification services such as Address, Account, PIN, CVV.
Domestic Transaction	A transaction in which the merchant, acquirer, and issuer are all within the same country or political boundary (for example, U.S. domestic)

3.2 Data Elements

This section contains VisaNet message data elements, including header and data fields.

- Primary data fields have whole-number field numbers.
- Subfields and field parts have decimal-point field numbers.
- Field usage variations have "Usage *n*" after the field number, where *n* is the usage number that appears in the field description.

Data elements are listed in the following tables:

- [Table 3-4](#) Message Header and Data Fields—Alphabetical Order, lists current VisaNet header and data elements in alphabetical order. Header fields are identified by "Header." This table includes subfield names for all fields except field 127.
- [Table 3-5](#), Field 127 Subfields—Alphabetical Order, lists the subfields of field 127 in alphabetical order. Field 127 is a Visa-defined private-use field for file maintenance messages.
- [Table 3-6](#), Field Attributes, lists the header and data field attributes used by Visa. It also includes fields defined by ISO 8583 but not yet used by Visa. Fields defined by ISO 8583 do not include subfields; attributes are defined at the field level.

IMPORTANT

Transactions destined for non-Visa networks through the Authorization Gateway Service have field requirements in addition to those outlined in this manual. See the Authorization Gateway Service Cross-Reference Guide for field-level details pertaining to these non-Visa transactions.

[Table 3-4](#) identifies the message header and data fields in alphabetical order.

Table 3-4 Message Header and Data Fields—Alphabetical Order

Field/Data Name	Field Number
3-D Secure CAVV	126.9, Usage 2
3-D Secure CAVV, Revised Format	126.9, Usage 3
Account Identification 1	102
Account Identification 2	103
Account Type	54.1
Account Type (From)	3
Account Type (To)	3
Acquiring Institution Country Code	19
Acquiring Institution Identification Code	32
Actual Amount, Settlement	95.2
Actual Amount, Settlement Fee	95.3
Actual Amount, Transaction	95.1
Actual Amount, Transaction Fee	95.4
Additional Amounts	54
Additional Data— Private	48
Additional POS Information	60
Additional Response Data	44
Additional Trace Data	115
Address Verification Result Code	44.2
Agent Unique Account Result	126.18

Table 3-4 Message Header and Data Fields—Alphabetical Order (continued)

Field/Data Name	Field Number
American Express Safekey	126.9, Usage 4
Amount (field 54 balance)	54.5
Amount, Cardholder Billing	6
Amount, Sign	54.4
Amount, Transaction	4
Amount, Transaction Fee	28
Amount Type	54.2
Application Interchange Profile	138
Application Transaction Counter	137
Authorization Characteristics Indicator	62.1
Authorization Identification Response	38
Authorization Response Cryptogram (ARPC) and Code	139
Auxiliary Transaction Data (TLV Format)	120
BASE I Flags	Header Field 8
Batch Number (not used)	Header Field 10
Billing/Reporting/Other Data For Visa Use	48, Usage 15
Bitmap for field 62	62.0
Bitmap, Reject Message Header	Header Field 13
Bitmap, Returned Message	Header Field 14
Card Acceptor City Name	43
Card Acceptor Country code	43
Card Acceptor Identification Code	42
Card Acceptor Name (ATM)	43
Card Acceptor Name/Location	43
Card Acceptor Province/State Code	59
Card Acceptor Terminal Identification	41
Card Acceptor (U.S.) County Code	59
Card Acceptor (U.S.) ZIP Code	59
Card Authentication Reliability Indicator	60.7
Card Authentication Results Code	44.8
Card Issuer Data Elements	116
Card Sequence Number	23
Cardholder Certificate Serial Number	126.6
Check Acceptance Error Reason	48, Usage 3
Check Settlement Code	44.12
Chip Authentication Reliability Indicator	60.7
Chip Card Data	55, Usage 2

Table 3-4 Message Header and Data Fields—Alphabetical Order (continued)

Field/Data Name	Field Number
Chip Condition Code	60.3
Commercial Card Type Request	48, Usage 27
Conversion Rate, Cardholder Billing	10
Cryptogram	136
Cryptogram Amount	147
Cryptogram Cashback Amount	149
Cryptogram Currency Code	148
Cryptogram Transaction Type	144
Currency Code	54.3
Currency Code, Cardholder Billing	51
Currency Code, Transaction	49
Custom Payment Service Fields	62
CAVV Results Code	44.13
CVV Error Codes for Emergency Card Replacement	48, Usage 1a
CVV/iCVV Results Code	44.5
CVV2 Authorization Request Data	126.10
CVV2 Result Code	44.10
Date, Action	73
Date, Expiration	14
Date, Local Transaction	13
Dispute Detail	48, Usage 39a and b
Destination Station ID	Header Field 5
Duration	62.5
Dynamic Currency Conversion Indicator	126.19
Error codes in 0310/0312 responses or 0322 advices	48, Usage 1b
Error Reason Text in Check Acceptance Responses	48, Usage 3
Fee Program Indicator	63.19
Field 63 Bitmap	63.0
Field 126 Bitmap	126.0
File Name	101
File Security Code	92
File Update Code	91
BASE I File Maintenance	127
Forwarding Institution Identification Code	33
Gateway Transaction Identifier	62.17
Header Flag and Format	Header Field 2

Table 3-4 Message Header and Data Fields—Alphabetical Order (continued)

Field/Data Name	Field Number
Header Length	Header Field 1
Integrated Circuit Card (ICC) Related Data	55
Intra-Country Data	118
Intra-Country Data—Japan	118, Usage 1
Intra-Country Data—Korea	118, Usage 2
Intra-Country Data—South Africa	118, Usage 4
Issuer Authentication Data	140
Issuer Discretionary Data	135
Issuer Script	142
Issuer Script Results	143
Issuing Institution Identification Code	121
Mail/Phone/Electronic Commerce and Payment Indicator	60.8
Market-Specific Data Identifier	62.4
MasterCard Corporate Fleet Card Data	48, Usage 26
MasterCard UCAF Collection Indicator	126.15
MasterCard UCAF Field	126.16
Merchant Certificate Serial Number (VSEC)	126.7
Merchant Group Indicator	60.5
Merchant Type	18
Merchant Verification Value (MVV)	62.20
Message Reason Code	63.3
Message Status Flags	Header Field 9
National Point-of-Service Geographic Data	59
National Use	117
National Use—Colombia National Data	117, Usage 4
National Use—Japan	117, Usage 1
National Use—Turkish National Data	117, Usage 2
Network Identification Code	63.1
Network Management Information Code	70
Online Risk Assessment Condition Codes	62.22
Online Risk Assessment Risk Score and Reason Codes	62.21
Original Acquirer ID and Original Forwarding Institution ID	90.4
Original Credit Transaction	48, Usage 37
Original Data Elements	90
Original Message Type	90.1
Original Response Code	44.11

Table 3-4 Message Header and Data Fields—Alphabetical Order (continued)

Field/Data Name	Field Number
Original Trace Number	90.2 or 125, Usage 1
Original Transmission Date and Time	90.3 or 125, Usage 1
Other Amount, Cardholder Billing	61.2
Other Amount, Replacement Billing	61.3
Other Amount, Transaction	61.1
Other Amounts	61
PACM Diversion-Level Code	44.6
PACM Diversion Reason Code	44.7
PAN and Date Entry Mode	22.1
PAN Extended, Country Code	20
Payment Account Reference Data	56
Partial Authorization Indicator	60.10
Personal Identification Number (PIN) Data	52
PIN Block Format Code	53.3
PIN Encryption Algorithm ID	53.2
PIN Entry Capability	22.2
POS Environment	126.13
Point-of-Service Condition Code	25
Point-of-Service Entry Mode Code	22
Point-of- Service PIN Capture Code	26
Prestigious Property Indicator	62.6
Primary Account Number (PAN)	2
Processing Code	3
Product ID	62.23
Program Identifier	62.24
Purchasing Card Data	48, Usage 36
Receiving Institution Country Code	68
Receiving Institution Identification Code	100
Replacement Amounts	95
Reserved for Visa	Header Field 11 Data Fields 53.5, 60.4, 63.9, and 63.10
Response Code	39
Response Reason Code	44.14
Response Source/Reason Code	44.1
Retrieval Reference Number	37
Round Trip Control Information	Header Field 7
Secondary PIN Block	152
Security Format Code	53.1

Table 3-4 Message Header and Data Fields—Alphabetical Order (continued)

Field/Data Name	Field Number
Security-Related Control Information	53
Service Indicators	126.12
Source Station ID	Header Field 6
Special Condition Indicator—Existing Debt	60.4
Spend Qualified Indicator	62.25
State Province Region Code Identifier	127C.1
State Province Region Code	127C.2
STIP/Switch Reason Code	63.4
Supporting Information	125
Supporting Information (TLV Format)	125, Usage 2
System Trace Audit Number	11
Terminal Capability Profile	130
Terminal Country Code	145
Terminal Entry Capability	60.2
Terminal Serial Number	133
Terminal Transaction Date	146
Terminal Type	60.1
Terminal Verification Results	131
Text Format	Header Field 3
Text in Authorizations/Reversals/ BASE I Responses	48, Usage 2
Time, Local Transaction	12
Time (Preauth Time Limit)	63.2
Token File Maintenance	127.TK
Total Message Length	Header Field 4
Track 1 Data	45
Track 2 Data	35
Transaction Description	104
Transaction ID (XID)	126.8
Transaction Identifier	62.2
Transaction Indicator	60.6
Transaction Type	3
Transmission Date and Time	7
CAVV Data	126.9
Unformatted Text (for authorizations, reversals, network)	48, Usages 2
Unformatted Text (for responses from BASE I or error reasons in check acceptance responses)	48, SMS, Usages 2, 3
Unpredictable Number	132

Table 3-4 Message Header and Data Fields—Alphabetical Order (continued)

Field/Data Name	Field Number
User Information	Header Field 12
Validation Code	62.3
Verification Data	123
V.I.P. Private-Use Field	63
Visa Discretionary Data, Usage 1	134, Usage 1
Visa Discretionary Data, Usage 2	134, Usage 2
Visa Private-Use Bitmap	126.0
Visa Private-Use Fields	126
VSDC Chip Data	55, Usage 1
Zone Key Index	53.4

3.3 Field 127 Subfields

Table 3-5 lists the field 127 subfields in alphabetical order.

Table 3-5 Field 127 Subfields—Alphabetical Order

Field Name	Field Number
Account Linking File Maintenance	127.L3
Action Code	127E.1
Address Verification Value	127A.2
Algorithm Identifier	Fields 52 and 53 (PIN verification data)
ALP Product File Maintenance	127.L1
ATM Cash Activity Limit (issuer “available”)	127R.22
ATM Cash Activity Limit (issuer “unavailable”)	127R.23
Auto Rental Activity Limit (issuer “available”)	127R.10
Auto Rental Activity Limit (issuer “unavailable”)	127R.11
File Update Code	n/a
Filler	127R.2
Filler	127R.3
Filler	127R.4
Filler	127R.5
Lodging Activity Limit (issuer “available”)	127R.8
Lodging Activity Limit (issuer “unavailable”)	127R.9
Mail/Telephone Activity Limit (issuer “available”)	127R.14
Mail/Telephone Activity Limit (issuer “unavailable”)	127R.15
Merchant Data 1	127M.2
Merchant Data 2	127M.3, 127M.4, 127M.5
Merchant Record Type	127M.1
PIN Verification Data	PIN Verification Data

Table 3-5 Field 127 Subfields—Alphabetical Order (continued)

Field Name	Field Number
Postal Code (Address Verification)	127A.1
Portfolio File	127.PF
Region Coding	127E.2
Restaurant Activity Limit (issuer “available”)	127R.12
Restaurant Activity Limit (issuer “unavailable”)	127R.13
Risk Level	127R.1
Risky Purchase Activity Limit (issuer “available”)	127R.16
Risky Purchase Activity Limit (issuer “unavailable”)	127R.17
State Province Region Code Identifier	127C.1
State Province Region Code	127C.2
Token Maintenance File	127.TK
Total Cash Activity Limit (issuer “available”)	127R.20
Total Cash Activity Limit (issuer “unavailable”)	127R.21
Total Purchase Activity Limit (issuer “available”)	127R.18
Total Purchase Activity Limit (issuer “unavailable”)	127R.19
Travel Activity Limit (issuer “available”)	127R.6
Travel Activity Limit (issuer “unavailable”)	127R.7

3.4 Field Attributes

Table 3-6 lists header and data field attributes for BASE I messages. ISO fields that are listed as “not used” do not appear in BASE I messages. SMS fields are not included.

Issuer and acquirer centers processing BASE I messages are required to test for all ISO fields, not just those currently in use.

For the tables in this section, the three columns under the Type, Length, and Attributes headings provide the following information:

Field type	<p>F indicates a fixed-length field.</p> <p>V1 indicates a variable-length BCD field where the length subfield specifies the number of real digits that follow. The lead zero, required when the first half byte of a 4-bit BCD field is not used, is not included in the length count.</p> <p>V2 indicates a variable-length EBCDIC, AN, or ANS field where the length subfield specifies the number of bytes that follow.</p>
Field length	The number of bytes for this field. The maximum number of bytes allowed for V1 and V2 fields, including the length subfield. For F fields, this number is the fixed length of the field.
Attributes	<p>For V1 and V2 fields, the first byte is a binary value specifying the length of data. This length subfield is shown in the table as 1 B. The remainder of the specification gives the format of the data and the maximum number of positions (digits, characters, bits, and so on) allowed.</p> <p>For F fields, this is the format and number of positions required. For all fields, the format can be:</p> <p>AN (alphanumeric, no special characters; EBCDIC)</p> <p>ANS (alphanumeric and special characters; EBCDIC)¹</p> <p>B (binary value)</p> <p>BCD (numeric, four-bit BCD = unsigned packed)</p> <p>Bit String</p> <p>N (numeric, one byte per character)</p>

1. Or BCDIC-K which is used in Japan and is the EBCDIC 7 bit code definition for Japanese Katakana characters.

NOTE

Special characters include characters such as commas (,), slashes (/), and dashes (-).

Table 3-6 Field Attributes

Field Number	Field Name	Type	Length	Attributes
n/a	Message Type Identifier	F	2	4 BCD
n/a	Bitmap, Primary	F	8	64-bit string
n/a	Bitmap, Secondary	F	8	64-bit string
n/a	Bitmap, Third	F	8	64-bit string
H1	Header Length	F	1	binary
H2	Header Flag and Format	F	1	8-bit string
H3	Text Format	F	1	binary
H4	Total Message Length	F	2	binary
H5	Destination Station ID	F	3	6 BCD
H6	Source Station ID	F	3	6 BCD
H7	Round Trip Control Information	F	1	binary
H8	BASE I Flags	F	2	16-bit string
H9	Message Status Flags	F	3	24-bit string
H10	Batch Number (not used)	F	1	binary
H11	Reserved	F	3	binary
H12	User Information	F	1	binary

Table 3-6 Field Attributes (continued)

Field Number	Field Name	Type	Length	Attributes
H13	Bitmap	F	2	16-bit string
H14	Bitmap	F	2	4 BCD
2	Primary Account Number (PAN)	V	≤11	1 B + 19 BCD ¹
3	Processing Code	F	3	6 BCD
4	Amount, Transaction	F	6	12 BCD
6	Amount, Cardholder Billing	F	6	12 BCD
7	Transmission Date and Time	F	5	10 BCD
8	Amount, Cardholder Billing Fee (not used)	F	4	8 BCD
10	Conversion Rate, Cardholder Billing	F	4	8 BCD
11	System Trace Audit Number	F	3	6 BCD
12	Time, Local Transaction	F	3	4 BCD
13	Date, Local Transaction	F	2	4 BCD
14	Date, Expiration	F	2	4 BCD
17	Date, Capture	F	2	4 BCD
18	Merchant Type	F	2	4 BCD
19	Acquiring Institution Country Code	F	2	3 BCD ¹
20	PAN Extended, Country Code	F	2	3 BCD ¹
22	Point-of-Service Entry Mode Code	F	2	4 BCD
23	Card Sequence Number	F	2	3 BCD
24	Network International Identifier (not used)	F	2	3 BCD ¹
25	Point-of-Service Condition Code	F	1	2 BCD
26	Point-of-Service PIN Capture Code	F	1	2 BCD
27	Authorization Identification Response Length (not used)	F	1	1 BCD ¹
28	Amount, Transaction Fee	F	9	1 AN + 8 N
29	Amount, Settlement Fee (not used)	F	9	9 AN
30	Amount, Transaction Processing Fee (not used)	F	9	9 AN
31	Amount, Settlement Processing Fee (not used)	F	9	9 AN
32	Acquiring Institution Identification Code	V	≤ 7	1 B + 11 BCD ¹
33	Forwarding Institution Identification Code	V	≤ 7	1 B + 11 BCD ¹
35	Track 2 Data	V	≤ 20	1 B + 37 BCD ¹ and hexadecimal D
36	Track 3 Data (not used)	V	≤ 53	1 B + 104 BCD
37	Retrieval Reference Number	F	12	12 AN ²
38	Authorization Identification Response	F	6	6 AN
39	Response Code	F	2	2 AN
41	Card Acceptor Terminal Identification	F	8	8 ANS
42	Card Acceptor Identification Code	F	15	15 ANS

Table 3-6 Field Attributes (continued)

Field Number	Field Name	Type	Length	Attributes
43	Card Acceptor Name/Location	F	40	40 ANS
44	Additional Response Data	V	≤26	1 B + 25 ANS ³
44.1	Response Source/Reason Code	F	1	1 AN
44.2	Address Verification Result Code	F	1	1 AN
44.5	CVV/iCVV Results Code	F	1	1 AN
44.6	PACM Diversion-Level Code	F	2	2 AN
44.7	PACM Diversion Reason Code	F	1	1 N
44.8	Card Authentication Results Code	F	1	1 AN
44.10	CVV2 Result Code	F	1	1 AN
44.11	Original Response Code	F	2	2 ANS
44.12	Check Settlement Code	F	1	1 ANS
44.13	CAVV Results Code	F	1	1 AN
44.13	Response Reason Code	F	4	4 AN
45	Track 1 Data	V	≤ 77	1 B + 76 ANS
46	Additional Data—ISO (not used)	V	≤ 256	1 B + 255 ANS
47	Additional Data—National (not used)	V	≤256	1 B + 255 ANS
48	Additional Data—Private	V	≤ 256	1 B + 255 ANS ⁴
49	Currency Code, Transaction	F	2	3 BCD ¹
51	Currency Code, Cardholder Billing	F	2	3 BCD ¹
52	Personal Identification Number (PIN) Data	F	8	64-bit string
53	Security-Related Control Information	F	8	16 BCD
54	Additional Amounts	V	≤ 121	1 B + 120 ANS
55	Integrated Circuit Card (ICC) Related Data	V	≤ 256	1 B + 255 ANS
56	Payment Account Reference Data	V	≤ 256	1 B + 255 ANS
57	Reserved—National (not used)	V	≤ 256	1 B + 255 ANS
58	Reserved—National (not used)	V	≤ 256	1 B + 255 ANS
59	National POS Geographic Data	V	≤ 15	1 B + 14 ANS
60	Additional POS Information	V	≤ 7	1 B + 12N, 4 bit BCD
60.1	Terminal Type	F	1/2	1 N, 4 bit BCD
60.2	Terminal Entry Capability	F	1/2	1 N, 4 bit BCD
60.3	Chip Condition Code	F	1/2	1 N, 4 bit BCD
60.4	Special Condition Indicator—Existing Debt	F	1	1 N, 4 bit BCD
60.5	Merchant Group Indicator	F	1	2 N, 4 bit BCD
60.6	Transaction Indicator (position 1)	F	1/2	1 N, 4 bit BCD
60.7	Card Authentication Reliability Indicator (position 2)	F	1/2	1 N, 4 bit BCD
60.8	Mail/Phone/Electronic Commerce and Payment Indicator	F	1	2 N, 4 bit BCD

Table 3-6 Field Attributes (continued)

Field Number	Field Name	Type	Length	Attributes
60.10	Partial Authorization Indicator	F	1/2	1 N, 4 bit BCD
61	Other Amounts	V	≤ 19	1 B + 12, 24, 36 BCD
61.1	Other Amount, Transaction	F	6	12 BCD
61.2	Other Amount, Cardholder Billing	F	6	12 BCD
61.3	Other Amount, Replacement Billing	F	6	12 BCD
62	Custom Payment Service Fields	V	≤ 256	1 B + 255 bytes
62.0	Field 62 Bitmap	F	8	64-bit string
62.1	Authorization Characteristics Indicator	F	1	1 AN
62.2	Transaction Identifier	F	8	15 BCD ¹
62.3	Validation Code	F	4	4 AN
62.4	Market-Specific Data Identifier	F	1	1 AN
62.5	Duration	F	1	2 BCD
62.6	Prestigious Property Indicator	F	1	1 AN
62.17	Gateway Transaction Identifier	F	15	15 EBCDIC
62.20	Merchant Verification Value (MVV)	F	5	10 N, 4-bit BCD
62.21	Online Risk Assessment Risk Score and Reason Codes	F	4	4 AN, EBCDIC
62.22	Online Risk Assessment Condition Codes	F	6	6 AN, EBCDIC
62.23	Product ID	F	2	2 AN, EBCDIC
62.24	Program Identifier	F	6	6 AN, EBCDIC
62.25	Spend Qualified Indicator	F	1	1 AN, EBCDIC
63	V.I.P. Private-Use Field	V	≤ 256	1 B + 255 bytes
63.0	Bitmap (Field 63)	F	3	24-bit string
63.1	Network Identification Code	F	2	4 BCD
63.2	Time (Preauth Time Limit)	F	2	4 BCD
63.3	Message Reason Code	F	2	4BCD
63.4	STIP/Switch Reason Code	F	2	4BCD
63.19	Fee Program Indicator	F	3	3AN
67	Extended Payment Code (not used)	F	1	2 BCD
68	Receiving Institution Country Code	F	2	3 BCD ¹
70	Network Management Information Code	F	2	3 BCD ¹
71	Message Number (not used)	F	2	4 BCD
72	Message Number Last (not used)	F	2	4 BCD
73	Date, Action	F	3	6 BCD
78	Transfer, Number (not used)	F	5	10 BCD
79	Transfer, Reversal Number (not used)	F	5	10 BCD
80	Inquiries, Number (not used)	F	5	10 BCD
81	Authorizations, Number (not used)	F	5	10 BCD

Table 3-6 Field Attributes (continued)

Field Number	Field Name	Type	Length	Attributes
82	Credits, Processing Fee Amount (not used)	F	6	12 BCD
83	Credits, Transaction Fee Amount (not used)	F	6	12 BCD
84	Debits, Processing Fee Amount (not used)	F	6	12 BCD
85	Debits, Transaction Fee Amount (not used)	F	6	12 BCD
90	Original Data Elements	F	21	42 BCD
91	File Update Code	F	1	1 N
92	File Security Code	F	2	2 AN
94	Service Indicator (not used)	F	7	7 AN
95	Replacement Amounts	F	42	42 AN
98	Payee (not used)	F	25	25 AN
100	Receiving Institution Identification Code	V	≤ 7	1 B + 11 BCD ¹
101	File Name	V	≤ 18	1 B + 17 ANS
102	Account Identification 1	V	≤ 29	1 B + 28 ANS
103	Account Identification 2	V	≤ 29	1 B + 28 ANS
104	Transaction Description ⁵	V	≤ 256	1 B + 255 ANS
105	Reserved ISO (not used)	V	≤ 256	1 B + 255 ANS
106	Reserved ISO (not used)	V	≤ 256	1 B + 255 ANS
107	Reserved ISO (not used)	V	≤ 256	1 B + 255 ANS
108	Reserved ISO (not used)	V	≤ 256	1 B + 255 ANS
109	Reserved ISO (not used)	V	≤ 256	1 B + 255 ANS
110	Reserved ISO (not used)	V	≤ 256	1 B + 255 ANS
111	Reserved ISO (not used)	V	≤ 256	1 B + 255 ANS
112	Reserved National (not used)	V	≤ 256	1 B + 255 ANS
113	Reserved National (not used)	V	≤ 256	1 B + 255 ANS
114	Reserved National (not used)	V	≤ 256	1 B + 255 ANS
115	Additional Trace Data	V	≤ 25	1 B + 24 ANS
116	Card Issuer Reference Data	V	≤ 256	1 B + 255 ANS
117	National Use	V	≤ 256	1 B + 3 ANS + 252 ANS
118	Intra-Country Data	V	≤ 256	1 B + 3 ANS + 252 ANS
120	Auxiliary Transaction Data (TLV Format)	V	≤ 256	1 byte, binary + 255 ANS, EBCDIC
121	Issuing Institution Identification Code	V	≤ 12	1 B + 3 to 11 AN
123	Verification Data	V	≤ 30	1 B + 29 ANS
125	Supporting Information	V	≤ 256	1 byte, binary + 255 ANS, EBCDIC
126	Visa Private-Use Fields	V	≤ 256	1 B + 255 ANS
126.0	Visa Private-Use Bitmap	V	8	64-bit string
126.1	Reserved	V	25	unassigned

Table 3-6 Field Attributes (continued)

Field Number	Field Name	Type	Length	Attributes
126.2	Reserved	V	57	unassigned
126.3	Reserved	V	57	unassigned
126.4	Reserved	V	18	unassigned
126.5	Visa Merchant Identifier	F	8	8 AN, EBCDIC, 8 bytes
126.6	Cardholder Certificate Serial Number	F	17	1 byte binary + 16 bytes
126.7	Merchant Certificate Serial Number	F	17	1 byte binary + 16 bytes
126.8	Transaction ID (XID)	F	20	20 bytes binary
126.9	CAVV Data	F	20	20 bytes binary or 19 bytes binary for usage 3
126.10	CVV2 Authorization Request Data	F	6	6 AN
126.12	Service Indicators	F	3	24-bit string
126.13	POS Environment	F	1	1 AN
126.14	Reserved	F	1	1 ANS
126.15	MasterCard UCAF Collection Indicator	F	1	1 ANS, EBCDIC
126.16	MasterCard UCAF Field	V	33	1 byte binary + 32 bytes ANS EBCDIC
126.18	Agent Unique Account Result	F	12	1 B + 11 bytes
126.19	Dynamic Currency Conversion Indicator	F	1	1 ANS, EBCDIC
127	File Maintenance	V	≤ 256	1 B + 255 ANS
130	Terminal Capability Profile	F	3	24-bit string
131	Terminal Verification Results (TVR)	F	5	40-bit string
132	Unpredictable Number	F	4	8 hexadecimal digits
133	Terminal Serial Number	F	8	8 ANS
134	Visa Discretionary Data	V	≤ 256	1 byte binary + 255 bytes; variable by usage and subfield
134	Visa Discretionary Data, Format 1	V	≤ 16	1 byte binary + 15 bytes
134	Visa Discretionary Data, Format 2	V	≤ 33	1 byte binary + 32 bytes
135	Issuer Discretionary Data	V	≤ 16	1 byte binary + 30 hexadecimal digits
136	Cryptogram	F	8	16 hexadecimal digits
137	Application Transaction Counter	F	2	4 hexadecimal digits
138	Application Interchange Profile	F	2	16-bit string
139	ARPC Response Cryptogram & Code	F	10	16 hexadecimal digits + 2 bytes, AN EBCDIC
139	Format 1—VIS Usage, ARPC Response Cryptogram & Code	F	10	16 hexadecimal digits + 2 bytes, AN EBCDIC
139	Format 2—CCD Usage, Issuer Authentication Data	F	10	16 hexadecimal digits + 2 bytes, AN EBCDIC
140	Issuer Authentication Data	V	≤ 256	1 byte binary + 255 bytes variable by usage

Table 3-6 Field Attributes (continued)

Field Number	Field Name	Type	Length	Attributes
140	Format 1, VIS Usage: Issuer Authentication Data	V	≤ 11	1 byte binary + 16 hexadecimal digits and 2 bytes binary, ASCII equivalent; maximum 11 bytes
140	Format 2, CCD Usage: Issuer Authentication Data	V	≤ 17	1 byte binary + 16 hexadecimal bytes; minimum 9 bytes; maximum 17 bytes
140	Generic EMV Transport Usage: Issuer Authentication Data	V	9–17	1 byte binary + 16 hexadecimal digits to 32 hexadecimal digits
142	Issuer Script	V	≤ 256	1 byte + 510 hexadecimal digits
143	Issuer Script Results	V	≤ 21	1 byte + 40 hexadecimal digits
144	Cryptogram Transaction Type	F	1	2 N, 4-bit BCD (unsigned, unpacked)
145	Terminal Country Code	F	2	3 N, 4-bit BCD
146	Terminal Transaction Date	F	3	6 N, 4-bit BCD
147	Cryptogram Amount	F	6	12 N, 4-bit BCD (unsigned, unpacked)
148	Cryptogram Currency Code	F	2	3 N, 4-bit BCD
149	Cryptogram Cashback Amount	F	6	12 N, 4-bit BCD
152	Secondary PIN Block	F	8	64 N, bit string
File Maintenance Fields				
127	File Maintenance	V2	≤ 256	1 B + 255 bytes
127A.1	Address Verification Postal Code	F	9	9 ANS
127A.2	Address Verification Value	F	5	5 ANS
127C.1	State Province Region Code Identifier	F	1	1 ANS EBCDIC
127C.2	State Province Region Code	F	2	2 N EBCDIC
127E.1	Action Code	F	2	2 AN
127E.2	Region Coding	F	9	9 ANS
127M.1	Merchant Record Type	F	1	1 AN
127M.2	Merchant Data 1	F	4, 15	4 ANS or 15 ANS
127M.3	Merchant Data 2	F	1, 9	1 AN or 9 ANS
127M.4	Merchant Data 2	F	16	16 ANS
127M.5	Merchant Data 2	F	10	10 ANS
127P.1	PIN Verification Data	F	7	7 ANS
127R.1	Risk Level	F	1	1 ANS
127R.2	Filler	F	5	5 ANS
127R.3	Filler	F	5	5 ANS
127R.4	Filler	F	5	5 ANS
127R.5	Filler	F	5	5 ANS
127R.6	Travel Activity Limit (issuer “available”)	F	5	5 ANS

Table 3-6 Field Attributes (continued)

Field Number	Field Name	Type	Length	Attributes
127R.7	Travel Activity Limit (issuer "unavailable")	F	5	5 ANS
127R.8	Lodging Activity Limit (issuer "available")	F	5	5 ANS
127R.9	Lodging Activity Limit (issuer "unavailable")	F	5	5 ANS
127R.10	Auto Rental Activity Limit (issuer "available")	F	5	5 ANS
127R.11	Auto Rental Activity Limit (issuer "unavailable")	F	5	5 ANS
127R.12	Restaurant Activity Limit (issuer "available")	F	5	5 ANS
127R.13	Restaurant Activity Limit (issuer "unavailable")	F	5	5 ANS
127R.14	Mail/Phone Activity Limit (issuer "available")	F	5	5 ANS
127R.15	Mail/Phone Activity Limit (issuer "unavailable")	F	5	5 ANS
127R.16	Risky Purchase Activity Limit (issuer "available")	F	5	5 ANS
127R.17	Risky Purchase Activity Limit (issuer "unavailable")	F	5	5 ANS
127R.18	Total Purchase Activity Limit (issuer "available")	F	5	5 ANS
127R.19	Total Purchase Activity Limit (issuer "unavailable")	F	5	5 ANS
127R.20	Total Cash Activity Limit (issuer "available")	F	5	5 ANS
127R.21	Total Cash Activity Limit (issuer "unavailable")	F	5	5 ANS
127R.22	ATM Cash Activity Limit (issuer "available")	F	5	5 ANS
127R.23	ATM Cash Activity Limit (issuer "unavailable")	F	5	5 ANS
127.L1	ALP Product File Maintenance	V	≤ 256	1 B + 255 ANS
127.L3	Account Linking File Maintenance	V	≤ 256	1 B + 255 ANS
127.PF	Portfolio File	V	≤ 256	1 B + 255 ANS, EBCDIC
127.TK	Token File Maintenance	V	≤ 256	1 B + 255 ANS, EBCDIC

1. Plus a leading **zero** to fill the unused first half-byte.
2. Contents limited to numerics.
3. Currently, only ten positions are defined.
4. Format varies with message type and card program.
5. For BASE I usage, this field can be transmitted between a VisaNet connection and a VIC only. See field description for details.

Data Field Descriptions

4

This chapter contains the data field descriptions for V.I.P. online messages.

4.1 Acronyms Used in Data Field Descriptions

The field descriptions in this chapter use the acronyms shown in [Table 4-1](#).

Table 4-1 Acronyms Used in Data Field Descriptions

Acronym	Definition
3-D Secure™	Three-Domain Secure™ (merchant, acquirer, issuer)
AAC	Application Authentication Cryptogram
ACI	Authorization Characteristics Indicator
ACS	Access Control Server
AFD	Automated Fuel Dispenser
AFT	Account Funding Transaction
AID	Application Identifier
ALM	Account-Level Management
ALP	Account-Level Processing
AML	Anti-Money-Laundering
ARPC	Authorization Response Cryptogram
ARQC	Authorization Request Cryptogram
ATM	Automated Teller Machine
ATR	Assured Transaction Response
Auto-CDB	Automated Cardholder Database Service
AVS	Address Verification Service
AWK	Acquirer Working Key
B2B	Business-to-Business
BCD	Binary-Coded Decimal Notation
BCR	BIN Control Record
BER	Basic Encoding Rules (as in TLV format)
CAM	(Online) Card Authentication Method
CAMS	Compromised Account Management System
CAVV	Cardholder Authentication Verification Value

Table 4-1 Acronyms Used in Data Field Descriptions (continued)

Acronym	Definition
CCDR	Commercial Card Data Repository
CDB	Cardholder Database
CER	Compromised Event Reference (appears as CER ID)
CORE	Customer Online Repository
CPS	Custom Payment Service
CRB	Card Recovery Bulletin
CRM	Copy Request Manager
CRS	Chargeback Reduction Service
CSU	Card Status Update
CVM	Card Verification Method
CVN	Cryptogram Version Number
CVR	Card Verification Results
CVV	Card Verification Value
DCAF	Deferred Clearing Advice File
DCC	Dynamic Currency Conversion
dCVV	Dynamic Card Verification Value
DDA	Dynamic Data Authentication
DEX	Direct Exchange
DF	Dedicated File name
EDC	Electronic Data Capture
EIRF	Electronic Interchange Reimbursement Fee
EPS	Express Payment Service
FPI	Fee Program Indicator
FSA	Flexible Spending Account
GCAS	Global Customer Assistance Service
HRA	Healthcare Reimbursement Arrangement
IAD	Issuer Application Data
IAVS	International Address Verification Service
ICP	Intra Company Purchase
ICS	Interchange Control System
ICS (Fraud)	Issuers' Clearinghouse Service
iCVV	Integrated Circuit Card (iCC) CVV
IIAS	Inventory Information Approval System—Internal Revenue Service (IRS) terminology
ISA	International Service Assessment
ITT	Intertask Table
IWK	Issuer Working Key
MAC	Message Authentication Code

Table 4-1 Acronyms Used in Data Field Descriptions (continued)

Acronym	Definition
MCC	Merchant Category Code
MCFS	Merchant Central File Service
MCG	Merchant Category Group
MOTO	Mail Order or Telephone Order
MS	Merchant Servicer
MSDI	Market-Specific Data Identifier
MVI	Merchant Volume Indicator (Field 63.18)
MVV	Merchant Verification Value
NCRF	National Card Recovery File
NFC	Near Field Communication
NID	Network ID (Field 63.1—Network Identification Code)
NRI	Not Received as Issued
NNSS	National Net Settlement Service
OIF	Optional Issuer Fee
OCT	Original Credit Transaction
OTC	Over-the-Counter
PACM	Positive Authorization Capacity Management
PAD	Proprietary Authentication Data
PAN	Primary Account Number
PCAS	Positive Cardholder Authorization Service
PCR	Processing Center Record
PIN	Personal Identification Number
PPCS	Preauthorized Payment Cancellation Service
PSP	Payment Service Provider
PVKI	PIN Verification Key Index
PVS	PIN Verification Service
PVV	PIN Verification Value
RFC	Request for Copy
RPIN	Rewards Program Identification Number
RTD	Real Time Decisioning
SDA	Static Data Authentication
SIGIS	Special Interest Group for IAS Standards
SIP	Supermarket Incentive Program
SMF	Select Merchant Fee (Program)
SMS	Single Message Service
SRP	Stop Recurring Payment
STIP	Stand-In Processing
TADC	Transaction Amount in Destination Currency

Table 4-1 Acronyms Used in Data Field Descriptions (continued)

Acronym	Definition
T&E	Travel & Entertainment
TC	For VSDC, TC = Transaction Certificate For BASE II, TC = Transaction Code
TID	Transaction Indicator
TLV	Tag-Length-Value (Format) (see BER)
TPS	Third-Party Servicer
TVR	Terminal Verification Results
UCAF	Universal Cardholder Authentication Field (MasterCard)
UCAT	Unattended Cardholder-Activated Transaction
URL	Uniform Resource Locator
VAS	VisaNet Authentication Service
VAT	Value-Added Tax
VCRFS	VisaNet Copy Request and Fulfillment Service
VDAS	VisaNet Documentation Automation Service
VIC	VisaNet Interchange Center
ViC	Visa iCVV Convert
V.I.P.	Visanet Integrated Payment (System)
VIP	Very Important Person
Visa MG	Visa Message Gateway
VMT	Visa Money Transfer
VSDC	Visa Smart Debit and Visa Smart Credit
VSEC	Visa Secure Electronic Commerce
VSIL	Visa Information Security Line
VSS	VisaNet Settlement Service
VTM	Visa TravelMoney (card)
VTs	Visa Test System
WLM	Watch List Management
XID	Electronic Commerce Transaction Identifier

4.2 Definition of the Term “Mandatory”

The term “mandatory” refers to a client requirement and means that a field must be present in a message and must contain certain values. “Conditional” refers to a client requirement that applies under specified conditions. While the V.I.P. System enforces edits and rejects transactions for some violations of mandatory requirements, the V.I.P. System does not enforce edits for all mandatory or conditional fields and values.

Visa strongly urges clients and their processors to comply with mandatory field requirements. Failure to do so can result in greater risk to the client or increased processing cost, and may result in exposure to chargebacks and compliance claims, elevated decline rates, and disqualification for preferential interchange rates. Visa also

advises clients not to rely on the V.I.P. System to reject all transactions that do not comply with mandatory or conditional requirements.

4.3 Field 2—Primary Account Number

4.3.1 Attributes

variable length

1 byte, binary +

19 N, 4-bit BCD (unsigned packed); maximum 11 bytes

NOTE

This is the only data field measured in nibbles, not bytes.

4.3.2 Description

Field 2 contains the number identifying the cardholder account or relationship. The value is a cardholder primary account number of **19** numeric digits encoded on Track 1 and Track 2 of the magnetic stripe. The length specifies the number of digits in the account number, which is right-justified. If the account number has an odd number of digits, a leading zero is required to pad the first unused half-byte of data. Because this zero is a filler and not part of the account number, it is not counted in the length subfield.

Non-Standard Account Numbers

Clients wanting to use account numbers with greater than **19** numeric digits or digits that are non-ISO standard must first consult with Visa to determine the fields to use for account number and issuer identification. The fields are:

- For account numbers with non-numeric characters, see field 102 or 103.
- For account numbers that cannot be used to determine the issuer, see field 100 or 121.

The account number may be a cardholder identification number related to one or more of the cardholder's accounts. If this field is not the account to be used for transaction posting, the issuer can optionally send the correct account number in field 102 or 103 of the response.

4.3.3 Usage

Field 2 is required in the non-CPS message types listed below unless arrangements have been made with Visa to use other account number fields:

- 0100 authorization requests/balance inquiries and their 0110 responses
- 0120 advices
- 0100 ATM balance inquiries
- 0302 file maintenance inquiries, and 0312 file maintenance responses
- 0400 reversals and their 0410 responses
- 0420 reversal advice and 0430 responses

Balance Inquiries: Account numbers should be included in this field. Otherwise, the request will be unsuccessful because V.I.P. will be unable to determine the authorizing BCR. This can result in a decline (field 39 = **15**, no such issuer) or if SMS is accessed in the identification attempt, message reject code **0062**.

CPS: Field 2 is required in all CPS requests; otherwise, the request is downgraded. See the CPS ATM and CPS/POS chapters in *V.I.P. System Services* and the latest edition of the *U.S. Interchange Reimbursement Fee Rate Qualification Guide*.

PIN Management Messages: This field is required in PIN change or unblock requests.

Check Acceptance: Field 102 instead of field 2 must be used for the cardholder ID.

0120 and 0322 File Update Advices: Field 2 is present.

STIP and Switch Advices: Field 2 is present in 0120 or 0420 advices and their responses if it was in the request.

Visa Token Service: Acquirers must send the token PAN in requests. V.I.P. changes the token PAN to the cardholder PAN before forwarding messages to the issuer.

Visa ReadyLink Load Transactions: This field must contain the account number of the Visa Prepaid card to which funds are being loaded.

NOTE

In U.S.-only electronic load transactions, this field must contain the account number for the transit system's fare product.

MasterCards POS Transactions: This field contains the device account number (token) in transactions that cardholders initiate using a smart device. MasterCard's Digital Enablement Service maps this account number to a cardholder's funding account number.

4.3.4 Field Edits

The account number in the original request is required in all subsequent messages for that cardholder transaction. If this field is present in a request or advice, it must be returned unchanged in the response.

The length subfield value must be numeric and cannot exceed 19 digits.

NOTE

*The number must be within a card number range supported by V.I.P.; otherwise, V.I.P. denies the request with a response code of **15**.*

In messages related to a cardholder transaction, or 0302 requests, if field 2 is present, V.I.P. ignores fields 102, and 103. The account number must be in this field if it is not in field 102, or 103.

Visa: Only during STIP does V.I.P. check for correct length based on issuer-supplied parameters.

STIP Edits

V.I.P. performs an optional modulus-10 account number check (and verifies the check digit) only when the transaction is processed in STIP and only if the issuer has chosen this option. If the account number fails the modulus-10 verification, V.I.P. will respond with response code **14** (invalid account number) in STIP.

The card length must not exceed maximum allowed length. If STIP finds that the message's account number length does not match the issuer-supplied parameters, it attempts to forward the message to the issuer for the authorization decision; for instance, if STIP encounters a 13-digit number but the issuer parameters specify 16 digits. If the issuer is unavailable, a referral (**01**) response is returned. The decline response code is **14**.

4.3.5 Reject Codes

0001 = Invalid length

0002 = Invalid value. For VCMS rejects, the account number is associated with a Processing Center Record (PCR), which differs in the issuer's part from the partner station PCR.

0165 = VCMS reject

0251 = Field missing

0531 = Non-domestic transaction

0600 = Consistency error: the account number does not match that in the transaction set

4.3.6 File Edits

When this field is present in an 0302 request, the File Management Function at the VIC applies these additional edits:

- Account number length must not exceed length allowed for the issuer BIN.
- The number must be within the issuer's range of numbers and must be under the issuer's control. (An issuer can only update records for its own cardholders, not for those of other centers unless alternate parameters have been invoked.)
- For an add, the account number cannot be in the file.
- For a change or delete, the account number must be present in the file.
- For STIP only, the modulus-10 check is optional for non-Visa card issuers.
- V.I.P. does not perform modulus-10 verifications on account numbers in Exception File updates.

4.3.7 File Maintenance Error Codes

0564 = Invalid length

0565 = No record on file (change, delete, or inquiry)

0566 = Record on file, cannot add

0570 = Invalid check digit

0571 = Account number not in range for the processing center

4.4 Field 3—Processing Code

4.4.1 Attributes

fixed length

6 N, 4-bit BCD (unsigned packed); 3 bytes

4.4.2 Description

Field 3 contains a code that identifies the cardholder transaction type and the cardholder account types that are affected by the transaction. Field 3 is a fixed-length field for three data elements. The codes are in [Table 4-3](#) of the Valid Values section.

Positions:

1–2	3–4	5–6
transaction type	account type "from"	account type "to"
Byte 1	Byte 2	Byte 3

Positions 1–2, Transaction Type: These positions contain a 2-digit code identifying the type of cardholder transaction or center function being processed.

Positions 3–4, Account Type (From): These positions contain a two-digit code identifying the account type affected by this transaction.

Positions 5–6, Account Type (To): These positions contain a 2-digit code that identifies the account type to which an account transfer is made.

NOTE

Visa cardholders cannot perform account transfers.

4.4.3 Usage

Field 3 is used in these message types:

- 0100 preauthorization requests and 0110 preauthorization responses
- 0100 authorization requests/balance inquiries, and 0110 authorization responses (subject to per-message format rules)
- 0120 advices
- 0302 file maintenance inquiries
- 0312 file maintenance responses
- 0400 reversals
- 0410 reversal responses
- 0420 reversal advice

Field 3 is required in responses.

Positions 1–2: For quasi-cash requests, the transaction type must be **11**. Visa does not check for issuer participation when sending this value, which all issuers must be able to receive and process. Testing is required.

NOTE

*V.I.P. does not convert the processing code from **00** to **11** for quasi-cash transactions when the MCC is 4829, 6051, or 7995.*

NOTE

Quasi-cash transactions are not supported for American Express transactions.

Positions 3–4: The account type is based on cardholder specifications when the cardholder selects an account type at the point of service. The value is **00** (unspecified) unless explicitly indicated otherwise by cardholder. Acquirers should not make assumptions about account types.

Balance Inquiries: For ATM requests and POS stand-alone requests, participating acquirers should use **30** (available funds) in positions 1–2. POS balance inquiries that are part of a purchase authorization request should use **00** in positions 1–2 (goods/service purchase).

For balance inquiry responses, the account type codes in field 54 of the response must match the codes in this field. See the Field Edits section.

CPS: See the CPS/ATM and CPS/POS chapters in *V.I.P. System Services* and the latest edition of the *U.S. Interchange Reimbursement Fee Rate Qualification Guide*.

Visa Cashback: The transaction must be a purchase: Positions 1–2 must be **00**.

Prepaid Transactions: This field is used in the activation and loading of prepaid cards. An *activation* message notifies the issuer that a card has been purchased and should be activated for cardholder usage on the issuer processor system. A *load* message notifies the issuer of the dollar amount to be loaded to the card account.

Valid messages are:

- 0100 requests and 0110 responses
- 0400 reversals and 0410 responses

Prepaid activation and load transactions cannot be ATM.

Table 4-2 specifies the pertinent field 3 values.

Table 4-2 Processing Codes for Prepaid Transactions

Transaction Type	BASE I Message Type	Processing Code (Positions 1 and 2)
Activation	0100 and 0110	72
Reversal or Void of Activation	0400 and 0410	72
Load or Activation and Load	0100 and 0110	28
Reversal or Void of Load	0400 and 0410	28
Reversal or Void of Activation and Load		

See the “Field 4” and “Field 54” descriptions.

Visa ReadyLink Load Transactions: This field must contain a value of **28**. BASE I issuers can receive these transactions as 0100s when initiated as full financial transactions.

Bill Payment Transactions (U.S. Only): Positions 1–2 must be **50**, when U.S. acquirers wish to identify Bill Payment transactions. Bill Payment messages require **B** in field 62.4,

and in the method of payment, which is indicated by the value in field 60.8. See the descriptions of field 62.4 and field 60 for more details about these fields.

Bill payment transaction type **50** is supported in all original authorization requests, responses, and advices, and in associated reversals and their responses.

Only U.S. acquirers can submit bill payment requests, although transactions originating from merchants in U.S. territories are allowed. Otherwise, the request is declined with a response code of **12** (invalid transaction) in field 39.

VSDC PIN Change/Unblock Requests: Positions 1–2 must be **70** for a PIN change request, and **72** for a PIN unblock request. If positions 1–2 = **70**, field 152 must be present. If positions 1–2 = **72**, fields 52 and 53 must be present but not field 152.

Private Label Prepaid Card: Processing code **20** must be used for return of redemption and void of return transactions. The card type must be Disney or Private Label; otherwise, V.I.P. rejects the transaction.

Check Acceptance: Field 3 is required in all requests and responses. The value must be **030000**.

STIP and Switch Advices: Field 3 is present.

Healthcare Eligibility Inquiry: This field must be **39** (eligibility inquiry) in requests and responses. Responses require field 54, including an amount type of **35** (amount co-payment). These transactions also use the field 104, usage 2, TLV format.

Product Eligibility Inquiry (U.S. Only): This field must be **39** (eligibility inquiry) in requests and responses. The amount in field 4 must be zeros (no amount), and the POS condition code in field 25 must be **51** (verification).

Product eligibility inquiries use the format of an 0100 verification message. Field 62.23—Product ID will carry the product information in the response message. No advice messages are generated for issuers.

NOTE

Field 104—Transaction—Specific Data must not be included in this type of eligibility inquiry transaction.

Payment Transactions (U.S. Only): Based on special arrangements between issuers and merchants, these transactions result in a credit to the issuer and a debit to the acquirer. Positions 1–2 must be **53** when U.S. acquirers wish to identify payment transactions. The source of funds can be included in field 104, usage 2. Responses may contain balance information from the issuer in field 54.

Payment transaction type **53** is supported in original authorizations and associated reversals.

Additional requirements and related information can be found in the descriptions for fields 39, 54, 62.1, and field 104, usage 2.

Credit Voucher and Merchandise Return Authorizations: All messages (0100 authorizations, 0400 reversals, and their responses) require a transaction type of **20** in this field. Although these authorizations are not CPS transactions, acquirers should include a value of **Y** in field 62.1.

Authorization requests are approved with a response code of **00** in field 39, provided the issuer has successfully completed testing to receive the request. If an issuer has not successfully completed testing to receive the request, V.I.P. responds with a response code of **85**, and no advice is sent to the issuer.

Authorization Gateway Transactions—MasterCard AFD: In 0100 status checks, the transaction must be for goods and services and contain a transaction type of **00**. See the *Authorization Gateway Service Cross-Reference Guide*.

Authorization Gateway Transactions—MasterCard Prepaid: In POS authorization requests, acquirers must send a value of **28** or **72**. V.I.P. forwards **28** to MasterCard.

Authorization Gateway Transactions—MasterCard POS (Brazil Only): In MasterCard Agro card authorization requests, this field must contain **00**.

Original Credit Transactions: Positions 1–2 must be **26**. Positions 3–6 are zeros. This field is used in authorization requests (except as noted in the next two subsections), reversals, and responses.

Additional requirements for original credit transactions are specified in the descriptions for fields 18, 43, and 104, usage 2.

Account Funding Transactions: Positions 1–2 must be **10** in 0100 authorization requests. The account funding value of **10** is also used in responses, reversals, and financial advices. Processing code **10** is converted to **01** if the issuer has not successfully completed testing for account funding.

AFD Status Check and Acquirer Confirmation (U.S. Only): The value in positions 1–2 of this field must be **00** in the status check request.

4.4.4 Field Edits

For status check transactions, the value in positions 1–2 must be **00**. See the field 4 description.

For quasi-cash (POS) transactions, the value in positions 1–2 must be **11**.

For manual cash disbursement (MCC **6010**), the value in positions 1–2 must be **01**; otherwise, V.I.P. rejects the transaction with reject code **0008**.

If the value in positions 3–4 for ATM authorization requests is other than **00** (not specified), that value must be returned unaltered in the response.

For balance inquiry responses, the value in positions 3–4 must match the account type code in the first two positions of each data set in field 54.

Bill Payment Transactions (U.S. Only): Acquirers must include field 62.4 (with a value of **B**); otherwise, the message will be rejected with reject code **0008** to indicate an invalid processing code in field 3.

Verification Services: Except as noted, the value must be all **zeros**.

NOTE

In account verification-only requests, the transaction type in positions 1–2 must be 00 (goods or service purchase), 01 (withdrawal or cash advance) or 11 (quasi-cash transaction).

Check Acceptance: Field 3 is required in 0100 and 0110 messages. The value in the response must match that in the request.

For legal gambling transactions (MCC **7801**) or (MCC **7802**), the value in positions 1–2 must be **11**; otherwise, V.I.P. rejects the transaction with reject code **0017**. Additional requirements are specified in the field 62.20 description.

4.4.5 Reject Codes

0008 = Invalid value (Processing code)

0017 = Invalid value (Merchant type)

0274 = Field missing

0528 = Invalid *from account* code in positions 3–4 in an 0110 POS or ATM balance inquiry response.

0529 = The first two digits of the reply are not the same as the request.

4.4.6 Valid Values

Table 4-3 Field 3 Processing and Account Type Codes

Positions 1–2: Transaction Type		Positions 3–4: Account Type “from” ¹		Positions 5–6: Account Type “to”	
Code	Definition	Code	Definition	Code	Definition
00	Goods/Service Purchase POS transaction only	00	Not Applicable or Not Specified	00	Not Applicable
01	Withdrawal/Cash Advance	10	Savings Account	10	Savings Account
03	Check Acceptance	20	Checking Account	20	Checking Account
10	Account Funding	30	Credit Card Account	30	Credit Card Account
11	Quasi-Cash Transaction (POS transaction only)	40	“Universal” Account (represented by a cardholder identification number) ²	40	“Universal” Account (represented by a cardholder identification number)
20	Return of Goods–Credit Credit Voucher or Merchandise Return Authorization (U.S. only)				
26	Original Credit				
28	Prepaid Activation & Load Prepaid Load				
30	Balance/Available Funds Inquiry				
39	Eligibility Inquiry				

Table 4-3 Field 3 Processing and Account Type Codes (continued)

Positions 1–2: Transaction Type		Positions 3–4: Account Type “from” ¹		Positions 5–6: Account Type “to”	
Code	Definition	Code	Definition	Code	Definition
40	Cardholder Account Transfer				
50	Bill Payment (U.S. only)				
53	Payment (U.S. only)				
70	PIN Change				
72	PIN Unblock				
	Prepaid Activation				

1. The first digit of the “from account” in the authorization request should be used in the BASE II TC 07 clearing record in the ATM Account Selection field.
2. A default or universal access account is what the issuer allows a cardholder to use when the account type in the request is unspecified. Its usage by U.S. financial institutions is the same as for Default Account; the values 40 and 00 are used interchangeably.

4.5 Field 4—Amount, Transaction

4.5.1 Attributes

fixed length

12 N, 4-bit BCD (unsigned packed); 6 bytes

4.5.2 Description

This field contains the POS, ATM, or Check Acceptance transaction amount in the currency specified by the currency code in field 49. The amount in an original authorization request is expressed in the transaction currency. No decimal point appears in this field; the decimal place is implied, based on the currency. Multicurrency processing applies to Visa and Plus card transactions and to others subject to VisaNet rules.

NOTE

*VisaNet uses a buy or sell rate for currency conversion, depending on message type and exchange direction. VisaNet uses U.S. dollar-based buy/sell rate pairs **and** buy/sell rate pairs of currencies other than U.S. dollars. See Multicurrency Service in V.I.P. System Services.*

4.5.3 Usage

Field 4 is used in these message types:

- 0100 authorization requests and 0110 authorization responses
- 0100 token activation requests and 0110 activation responses
- 0120 token STIP advices
- 0120 advices
- 0400 reversals and 0410 reversal responses
- 0420 reversal advices

NOTE

When this field is present in a message, the transaction currency code must be present in field 49.

Field 4 is a fixed-length field; lead zero fill is required.

For multicurrency participating issuers, this field reflects the acquirer's transaction currency submitted by the acquirer.

For non-multicurrency issuers, this field contains a U.S. dollar amount.

NOTE

Transaction amounts from Plus System and its sublicensees are in U.S. dollars.

Except in 0110 partial approval responses, the field 4 amount in the 0110 response must be the same as the amount that was present in the original 0100 request. Otherwise, the response will be edited.

Balance Inquiries: This field is not used.

ATM Transactions: The currency must be the currency dispensed.

CPS: See the CPS/ATM and CPS/POS chapters in *V.I.P. System Services* and the latest edition of the *U.S. Interchange Reimbursement Fee Rate Qualification Guide*.

Incremental Authorization: This field is used for the additional amount in incremental authorization requests. It contains the difference from the initial authorization amount. For example, if the initial request was for US\$100, and the merchant anticipates an additional US\$50 in charges, this field in the incremental authorization request will contain US\$50, not US\$150.

Visa Cashback: The amount in this field includes the purchase amount and the cashback amount. The cashback amount itself is in field 61.1.

Verification-Only Requests: If field 25 contains code **51**, a field 4 value of zero is supported for account, address, or CVV2 verification-only requests. STIP ignores other values, which (if the verification request is successful) responds with response code **85** (no reason to decline).

Reversals and Partial Reversals: In an 0400 partial reversal, this field contains the value of the original 0100 request. The following conditions apply:

- For partial POS reversals, the corrected amount goes in Field 95—Replacement Amounts. The field 95 replacement amount must be less than the original amount in field 4; otherwise, the reversal message will reject.

BASE I does not retain data from previous reversals. BASE I will process multiple partial reversals as long as field 95 is less than field 4 in each transaction. BASE I forwards them to issuers. If the reversal is processed in STIP, activity totals are not adjusted.
- For partial reversals of incremental authorizations, field 4 is required and must contain the total amount authorized (field 95 must contain the corrected total amount authorized).

In a reversal of a partial authorization, this field contains the partial amount from the issuer response (not the original full amount in the request).

Check Acceptance: Transaction amounts must be in U.S. dollars.

0120 File Update Advices: Field 4 is present and is zero-filled.

STIP and Switch Advices: Field 4 is present in 0120 or 0420 advices if it was in the original request.

Dynamic Currency Conversion: Acquirers that opt to participate in Dynamic Currency Conversion (DCC) must also participate in the Multicurrency Service when submitting authorizations in the cardholders' currency. In this case, this field reflects an amount in the currency used by the acquirer when submitting the request.

Prepaid Transactions: For activation messages, this field can be submitted with zeros. For load messages, the load amount is submitted in this field. There is no limit to the reloading of accounts. Loading of accounts does not require an activation transaction.

See the Field 3 and Field 54 descriptions.

Visa ReadyLink Load Transactions: This field must contain the amount to be loaded to the Visa Prepaid card.

NOTE

In U.S.-only electronic fare load transactions, this field must contain the amount to be loaded to the transit system account.

Partial Authorization: In 0100 messages that contain the purchase amount in this field and a value of **1** in field 60.10, position 12, the non-multicurrency issuer processes the request and responds with the approved amount in field 4, the original amount in field 54, and a response code of **10** (partial amount approval) in field 39.

If this field contains the purchase amount and field 60.10, position 12, contains a **0** or field 60.10 is not provided, the issuer may decline the message request with response code **51** (insufficient funds).

For issuers participating in multicurrency transactions, field 4 of the response must be the original amount in the transaction currency (field 49) of the request message. Field 6 must contain the approved amount in the cardholder billing currency (field 51). The original amount in field 54 must be in the transaction currency.

See "Field Edits." Also see related edits in descriptions for fields 6, 39, and 54.

Acquirers that need to reverse a partial approval transaction must send an 0400 reversal message with the partial approval amount and not the original amount from the 0100 request.

Auto-Substantiation Transactions: In original requests, this field contains the amount of the request. In responses, the field may contain the transaction amount from the request or an approved partial amount, in which case Partial Authorization processing applies.

See "Field 54."

Healthcare Eligibility Inquiries (U.S. Only): The amount is **zero** in this field.
See "Field 54" and "Field 104."

Product Eligibility Inquiry (U.S. Only): The amount in this field must be **zeros** (no amount). Other requirements are specified in the descriptions for fields 3, 25, and 62.23.

Single Unit of Currency: For purchase transactions containing one unit of currency, currency conversion is performed unless the transaction meets the requirements for a status check. For more information, see the following subsection.

NOTE

Currency conversion is not performed on single unit of currency transactions destined to debit or prepaid issuers in Japan.

Status Check: An 0100 authorization request for one unit of currency, such as one U.S. dollar, can be used to verify a customer's account status when the final transaction amount is not yet known. Typically, automated fuel dispenser (AFD) merchants use status check authorizations. (See the Visa Rules.)

NOTE

*For acquirers and merchants that are not permitted by the Visa Rules to use a status check or an authorization request for an arbitrary amount, a **zero**-dollar account verification message can be used to validate the cardholder account information.*

Each status check transaction must be followed by a corresponding clearing transaction, or an authorization reversal in the case of a cancelled sale or timeout event.

If the issuer participates in multicurrency processing, the field 6 value remains one unit but the currency code in field 51 reflects the billing currency.

In addition to the single unit of currency requirement, status checks must have **00xxxx** in field 3, and the merchant category code (MCC) in field 18 must be one of these values, **5542** (Automated fuel dispenser), **8062** (Hospitals) with the merchant located in Latin America, a lodging merchant MCC and Field 62.6—Prestigious Property Indicator of **D**, **B**, or **S**. For example, the MCC for AFD status checks is **5542**. Requests that do not meet these requirements are not considered status checks and are subject to currency conversion.

Issuers can respond to a status check request with a partial approval. The partial approval amount is the maximum authorized amount for the purchase. For acquirers to receive a response with a partial approval, the status check request must contain the values specified above for fields 3, 4, and 18, along with a value of **1** in field 60.10 to indicate that a partial authorization can be returned.

Issuers return the partial approval amount in field 4 (or field 6, which is used for multicurrency transactions), along with a field 39 response code of **10** to indicate that the amount in field 4 is a partial authorization. In addition, field 54 contains the original amount from the 0100 authorization request.

AFD Status Check and Acquirer Confirmation (U.S. Only): The value in this field of an 0100 status check request must be US\$1.00. For AFD transactions in the U.S. only, acquirers that do not participate in Real Time Clearing are required to follow an 0100 status check request with an 0120 acquirer confirmation advice that contains the transaction amount.

This amount must match the transaction amount in the TC 05 Draft Data, TCR 0, Source Amount field, positions 77–88.

Authorization Gateway Transactions—Discover Partial Approvals: Acquirers that participate in partial approvals can submit 0100 requests containing the full amount in this field, with the partial authorization indicator in field 60.10 set to **1** (terminal accepts partial authorization responses).

If the Discover issuer participates in partial authorization processing and does not approve the original amount requested in the authorization message, the following information will be present in the 0110 authorization response that Visa sends to the acquirer:

- Field 4 will contain the partial approval amount received from Discover.
- Field 39 will contain a response code of **10** (partial approval).
- Field 54 will contain the original amount, along with an amount type of **57** (original amount).

In 0400 and 0420 messages, field 4 must contain the partial approval amount if the reversal is for the partial approval from the authorization response. In 0410 and 0430 responses, this field contains the same value as the partial approval amount from the authorization reversal request.

Authorization Gateway Transactions—MasterCard AFD: In message pairs, where the first message is used to verify a customer's account status and the second message contains the amount of the purchase, field 4 is used as follows.

- Acquirers must submit an 0100 status check message, with the value in this field equal to one unit of currency.
- Once an AFD transaction is completed, acquirers must send the final transaction amount in this field of an 0120 confirmation advice (field 25 = **06**). The amount, which can include additional services such as car washes or other items sold at the AFD, must not exceed the preauthorized amount.

Acquirers that participate in partial approvals and process MasterCard AFD transactions can receive additional approved amounts in response messages. If an acquirer submits an 0100 authorization request with field 4 = **1.0** (single unit of currency), field 18 = **5542** (AFD), and field 60.10 = **1** (partial approval), it receives:

- An additional approved amount in field 4 of the 0110 issuer response, provided the issuer supports partial approvals.
- A response code of **10** in field 39.
- The original amount in field 54 (with an amount type of **57**).

If the issuer does not participate in partial approvals, response codes are sent in the 0110 authorization response.

For information about field mapping between Visa and MasterCard, see the *Authorization Gateway Service Cross-Reference Guide*.

Authorization Gateway Transactions—MasterCard POS Account Status Inquiry: In 0100 authorization requests, acquirers must send a zero amount in field 4 when field 25 = **51** (request for verification without authorization). The zero amount in field 4 may be present in responses.

VisaNet does not support sending one unit of currency in this field, along with address verification service information, except for automated fuel dispenser (AFD) transactions. VisaNet allows a **zero** amount in field 4 with field 123 (verification data) and field 126.10 (CVV2 authorization request data). Fields 123 and 126.10 can be present or absent.

For information about field mapping between Visa and MasterCard, see the *Authorization Gateway Service Cross-Reference Guide*.

MasterCard POS Credit Purchase Transactions: In POS authorizations originated in the U.S. and U.S. territories by merchants that assess a surcharge for MasterCard credit purchase transactions, this field must contain the total purchase amount and the merchant-assessed surcharge amount.

Authorization Gateway Transactions—MasterCard Prepaid: In POS authorizations for prepaid activation, acquirers must send a value greater than zero in this field. In POS authorizations for standalone activation, acquirers must send a value of **0**.

U.S. Visa Easy Payment Service (VEPS): The value in this field must be equal to or less than US\$25.00, except for supermarkets (MCC **5411**) and discount stores (MCC **5310**). If field 18 is **5411** or **5310**, the amount in field 4 must be equal to or less than US\$50.00.

Cashback Service (Australia): This field contains the total purchase amount plus the cashback amount. Acquirers and their merchants optionally can choose to support cashback transactions that do not include a purchase.

Visa Integrated Redemption Platform (VIRP)—U.S. Only: Acquirers send the merchandise amount plus the tax amount (all tax groups included) in this field in 0100 purchase requests.

Field 104, usage 2, dataset ID 02 includes the pre-tax amount and the tax rate (%) for a tax group. This dataset can be included a maximum of three times in a transaction. The sum of the pre-tax amount and the tax amount for all groups is called the transaction's post-tax amount.

If the post-tax amount in field 104, usage 2, dataset ID 02 matches the field 4 value in the request, V.I.P. calculates the field 4 value to send to the issuer as follows:

- For each group, V.I.P. deducts the discount amount from the pre-tax amount to arrive at the taxable amount.
- For each group, V.I.P. applies the tax rate to the taxable amount and arrives at the group total.
- V.I.P. adds the group totals of all groups in the transaction.

If the post-tax amount in field 104, usage 2 does not match the field 4 value in the request, V.I.P. calculates the field 4 value to send to the issuer as follows:

- For each group, V.I.P. applies the tax rate on the pre-tax amount to arrive at the group's pre-discount amount.
- For each group, V.I.P. deducts the discount amount from the group's pre-discount amount to arrive at the group total.
- V.I.P. adds the group totals of all groups in the transaction.

V.I.P. forwards the issuer-sent amount to the acquirer in this field in approved responses. If the issuer declines the request, V.I.P. returns the original amount from the request to the acquirer.

If the application of a discount leads to a zero value in this field, V.I.P. approves the fully discounted transaction and responds to the acquirer. V.I.P. does not send such requests to the issuer.

Cashback and partial approvals also apply to VIRP purchases.

For cents-off-per-gallon promotions, merchants send this field in 0120 completion advices.

Also see the descriptions for field 54 and field 104, usage 2 (dataset IDs 02 and 59).

Visa Token Service: Field 4 contains a **0** (zero) in token activation requests.

Manual Cash Disbursement: The amount in this field is the sum of the manual cash disbursement amount and the access fee amount.

4.5.4 Field Edits

The value in this field must be numeric and right-justified with leading zeros. For cash disbursement transactions, the value cannot exceed US\$99,999.99.

For a non-multicurrency participant, if the currency code is not **840**, the transaction will be rejected with reject code **0009**.

V.I.P. rejects request messages that have **zero** in field 4 with reject code **0009**, unless a following condition is present (in which case V.I.P. allows an amount of **zero**):

- Field 25 = **51** (zero-amount account verification).
- Field 3, positions 1–2, is **39** (eligibility message), **70** (PIN change/unblock), or **72** (PIN unblock or prepaid activation).
- The message is an 0302 request for a PPCS file update.

If this field is not present in a response, V.I.P. inserts it.

Field 4 is required in an 0110 or 0410 response if field 39 is **00**, **10**, or **85**. The field is optional in responses to verification-only requests or Status Checks.

Issuers must include this field in 0110 responses and 0410 reversal responses, except when field 3 contains **30**, **70**, or **72**. Otherwise, V.I.P. rejects the response messages with reject code **0275**.

The field 4 amount must comply with the transaction's card program amount parameters; that is, if a consumer card program has a maximum US\$99,999.99 amount, but the transaction amount for the same card program exceeds the maximum, V.I.P. declines the request with response code **13**. If the acquirer's currency is a non-zero amount but the U.S. dollar equivalent is zero, V.I.P. declines the request with response code **13** (invalid amount).

BASE I checks the amount returned by the issuer in an 0110 response. If the issuer sends a different value in field 4 of the response and the value in field 39 is not **10** (with a field 4 amount less than the original request), Visa will:

- Reject the response back to the issuer with reject code **0009**.
- Process the transaction in STIP and respond to the acquirer.

The following table shows the maximum amounts for credit and debit, prepaid, and account funding POS transactions by card product. If the amount in field 4 exceeds the amount for the card product and transaction type shown in [Table 4-4](#), the transaction will be declined with response code **13** (amount exceeds maximum for card program).

IMPORTANT

The product IDs associated with maximum limits are subject to the rules of individual jurisdictions. To verify the IDs and limits for a given jurisdiction, please check with your Visa representative.

IMPORTANT

Certain transactions can have a maximum amount limit of USD\$10,000,000.00. These limits apply to Visa credit and debit cards. Prepaid cards are excluded. Only qualified issuers can process these limits for card-present purchase transactions, including their reversals, credit vouchers, and exception items. Certain MCCs are also excluded. To verify the limits, please check with your Visa representative.

NOTE

For regional product names, see "Field 62.23—Product ID."

Table 4-4 Maximum Credit and Debit, Prepaid, and Account Funding POS Transaction Amounts

Card Product	Global Product Name	Credit and Debit POS Maximum Amount	Prepaid POS Maximum Amount	Account Funding POS Maximum Amount
A	Visa Traditional	US\$249,999.99	US\$99,999.99	US\$99,999.99
B	Visa Traditional Rewards	US\$249,999.99	US\$99,999.99	US\$99,999.99
C	Visa Signature	US\$749,999.99	US\$99,999.99	US\$499,999.99
D	Visa Signature Preferred	US\$999,999.99	US\$99,999.99	US\$499,999.99
F	Visa Classic	US\$249,999.99	US\$99,999.99	US\$99,999.99
G	Visa Business	US\$749,999.99	US\$499,999.99	US\$499,999.99
G1	Visa Signature Business	US\$749,999.99	US\$499,999.99	US\$499,999.99

Table 4-4 Maximum Credit and Debit, Prepaid, and Account Funding POS Transaction Amounts (continued)

Card Product	Global Product Name	Credit and Debit POS Maximum Amount	Prepaid POS Maximum Amount	Account Funding POS Maximum Amount
G3 ¹	Visa Business Enhanced	US\$749,999.99	US\$499,999.99	US\$499,999.99
G4	Visa Infinite Business	US\$749,999.99	US\$499,999.99	US\$499,999.99
I ²	Visa Infinite	US\$999,999.99	US\$99,999.99	US\$499,999.99
I1	Visa Infinite Privilege	US\$1,499,999.99	US\$99,999.99	US\$499,999.99
I2	Visa Ultra High Net Worth (UHNW)	US\$1,499,999.99	US\$99,999.99	US\$499,999.99
J3	Visa Healthcare	US\$99,999.99	US\$99,999.99	US\$99,999.99
K ³	Visa Corporate T&E	US\$749,999.99	US\$499,999.99	US\$499,999.99
K1 ²	Visa Government Corporate T&E	US\$749,999.99	US\$499,999.99	US\$499,999.99
L	Visa Electron	US\$249,999.99	US\$99,999.99	US\$99,999.99
N	Visa Platinum	US\$249,999.99	US\$99,999.99	US\$99,999.99
N1	Visa Rewards	US\$249,999.99	US\$99,999.99	US\$99,999.99
N2	Visa Select	US\$249,999.99	US\$99,999.99	US\$99,999.99
P	Visa Gold	US\$249,999.99	US\$99,999.99	US\$99,999.99
S ¹	Visa Purchasing	US\$749,999.99	US\$499,999.99	US\$499,999.99
S1 ¹	Visa Purchasing with Fleet	US\$749,999.99	US\$499,999.99	US\$499,999.99
S2 ²	Visa Government Purchasing	US\$749,999.99	US\$499,999.99	US\$499,999.99
S3 ²	Visa Government Purchasing With Fleet	US\$749,999.99	US\$499,999.99	US\$499,999.99
S4 ^{2,4}	Visa Commercial Agriculture	US\$749,999.99	US\$499,999.99	US\$499,999.99
S5 ³	Visa Commercial Transport	US\$749,999.99	US\$499,999.99	US\$499,999.99
S6 ²	Visa Commercial Marketplace	US\$749,999.99	US\$499,999.99	US\$499,999.99
U	Visa TravelMoney	US\$99,999.99	US\$99,999.99	US\$99,999.99
X	Visa B2B Virtual Payments	US\$749,999.99	US\$499,999.99	US\$499,999.99

1. For CEMEA region these amounts also apply to Visa Platinum Business.
2. For U.S.-issued cards, the globally applicable maximum amount for purchase and credit voucher transactions is US\$1,499,999.99.
3. These maximum amounts do not apply to large-ticket card ranges.
4. Domestic transactions within Brazil are not eligible for these maximum amounts.

Maximum Amount Limits for U.S. Tax Payment Transactions: The following table shows the new maximum amount limits for U.S. tax payment transactions by card product and card type. For other requirements, see the descriptions for fields 18, 43, 63.1, and 62.20.

IMPORTANT

The product IDs associated with maximum limits are subject to the rules of individual jurisdictions. To verify the IDs and limits for a given jurisdiction, please check with your Visa representative.

IMPORTANT

Certain transactions can have a maximum amount limit of US\$10,000,000.00. These limits apply to Visa credit and debit cards. Prepaid cards are excluded. Only qualified issuers can process these limits for card-present purchase transactions, including their reversals, credit vouchers, and exception items. Certain MCCs are also excluded. To verify the limits, please check with your Visa representative.

Table 4-5 U.S. Tax Payment Transaction Maximum Amount Limits

Card Product	Global Product Name	Credit and Debit	Prepaid
A	Visa Traditional	US\$499,999.99	US\$99,999.99
B	Visa Traditional Rewards	US\$499,999.99	US\$99,999.99
C	Visa Signature	US\$749,999.99	US\$99,999.99
D	Visa Signature Preferred	US\$999,999.99	US\$99,999.99
F	Visa Classic	US\$499,999.99	US\$99,999.99
G	Visa Business	US\$749,999.99	US\$499,999.99
G1	Visa Signature Business	US\$749,999.99	US\$499,999.99
G3	Visa Business Enhanced	US\$749,999.99	US\$499,999.99
G4	Visa Infinite Business	US\$749,999.99	US\$499,999.99
I ¹	Visa Infinite	US\$999,999.99	US\$99,999.99
I1	Visa Infinite Privilege	US\$1,499,999.99	US\$99,999.99
I2	Visa Ultra High Net Worth (UHNW)	US\$1,499,999.99	US\$99,999.99
J3	Visa Healthcare	US\$99,999.99	US\$99,999.99
K ²	Visa Corporate T&E	US\$749,999.99	US\$499,999.99
K1 ¹	Visa Government Corporate T&E	US\$749,999.99	US\$499,999.99
L	Visa Electron	US\$499,999.99	US\$99,999.99
N	Visa Platinum	US\$499,999.99	US\$99,999.99
N1	Visa Rewards	US\$499,999.99	US\$99,999.99
N2	Visa Select	US\$499,999.99	US\$99,999.99
P	Visa Gold	US\$499,999.99	US\$99,999.99
S ¹	Visa Purchasing	US\$749,999.99	US\$499,999.99

Table 4-5 U.S. Tax Payment Transaction Maximum Amount Limits (continued)

Card Product	Global Product Name	Credit and Debit	Prepaid
S1 ¹	Visa Purchasing with Fleet	US\$749,999.99	US\$499,999.99
S2 ¹	Visa Government Purchasing	US\$749,999.99	US\$499,999.99
S3 ¹	Visa Government Purchasing With Fleet	US\$749,999.99	US\$499,999.99
S4	Visa Commercial Agriculture	US\$749,999.99	US\$499,999.99
S5	Visa Commercial Transport	US\$749,999.99	US\$499,999.99
S6	Visa Commercial Marketplace	US\$749,999.99	US\$499,999.99
U	Visa TravelMoney	US\$99,999.99	US\$99,999.99
X	Visa B2B Virtual Payments	US\$749,999.99	US\$499,999.99

1. For U.S.-issued cards, the globally applicable maximum amount is US\$1,499,999.99.

2. These maximum amounts do not apply to large -ticket card ranges.

U.S. Commercial Large-Ticket—POS: US\$10,000,000.00 is the maximum amount, including fees, for U.S. government or non-government POS Commercial Large-Ticket transactions. Transactions must be U.S. domestic; the transaction and issuer currency codes must be **840**. Acquirers must not specify a receiving institution ID.

The card type for non-government Commercial Large-Ticket transactions must be Visa Business, Visa Corporate, including Corporate T&E, or Visa Purchasing (including Fleet) cards. Commercial Large-Ticket transactions can also be initiated using Visa Infinite, Visa Signature Preferred, or Visa Signature cards if the issuing BIN is a Commercial Large-Ticket participant and amounts do not exceed the US\$499,999.99 limitation for these cards.

Commercial Large-Ticket—Cash Disbursement: The maximum amount for Commercial Large-Ticket cash disbursement transactions is US\$99,999.99. (The maximum amount for an individual clearing and settlement transaction is \$500,000.)

LAC Commercial Large-Ticket—POS: US\$10,000,000.00 is the maximum amount for LAC (excluding Brazil) Government Corporate T&E, Government and non-Government purchasing and Commercial Agriculture large-ticket transactions. LAC also supports a maximum amount of US\$10,000,000 on commercial marketplace large-ticket transactions. Brazilian domestic Commercial Agriculture large-ticket transactions have a maximum amount of US\$15,000,000.

AP, Canada, CEMEA Commercial Large-Ticket —POS:US\$10,000,000 is the maximum amount for domestic large-ticket transactions for Government and non-Government Purchasing and Purchasing with Fleet cards. Card-present and card-not-present transactions are supported.

STIP Processing: STIP does not process Commercial Large-Ticket POS transactions between US\$99,999.99 and US\$10,000,000.00. Transactions with amounts in that range are sent to available issuers; STIP responds with response code **91** (Issuer Unavailable) for issuer-unavailable transactions or transactions that have timed-out according to

Assured Transaction Response (ATR) rules. STIP processes Commercial Large-Ticket POS transactions under \$100,000 using regular issuer-specified processing rules.

V.I.P. Message Format: The value in the response or advice must match that in the request, except when responding with a partial authorized amount.

Partial Authorization: The following edits apply to 0110 responses where field 39 = **10**:

- When the issuer does not participate in multicurrency:
 - If field 4 is not present, V.I.P. will reject the response back to the issuer with reject code **0275**.
 - If the request message is not a status check (where field 4 is not one unit of currency) and field 4 is greater than the field 4 in the request message, V.I.P. will reject the response back to the issuer with reject code **0735**.
 - If the request message is a status check (where field 4 is one unit of currency) and field 4 is greater than the field 4 in the request message, V.I.P. will not reject the response.
- When the issuer participates in multicurrency:
 - If field 4 is not present, or has a different value than in the request, V.I.P. will recalculate field 4 from field 6.

If a response is rejected, STIP accepts or declines the total transaction amount based on issuer-specified parameters. Also see Partial Authorization edits in the descriptions for fields 6, 39, and 54.

Basic Money Transfer Original Credit Transactions: For these transactions, the cross-border limit is USD\$2,500.

Enhanced Money Transfer Original Credit Transactions: This field is present in 0100 authorization requests (initiated as full-financial transactions) with a business application identifier of **AA** or **PP** in Dataset ID 57 of field 104. The value in field 4 cannot be greater than USD\$2,500.00, unless the transaction occurs in a designated country with a different maximum.

Designated countries and their maximum amounts are identified below. If a given maximum is exceeded, V.I.P. declines the transaction with response code **61**.

In the following countries, the maximum is USD\$15,000.00, provided the acquirer, or originator, and issuer are in the same country:

- Australia
- Singapore

In the following designated countries, money transfer transactions can be USD\$50,000, provided the acquirer, merchant or originator, and issuer are in the same country.

Bahrain	Morocco	Saudi Arabia
Georgia	Nigeria	Serbia
Kazakhstan	Qatar	Ukraine
Kuwait	Russia	United Arab Emirates
Macedonia		

Business-to-Business (B2B) Settlement Match Edit: The amount in this field of an 0220 acquirer advice for a key-entered B2B financial transaction must be equal to or less than the value in field 4 of the corresponding 0100 authorization request. The B2B settlement match edit is enforced when the 0220 acquirer advice meets these conditions:

- The product ID of the card is one of the following:
 - S (Visa Purchasing).
 - S1 (Visa Purchasing with Fleet).
 - S2 (Visa Government Purchasing).
 - S3 (Visa Government Purchasing With Fleet).
- Field 18 contains an MCC that is eligible for the B2B settlement match edit.
- The merchant country code in field 43 is **US**.
- Field 22 contains a value of **01** (manual key entry).
- Value in Field 49 is same as the corresponding 0100 authorization request.

B2B purchase transactions that meet the settlement match edit will be processed.

Transactions that fail the edit and contain **L** (Business to Business Amount Tolerance—clearing amount must be less than or equal authorization amount) in field 48, usage 27, position 4 are rejected with reject code **0741**.

Transactions that fail the edit and contain **E** (Business to Business Amount Tolerance—clearing amount must be equal authorization amount) in field 48, usage 27, position 4 are rejected with reject code **0740**.

NOTE

The settlement match edit applies only to 0220 acquirer advices that have corresponding 0100 authorization requests. Visa retains 30 days of B2B authorization history for settlement matching. Clearing transactions that do not have previous authorizations or are submitted more than 30 days after the authorization date are not subject to the settlement match edit and will be processed normally.

4.5.5 Reject Codes

0009 = Invalid value

0189 = Currency conversion overflow

0275 = Field missing

0735 = Partial authorization field 4 value is greater than the original field 4 transaction amount.

4.6 Field 6—Amount, Cardholder Billing

4.6.1 Attributes

fixed length
12 N, 4-bit BCD (unsigned packed); 6 bytes

4.6.2 Description

Field 6 is a multicurrency field. It contains the transaction amount (field 4), converted to the currency used to bill the cardholder's account. This converted transaction amount is called the Transaction Amount in Destination Currency (TADC). The conversion rate is in field 10. Besides the TADC, field 6 may contain the OIF. Issuers can increase or decrease the amount in this field when billing cardholders.

NOTE

Visa uses a buy rate or a sell rate for currency conversion, depending on the message type and the exchange direction. Visa uses U.S. dollar-based buy/sell rate pairs and buy/sell rate pairs of currencies other than the U.S. dollar. See Multicurrency Service in V.I.P. System Services.

No decimal point appears in this field; the decimal place is implied based on the currency. The locations of the implied decimal place (and the currency codes) for each currency are listed in the appendix titled "Country and Currency Codes."

If field 6 is present, the following fields also are present:

- Field 10—Conversion Rate, Cardholder Billing
- Field 51—Currency Code, Cardholder Billing. Field 51 identifies the currency in field 6.

4.6.3 Usage

Multicurrency Participants: Acquirers do not provide this field. V.I.P. adds this field and sends it to the issuer if the issuer is a multicurrency participant. Multicurrency issuers should not return this field in responses, except when responding with a partial approval (field 39 response code is **10**). For POS transactions only, V.I.P. adds this field for participating acquirers if the request was referred to the issuer (field 39 response code is **01** or **02**). The field is not added to ATM responses because referrals are not allowed for ATM transactions.

Check Acceptance: Not applicable to field 6.

STIP and Switch Advices: Field 6 is present in 0120 or 0420 advices if it's in the request.

Non-Multicurrency Participants and Balance Inquiries: Not applicable to field 6.

Verification-Only Requests: This field (and other multicurrency fields) is not applicable for these requests.

Partial Authorization: Field 60.10 (partial authorization indicator) identifies whether an acquirer supports partial authorizations. A value of **1** indicates that the terminals are able to support a partial amount approval. When field 60.10 is not present, or has a value of **0**, the acquirer does not support partial amount approvals.

For issuers participating in multicurrency transactions, field 4 of the response must be the original amount in the transaction currency (field 49) of the request message. Field 6 must

contain the approved amount in the cardholder billing currency (field 51). The original amount in field 54 must be in the transaction currency.

For applicable field 6 edits, see "Field Edits."

4.6.4 Field Edits

Partial Authorization: The following edits apply to 0110 responses where field 39 = **10** and the issuer supports multicurrency:

- If field 6 is missing or contains **zeros**, V.I.P. rejects the response with reject code **0486**.
- If the request message is not a status check (where field 6 is not one unit of currency) and field 6 is greater than the field 6 in the request message, V.I.P. reject the response back to the issuer with reject code **0736**.
- If the request message is a status check (where field 6 is one unit of currency) and field 6 is greater than the field 6 in the request message, V.I.P. doesn't reject the response.

If a response is rejected, STIP accepts or declines the total transaction amount based on issuer-specified parameters. Also see Partial Authorization edits in the descriptions for fields 4, 39, and 54.

4.6.5 Reject Codes

0486 = Field missing or all **zeros** in partial authorization.

0736 = Partial authorization field 6 value is greater than the original field 6 transaction amount.

4.7 Field 7—Transmission Date and Time

4.7.1 Attributes

fixed length
10 N, 4-bit BCD (unsigned packed); 5 bytes
format: MMDDhhmmss

4.7.2 Description

Field 7 contains the date and time the request or advice was submitted to VisaNet by the acquirer. The date and time must be in *mmdd* format. GMT (Greenwich mean time) can be used. See the appendix titled "GMT Conversion" for time zones.

4.7.3 Usage

ISO specifies transmission date and time as a key data element for matching a response to its request or advice. A transaction sender enters a new date and time with each request entering the network. The receiving client saves the field and returns it in the response message.

Field 7 is used in every message generated by acquirers and issuers and is present in every message generated by VisaNet. The value in responses, including those for STIP and Switch advices, must match that in requests or advices.

Check Acceptance: Requirements are the same as those for card transactions.

0120 and 0322 File Update Advices: Field 7 is present. If the file update was initiated by Auto-CDB or the Issuer Direct Service, this is the value from the 0110 response. If the file update was initiated by CRS or GCAS, this field reflects the date and time the file was updated.

STIP and Switch Advices: Field 7 contains the date and time from the original message.

Authorization Gateway Transactions—MasterCard: This field must be present in 0100 authorization requests. The time must be in GMT format.

Authorization Gateway Transactions—MasterCard AFD: An 0120 confirmation advice must be submitted within 60 minutes of the status check request. See the *Authorization Gateway Service Cross-Reference Guide*.

Visa Token Service: This field contains the date and time when the token activation request was created.

4.7.4 Field Edits

Field 7 is required in all messages. Value must be in date and time format:

MM must be **01–12**
DD must be **01–31**
hh must be **00–23**
mm must be **00–59**
ss must be **00–59**

The DD (day) value cannot be greater than the maximum number of days for the month identified below. Otherwise, the message will reject with **0010** Invalid value.

January = 31	April = 30	July = 31	October = 31
February = 28 (leap year = 29)	May = 31	August = 31	November = 30
March = 31	June = 30	September = 30	December = 31

Check Acceptance: No additional edits are required.

4.7.5 Reject Codes

0010 = Invalid value

0276 = Field missing

4.8 Field 10—Conversion Rate, Cardholder Billing

4.8.1 Attributes

fixed length
8 N, 4-bit BCD (unsigned packed); 4 bytes

4.8.2 Description

Field 10 contains a calculated value that may be applied to the transaction amount (field 4) to obtain the cardholder billing amount (field 6). It is not used for currency conversion.

The transaction amount is converted using daily conversion rates for the applicable currencies.

NOTE

Visa uses a buy rate or a sell rate for currency conversion, depending on the message type and the exchange direction. Visa uses U.S. dollar-based buy/sell rate pairs and buy/sell rate pairs of currencies other than the U.S. dollar. See Multicurrency Service in V.I.P. System Services.

Optional issuer fees are applied to the converted transaction amount, or TADC, to yield the cardholder billing amount (field 6). Field 10 is calculated from the cardholder billing amount (field 6) and the original transaction amount (field 4). The resulting field 10 value may differ from published conversion rates because it reflects differences resulting from rounding.

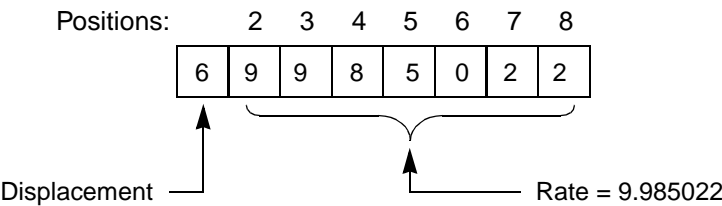
If field 10 is present, these fields are required:

- Field 6—Amount, Cardholder Billing
- Field 51—Currency Code, Cardholder Billing, identifies the currency in field 10.

The leftmost digit denotes the number of positions the decimal separator shall be shifted from the right (allowable values are **0–9**). Positions 2–8 are the rate.

EXAMPLE

69985022 = 9.985022 as shown in the following illustration.



4.8.3 Usage

Multicurrency Participants: Field 10 is present if Field 6—Cardholder Billing Amount, is present. V.I.P. adds it and delivers it to participating multicurrency issuers. For POS transactions only, V.I.P. adds it for participating acquirers if the request was referred to the issuer (field 39 response code is **01** or **02**). The field is not added to ATM responses because referrals are not allowed for ATM transactions.

NOTE

For euro currency issuers, this field is for information only.

STIP and Switch Advices: Field 10 is included in 0120 or 0420 advices for participating users.

4.8.4 Field Edits

Field must be numeric.

4.8.5 Reject Codes

0032 = Invalid value

4.9 Field 11—System Trace Audit Number

4.9.1 Attributes

fixed length

6 N, 4-bit BCD (unsigned packed); 3 bytes

4.9.2 Description

Field 11 is a number assigned by the message initiator that uniquely identifies a cardholder transaction and all message types (also known as *system* transactions) that it comprises, according to individual program rules. See tracing elements in the chapter titled Message Matching. For example, the same trace number is used in an authorization request and response, and in a subsequent reversal request and response.

The trace number can be used to match a response to its request or to match a message to a given cardholder transaction set.

4.9.3 Usage

A non-zero value in this field is required in all cardholder transactions - authorizations and its reversals, file updates, administration, and network management messages. The system trace audit number must be returned unchanged in repeat and response messages.

Check Acceptance (U.S. Only): The number is used to match the response to the request.

0120 and 0322 File Update Advices: Field 11 is present.

STIP and Switch Advices: Field 11 is present.

Incremental Authorizations: In 0100 incremental authorization messages and their reversals, this field must contain the value from the original authorization request message.

AFD Status Check and Acquirer Confirmation (U.S. Only): Although the 0100 status check and the 0120 acquirer confirmation advice are related to each other, they are not treated as one cardholder transaction and must have unique values in this field.

4.9.4 Field Edits

Messages identified in the Usage section will be rejected if:

- This field contains all **zeros** (reject code **0011**)
- The field is missing (reject code **0277**)
- The number in this field was changed in a repeat or response message—including those for reversals and confirmations (reject code **0514**)

4.9.5 Reject Codes

0011 = Invalid value (all **zeros** in field)

0277 = Field missing

0514 = Unsolicited response (value changed in response message)

0603 = Consistency error; response is inconsistent with request

4.10 Field 12—Time, Local Transaction

4.10.1 Attributes

fixed length

6 N, 4-bit BCD (unsigned packed); 3 bytes

format: hhmmss

4.10.2 Description

Field 12 contains the time the transaction takes place, expressed in the local time of the card acceptor location. The time is in *hhmmss* format, where: *hh* = hours, *mm* = minutes, and *ss* = seconds.

4.10.3 Usage

4.10.4 Field Edits

The value must be in the following format:

hh **00–23**

mm **00–59**

ss **00–59**

4.10.5 Reject Codes

0090 = Invalid value

0278 = Field missing

4.11 Field 13—Date, Local Transaction

4.11.1 Attributes

fixed length

4 N, 4-bit BCD (unsigned packed); 2 bytes

format: mmdd

4.11.2 Description

Field 13 contains the local month and day on which the cardholder originated the transaction. The date is in mmdd format, where: mm = month and dd = day.

For recurring payments, this field contains the cardholder-requested payment date.

- mm = **01** through **12**
- dd = **01** through **31**

4.11.3 Usage

4.11.4 Field Edits

Date format:

- mm must be **01–12**
- dd must be **01–31**

4.11.5 Reject Codes

0091 = Invalid value

0279 = Field missing

4.12 Field 14—Date, Expiration

4.12.1 Attributes

fixed length
4 N, 4-bit BCD (unsigned packed); 2 bytes
format: yymm

4.12.2 Description

Field 14 contains the year and the month after which the card expires. The date is in yymm numeric format, where yy = year (**00–99**) and mm = month (**01–12**).

The card expiration date is located in the card's magnetic stripe (field 35 or 45).

4.12.3 Usage

Field 14 must be included in authorization requests if the true expiration date is known. If present in an original request, the field is also present in advices and reversals. It is not required in responses.

NOTE

Issuers must use the value 4912 in the magnetic stripe track data to denote a nonexpiring card.

CPS: This field is required in card-present authorization requests. See the CPS/ATM and CPS/POS chapters in *V.I.P. System Services* and the latest edition of the *U.S. Interchange Reimbursement Fee Rate Qualification Guide*.

Manual Cash Advances: Field 14 is required.

CVV2: The card expiration date determines which CVV2 key to use.

File Processing: Not applicable to field 14. See "Field 73."

Check Acceptance: Not applicable to field 14. See "Field 73."

STIP and Switch Advices: Field 14 is present in 0120 or 0420 advices if it was in the request.

Visa Smart Debit/Visa Smart Credit: This field is present in 0120 offline decline advices.

Field 14 is a required field in manual key-entered authorizations.

Visa Token Service: The token expiration date is three years from the PAN expiration date.

Original Credit Transactions (U.S. Only): This field is required in 0100 requests and related advices.

Visa ReadyLink Load Transactions: This field must contain the expiration date of the Visa Prepaid card to which funds are being loaded.

MasterCard POS Transactions: In authorization requests, this field contains the expiration date of the device account number (token) that a cardholder's smart device generates for MasterCard's Digital Enablement Service.

Account Verification: This field is required for all Visa-branded cards.

4.12.4 Field Edits

If field 14 is present, it must contain a numeric date in *yymm* format, where *yy* = year (**00–99**) and *mm* = month (**01–12**).

If the year and month are other than **00–99** and **01–12** respectively, V.I.P. rejects requests (**0014** invalid value).

If, during CVV/iCVV validation, a problem is detected with the expiration date in the track data, Field 14 is checked. If Field 14 is not present, the request will be rejected with **0280**.

Relationship Between BASE I and SMS: For transactions from an SMS acquirer to a BASE I issuer that lack an expiration date in field 14 but contain a magnetic stripe in field 35, V.I.P. inserts field 14 in the message using the card expiration date from the track data. Conversely, V.I.P. does not remove field 14 from requests from a BASE I acquirer to an SMS issuer that include track data.

NOTE

For SMS-acquired BASE I reversal transactions, field 14 is not populated from field 35 (Track 2 data).

Check Acceptance: Not applicable to field 14.

4.12.5 Reject Codes

0014 = Invalid value

0280 = Field missing

0518 = Message type missing required field

4.12.6 STIP Edits

STIP responds to the acquirer with a field 39 response code **54** if the date is greater than the maximum date allowed and less than the current date. The date **4912** is considered a nonexpiring date.

NOTE

STIP cannot decode the date from nonstandard magnetic stripes.

Manual POS Authorizations and STIP: STIP processes manual authorization requests (field 22 = **01**) that lack field 14 expiration dates, as follows:

1. V.I.P. declines the request with response code **05** (do not honor) in field 39; field 44.1 is reset with the STIP reason code if all following conditions exist:
 - The issuer is unavailable or times out.
 - The transaction is anything other than MOTO/ECI (field 25 is not **08**), or the transaction is MOTO/ECI (field 25 is **08**), and the issuer BIN option requires that MOTO/ECI transactions include field 14.
2. V.I.P. inserts a response code **05** in field 39 and forwards the request to the issuer for approval if all following conditions exist:

- The request is below the issuer limit.
- The transaction is anything other than MOTO/ECI (field 25 is not **08**), or the transaction is MOTO/ECI (field 25 is **08**), and the issuer BIN option requires that MOTO/ECI transactions include field 14.

3. If the issuer approves the request, the issuer changes the response code accordingly.

Card-Not-Present Mail Order/Telephone Order or E-Commerce Transactions: Field 14 is required by STIP unless the issuer has established that STIP can process card-not-present transactions without expiration dates. If the issuer has declared that field 14 must be present in MOTO/ECI requests but the request does not contain the field:

- The request is forward-referred to the issuer, if the issuer is available.
- STIP declines the request with a field 39 response code equal to **05** if the issuer is unavailable.

STIP does not check expiration dates for reversals or Visa Electron card transactions.

4.12.7 Decline Responses

The decline response is **05** (issuer will not accept transaction without expiration date).

4.13 Field 18—Merchant Type

4.13.1 Attributes

fixed length

4 N, 4-bit BCD (unsigned packed); 2 bytes

4.13.2 Description

Field 18 contains a code describing the merchant's type of business product or service, also known as the merchant category code (MCC). These codes are based on the *Merchant Classification Code Guideline* available from the Bank Card Division of the ABA. Codes are listed in the *Visa Core Rules and Visa Product and Service Rules*, as amended by additions and changes published in *VisaNet Business Enhancements* and in Technical Letters for clients.

4.13.3 Usage

Field 18 is required in all authorization requests, balance inquiries, advices, and reversals related to a cardholder transaction. It is not used in responses.

If the acquirer uses the Merchant Central File Service (MCFS) to provide the correct code, this field may be omitted from the request.

ATM: The code must be **6011**.

CPS: This field is required in all authorization requests. See the CPS/ATM and CPS/POS chapters in *V.I.P. System Services* and the latest edition of the *U.S. Interchange Reimbursement Fee Rate Qualification Guide*.

Visa Cashback: Field 18 must contain a merchant category code. For U.S. transactions, the merchant category code must be **5411** (supermarkets).

VSDC PIN Change/Unblock Requests: The code must be **6011**; otherwise, the request will be rejected with reject code **0017**.

U.S. Tax Payment Transactions: The merchant category code must be **9311**. For other requirements, see the descriptions for fields 4, 43, 62.20, and 63.1.

STIP and Switch Advices: Field 18 is present in 0120 or 0420 advices if it was in the request, but it is not used in advice responses.

Visa Data Quality Improvement Program: This is a priority data field. Visa monitors priority data fields submitted in V.I.P. and BASE II POS transactions to ensure that the values are accurate, descriptive, and consistent between authorization and clearing transactions.

Original Credit Transactions: All MCCs are permitted for original credits except as follows. For basic and enhanced money transfer original credit transactions, the MCC must be **4829** or **6012**, where:

- **4829** = Wire Transfer Money Order (WTMO), when the transaction is initiated by a merchant.
- **6012** = Financial Institutions (Merchandise and Services), when the transaction is initiated by a financial institution.

Recipients of mVisa merchant payment original credit transactions must populate this field with a MCC; otherwise, V.I.P. rejects the transaction with reject code **0017**.

Additional requirements are specified in the descriptions for field 43 and field 104, usage 2.

Account Funding Transactions: The MCC must be **6012** for a person-to-person money transfer initiated by a financial institution with **BI** in Field 104, Usage 2, Dataset ID 57—Business Application Identifier, Tag 01, or V.I.P. rejects the request with Reject Code **0635**—Invalid Merchant Category Code.

NOTE

This applies to financial institution-initiated person-to-person money transfer U.S.-domestic AFTs only. There are no impacts to other AFTs.

Authorization Gateway Transactions—American Express: The Visa field number differs from the corresponding American Express field number. See the *Authorization Gateway Service Cross-Reference Guide*.

Authorization Gateway Transactions—MasterCard: The Visa field number differs from the corresponding data element number. See the *Authorization Gateway Service Cross-Reference Guide*.

NOTE

V.I.P. passes MCC values to and from the gateway as they were received. No field editing or MCC validation occurs.

Authorization Gateway Transactions—MasterCard AFD: The MCC in an 0100 status check must be **5542**, and the message must be submitted by an AFD merchant. See the *Authorization Gateway Service Cross-Reference Guide*.

Preauthorized Payment Cancellation Service (PPCS): The PPCS 0302 add/replace message provides an option to include this field for stop codes **R0** (stop specific payment) and **R1** (revoke authorization for payments). Field 18 and other optional fields, including field 42, field 43, and field 62.20, should not be present for stop code **R3** (preauthorized payment revocation order).

WARNING

This capability must be used with caution, because it will block all transactions to a cardholder's account coming from the specified MCC. Before using this feature, to avoid the risk of inadvertently stopping desired transactions, issuers must ascertain cardholder intent to use other service providers that may be in the same bill payment MCC.

Account Verification-Only: The merchant type can be any MCC (other than **6011**) for card-present and card-not-present requests.

Visa Fleet Cards: Visa Fleet transactions are submitted from fuel merchants with the following merchant category codes. (If a Visa Fleet card is used at other merchant types, V.I.P. designates the resulting transaction as a Visa Purchasing card transaction.)

Table 4-6 Fleet Merchant Category Codes

MCC	Description
4468	Marinas, Marine Service, and Supplies
5499	Miscellaneous Food Stores—Convenience Stores and Specialty Markets

Table 4-6 Fleet Merchant Category Codes (continued)

MCC	Description
5541	Service Stations (with or without ancillary services)
5542	Automated Fuel Dispensers
5983	Fuel Dealers—Fuel Oil, Wood, Coal, and Liquefied Petroleum

Status Checks: This service requires a specific MCC. See “Field 4.”

AFD Status Check and Acquirer Confirmation (U.S. Only): This field must contain **5542**, in the 0100 status check message and the 0120 acquirer confirmation advice.

Visa ReadyLink Load Transactions: In U.S.-only electronic fare load transactions, this field must contain the MCC for the merchant.

Check Acceptance: The value can be any MCC.

4.13.4 Field Edits

The value must be numeric. See the *Visa Core Rules and Visa Product and Service Rules*, the *VisaNet Business Enhancements*, and technical letters.

Field 18 is required in all 0100 and 0400 requests and in all 0120 and 0420 advices.

If this field is not present in an authorization, reversal, or related 0120 or 0420 advice and is not augmented by the Merchant Central File Service (MCFS), the transaction will be rejected with reject code **0283**.

Money Transfer Transactions: If an original credit with a business application identifier of **AA** or **PP** is received with an MCC other than **4829** or **6012**, V.I.P. rejects the transaction with reject code **0635**.

4.13.5 Reject Codes

0017 = Invalid value

0283 = Field missing

0635 = Invalid Merchant Category Code (MCC) for EPS or NSR transaction

4.14 Field 19—Acquiring Institution Country Code

4.14.1 Attributes

fixed length

3 N, 4-bit BCD (unsigned packed); 2 bytes

4.14.2 Description

Field 19 contains a code that identifies the country of the acquiring institution for the merchant or ATM.

The values for field 19 are the numeric codes listed in the appendix titled “Country and Currency Codes.” A leading zero is required to pad the first unused half-byte of this field. This zero is filler and is *not* part of the country code.

4.14.3 Usage

Field 19 is required in all requests and advices related to a cardholder transaction. The field is also required in responses, including 0130 responses to 0120 completion advices.

If the card acceptor and acquiring institution are in different countries, the card acceptor country code must be placed in Field 43—Card Acceptor Name/Location.

For U.S. military bases, embassies and consulates, and overseas traveling merchants, this field must be 840. Field 43, positions 39–40, must contain a country code, and field 59, positions 1–2, must be **99**.

CPS/ATM: This field does not apply to balance inquiries.

Check Acceptance: Field 19 is optional in the 0100 request. It is not used in the 0110 response.

0120 File Update Advices: Field 19 is must be present.

0302 and 0322 File Update Messages: This field is optional in 0302 requests except for PPCS 0302 requests, in which case it is conditional (see below). The field is not used in 0322 requests.

Preauthorized Payment Cancellation Service (PPCS): Field 19 is optional for stop code **R3** and mandatory for stop codes **R0** and **R1**. V.I.P. returns the field in 0312 responses. See “Field 127.PF.”

STIP and Switch Advices: Field 19 is present in 0120 or 0420 advices if it was in the request.

4.14.4 Field Edits

Field 19 is required in all requests related to a cardholder transaction. Transactions that do not include this field will be rejected with reject code **0306**. The value must be one of the 3-digit numeric codes listed in the appendix titled “Country and Currency Codes.”

4.14.5 Reject Codes

0033 = Invalid value

0306 = Field missing

4.14.6 File Edits

Preauthorized Payment Cancellation Service (PPCS): This field is mandatory for stop codes **R0** and **R1** in 0302/0312 transactions.

4.14.7 File Maintenance Error Codes

0591 = Field is missing.

4.15 Field 20—PAN Extended, Country Code

4.15.1 Attributes

fixed length

3 N, 4-bit BCD (unsigned packed); 2 bytes

4.15.2 Description

Field 20 contains a code that identifies the country of the card issuer institution. Values for this field are the numeric codes in the appendix titled "Country and Currency Codes". A leading zero is required to pad the first unused half-byte of this field. The zero is a filler, *not* part of the country code.

4.15.3 Usage

When applicable, field 20 is used in 0302 file maintenance inquiries and 0312 file maintenance responses.

For POS and ATM transactions, Visa drops this field from 0100 requests, 0110 responses, 0400/0420 requests, and 0410/0430 reversal responses.

Check Acceptance: Not applicable to field 20.

Auto-CDB: If this field is present in an 0322 advice it must be returned in the 0332 response.

4.15.4 Field Edits

The value must be one of the 3-digit numeric codes listed in the appendix titled Country and Currency Codes.

4.15.5 Reject Codes

0035 = Invalid value

4.15.6 File Maintenance Error Codes

0586 = Invalid value

4.16 Field 22—Point-of-Service Entry Mode Code

4.16.1 Attributes

fixed length

4 N, 4-bit BCD (unsigned packed); 2 bytes

4.16.2 Description

Field 22 contains a 4-digit code indicating the method used to enter the account number and card expiration date into the V.I.P. System (positions 1 and 2) and, if an electronic terminal is used, the capability of the terminal to capture online PINs (position 3) for transactions processed through VisaNet. This field is fixed-length with three subfields. The codes for each of the subfields are provided in [Table 4-7](#) of the Valid Values section. The position assignments are as follows:

Positions:		3	4
1– 2			
PAN/date entry mode	PIN entry capability	Fill	
Byte 1	Byte 2	n/a	

Positions 1–2, PAN and Date Entry Mode: A 2-digit code that identifies the method used to enter the cardholder account number and card expiration date. This code specifies whether the entire magnetic stripe is included in an authorization or financial request.

Position 3, PIN Entry Capability: A 1-digit code that identifies the capability of terminal to capture PINs. This code does not necessarily mean that a PIN was entered or is included in this message.

Position 4, Fill (Unused): This 1-digit subfield is zero-filled. This requirement is an exception to the general rule of using a leading zero to fill a field.

4.16.3 Usage

Field 22 is required in all 0100 authorization requests and 0100 account verification requests. It is also used in 0100 cash disbursements and balance inquiries. It is not used in responses. The value from the original authorization is included in 0120 advices, 0400 reversals, and 0420 reversal advices.

NOTE

The coding in this field is related to position 2 of Field 60—Additional POS Information, which describes the capability of the terminal used.

Mail/Phone Order and E-Commerce: The first two positions in a request should be **01** for mail/phone order and e-commerce transactions.

Plus: Acquirers can enter **02** or **90** for Plus card transactions to request CVV processing.

CPS: See the CPS/ATM and CPS/POS chapters in *V.I.P. System Services* and the *U.S. Interchange Reimbursement Fee Rate Qualification Guide*.

ATM: For balance inquiries, the POS entry mode code in positions 1 through 4 can be **0210**, **9010**, **0510** or **9510**.

Visa Cashback: For the U.S. only, this field must contain **90** in positions 1–2 or the transaction will be denied with field 39 = **05** (do not honor).

VSDC: The first two positions must be **05**, **07**, or **95**. Code **07** indicates that the transaction is a contactless chip transaction.

PIN Change/Unblock: The first two positions must be **05** or **95**.

Visa payWave Transactions: The first two positions must be **07** or **91**.

Visa Token Service: **07** (contactless device-read-originated using VSDC chip data rules) or **91** (contactless device-read-originated using magnetic stripe data rules) is required for iCVV convert service, early chip data, and full chip data for messages with token data.

E-Commerce messages containing token data must be submitted with **01** (manual key entry).

Merchant-Initiated Transactions: Merchant-initiated messages submitted on behalf of cardholders using credentials on file must be submitted with **10** in positions 1–2. Credential on file indicator **10** must be supported in:

- 0100 authorizations
- 0120 advices

Visa Token Convert Service: This field is required for application-based E-Commerce and NFC Visa payWave messages using the Visa Token Convert Service.

Visa Data Quality Improvement Program: This is a priority data field. When this field is submitted in V.I.P. and BASE II POS transactions, Visa monitors positions 1–2 and position 3 to ensure the values are accurate and consistent between authorization and clearing transactions.

Authorization Gateway Transactions—MasterCard AFD: In an 0100 status check, the code in this field must be **05**, **07**, **90**, or **91**. The full magnetic strip must be read and transmitted, or the unaltered chip data must be sent. See the *Authorization Gateway Service Cross-Reference Guide*.

Cashback Service (Australia): VSDC chip cards are required for cashback transactions in Australia. Hence, positions 1–2 of this field must contain a value of **05**, **07**, **91**, or **95**.

AFD Status Check and Acquirer Confirmation (U.S. Only): This field of the status check request must contain **05**, **07**, **90**, or **91**.

B2B Virtual Payments: Positions 1–2 must contain a value of **01**, otherwise V.I.P. declines the transaction with response code **57**.

4.16.4 Field Edits

Field 22 is required in all 01xx and 04xx requests and advices.

If field 22 is not present in a message where it is required, including card-not-present (CNP) and mail order/telephone order (MOTO) transactions, the message will be rejected with reject code **0285**.

Manual (key entry) processing edits apply to all original and reversal requests if field 22 is not present in the message, or if it is present with zeros (**00**).

If field 22, position 3 = **2** (terminal cannot accept PINs), but field 52 (PIN data) is present in an 0100 POS or ATM authorization or balance inquiry request, the message will be rejected with reject code **0592**.

Prepaid Transactions: In a non-U.S. original prepaid load request, if positions 1–2 are **00** or **01**, the transaction is rejected with code **0592**.

4.16.5 Reject Codes

0142 = Magnetic stripe data missing or acquirer has not successfully completed testing when field 22 = **90**.

0285 = Field missing.

0592 = Value is inconsistent with field 3 or field 52.

4.16.6 Valid Values

Table 4-7 Field 22 POS Entry Mode Codes

Code	Definition	Usage
Positions 1–2: PAN and Date Entry Mode		
00	Unknown or terminal not used	Use when account number and expiration date capture method number not known or when terminal not used to capture card data, for instance, when transaction is paper-based.
01	Manual key entry	Indicates card data not obtained from chip or magnetic stripe, for instance, when transaction is mail/phone order, e-commerce, recurring, voice-authorized, or when chip or magnetic stripe cannot be read.
02	Magnetic stripe read; CVV checking may not be possible Plus: Exact Track 2 contents read, but transaction not eligible for CVV checking	VisaNet uses to indicate magnetic-stripe data may be unreliable and accurate CVV processing may not be possible. For Plus, 02 means full, unaltered contents of magnetic stripe transmitted to issuer; and transaction not eligible for CVV checking.
03	Optical code	Used for QR transactions
04	Reserved for future use	Not used for Visa and Visa Electron.
05	Integrated circuit card read	Contact integrated circuit card read using VSDC chip data rules; Online CAM authentication method; iCVV checking possible.
06	Reserved for future use	Not used for Visa and Visa Electron.
07	Contactless payment using VSDC chip rules	Contactless device-read-originated using VSDC chip data rules; Online CAM authentication method; iCVV checking possible.
10	Credential on file	Merchant initiates transaction for cardholder using credentials stored on file.

Table 4-7 Field 22 POS Entry Mode Codes (continued)

Code	Definition	Usage
90	Magnetic stripe read and exact content of Track 1 or Track 2 included (CVV checking possible).	Indicates full, unaltered content of magnetic stripe transmitted to acquirer or issuer and CVV checking possible.
91	Contactless payment using magnetic stripe data rules	Contactless device read originated using magnetic stripe data rules; dCVV checking is possible; Online CAM checking is possible for MSD CVN 17 only.
95	Integrated circuit card; CVV or iCVV checking may not be possible	Used by VisaNet to indicate magnetic stripe image (MSI) may be unreliable and accurate CVV or iCVV processing may not be possible. V.I.P. may change field value to 95 when acquirer or issuer inactive for CVV or iCVV processing.
96	Stored value from pre-registered checkout service	Used by acquirers only when it is needed to qualify transactions for defined card fee programs. Issuers must be able to receive code in field 22.
Position 3: PIN Entry Capability		
0	Unknown	Indicates PIN capability of POT terminal cannot be determined.
1	Terminal can accept PINs	Indicates POT terminal can accept and forward online PINs.
2	Terminal cannot accept PINs	Indicates POT terminal cannot accept and forward online PINs.
8	Terminal PIN pad down	Indicates PIN capability of POT terminal not functioning.
9	Reserved for future use	Not used for Visa and Visa Electron.
Position 4: Fill		
0	Unused	Not used for Visa and Visa Electron.

4.17 Field 23—Card Sequence Number

4.17.1 Attributes

fixed length

3 N, 4-bit BCD (unsigned packed); 2 bytes

4.17.2 Description

Field 23 contains a number assigned to a card when two or more individual cards are associated with the same primary account number, thus enabling issuers to distinguish among different cards linked to the same account. The sequence number can also act as a tracking tool when reissuing cards.

For example, the initial card is issued with sequence number one, and when it expires, the card can be reissued with sequence number two, and so on.

Although not part of the cryptogram, the sequence number is used by the issuer or Visa to derive the Unique Derivation Key (UDK) from the Master Derivation Key (MDK) when using the Online Card Authentication Method (Online CAM).

This field applies to VSDC full data transactions and Contactless Magnetic Stripe transactions. If the sequence number is present on the chip card, acquirers must include it without modification in requests to avoid failing Online CAM. If the card sequence number is not present on the chip card, the acquirer may exclude the field entirely from the request message or include it with all **zeros**.

4.17.3 Usage

VSDC: If the card sequence number is present on the chip card, the field must be included in the following messages:

- 0100 authorization, account verification requests, and responses.
- 0100 cash disbursements, balance inquiries and their responses.
- 0120 stand-in advices.

Contactless Magnetic Stripe: If the card sequence number is received by the terminal from the chip card, the field should be included in the following messages:

- 0100 authorization requests and responses.
- 0120 stand-in advices.

Visa iCVV Convert: V.I.P. removes this field before forwarding chip-based requests to participating issuers.

Visa Token Service: This field is required for early and full chip data and will contain the PAN sequence number of the token.

Visa Token Convert Service: V.I.P. removes this field before forwarding requests to participating issuers.

4.17.4 Field Edits

If this field is present, it must be numeric.

This field is right-justified and zero-filled when it contains less than three digits. The zero is filler and not part of the sequence number.

4.17.5 Reject Codes

0092 = Invalid value

4.18 Field 25—Point-of-Service Condition Code

4.18.1 Attributes

fixed length

2 N, 4-bit BCD (unsigned packed); 1 byte

4.18.2 Description

Field 25 contains a code identifying transaction conditions at the point of sale or point of service. For messages that follow an original request, this code identifies the type of processing being done (for example, code **00** for balance inquiries).

4.18.3 Usage

Field 25 is required in all POS and ATM 0100 authorization requests and related 0400 reversals. The field is also required in 0120 and 0420 advices.

- For mail/telephone transaction authorization requests and their reversals, the code must be **08**.
- For ATM (field 18 = **6011**) cash withdrawals or cash advances, the code can be **00** or **02**. For balance inquiries, the code must be **00**.

Issuers must return this field in all responses. If the code in the response does not match what was in the request, Visa will restore the original value.

Preauthorization Requests: Only SMS acquirers initiate 0100 preauthorization requests. A authorization only issuer can receive these requests and identify them by the presence of a field 63.2 time limit, provided the issuer has elected to receive the field. An 0100 preauthorization request contains **00** in field 25. If the authorization only issuer has elected to receive the 0120 completion advice, field 25 contains **06**.

Verification Requests: This subsection applies to various types of verification requests. The following points apply:

- Use any code for authorization requests that include address verification data in field 123. Address verification requests support card-present and card-not-present requests in all merchant categories with or without authorization amount requests.
- Use code **51** for account verification requests and address verification requests without authorization. Code **51** is for Visa and MasterCard transactions only. This code is invalid for Crediário eligibility inquiry messages.

NOTE

*Although MasterCard AVS-only transactions are no longer supported, code **51** is used in account status inquiries. See "Authorization Gateway Transactions—MasterCard POS Account Status Inquiry."*

CVV2 Verification-Only Requests: These requests are used to check CVV2 data in a card-present transaction at the point of sale. This is useful when the magnetic stripe cannot be read. Acquirers submit CVV2 verification-only 0100 request messages, with a condition code of **51** in this field, a transaction amount of zero in field 4, and the CVV2 data to be verified in field 126.10.

Issuers that perform their own CVV2 validation must be prepared to receive CVV2 verification-only requests. Issuer 0110 responses must contain a transaction amount of zero in field 4, a response code of **85**, and a CVV2 result value in field 44.10. If V.I.P.

performs CVV2 validation on behalf of the issuer, V.I.P. will check the CVV2 in all eligible requests and provide results data in responses.

CPS: This field is required in all authorization requests. Recurring direct marketing payment transactions require code **08**. See the CPS/ATM and CPS/POS chapters in *V.I.P. System Services* and the *U.S. Interchange Reimbursement Fee Rate Qualification Guide*.

E-Commerce: Acquirers must use code **59** to indicate e-commerce over an open network, for example, the Internet. V.I.P. processes e-commerce transactions as MOTO/ECI when field 25 = **59**. V.I.P. forwards the value to issuers only if they have successfully tested to receive it. Otherwise, V.I.P. converts the **59** to **08** and drops field 60.8 before the request is sent to the issuer. Issuers should return field 25 in the response as it was received in the request.

VSDC PIN Change/Unblock Requests: This field must contain **00**.

Check Acceptance: Field 25 is used in 0100 requests but is not returned in 0110 responses. Code 10 indicates that customer identity has been verified.

0120 File Update Advices: Field 25 is present. It is zero-filled for 0120 Exception File updates.

STIP and Switch Advices: Field 25 is present in 0120 or 0420 advices.

Product Eligibility Inquiry (U.S. Only): The code in this field must be **51** (verification). Other requirements are specified in the descriptions for fields 3, 4, and 62.23.

Visa Data Quality Improvement Program: This is a priority data field. Visa monitors priority data fields submitted in V.I.P. and BASE II POS transactions to ensure that the values are accurate, descriptive, and consistent between authorization and clearing transactions.

Authorization Gateway Transactions—MasterCard AFD: In 0100 status checks and 0120 confirmation advices, the code in this field must be **00**. See the *Authorization Gateway Service Cross-Reference Guide*.

Authorization Gateway Transactions—MasterCard POS Account Status Inquiry: Acquirers must send a value of **51** in this field and a zero amount in field 4. See the *Authorization Gateway Service Cross-Reference Guide*.

AFD Status Check and Acquirer Confirmation (U.S. Only): This field must contain a value of **00** in the 0100 status check request and in the 0120 acquirer confirmation advice. The issuer must send an associated 0130 response message with a response code of **00** in field 39.

In 0120 acquirer confirmation advice messages for Visa AFD transactions, acquirers must not send the value of **06** (preauthorized request) in this field.

Visa Token Service: This field must contain a value of **00** (normal transaction of this type) or **06** (preauthorized request) in messages containing token data.

This field is required for e-commerce authorization and full financial messages containing token data.

Mobile Location Confirmation Service: This field must contain a value of **00** (normal transaction of this type).

4.18.4 Field Edits

The value must be numeric.

This field is mandatory in request messages from acquirers. Transactions that do not include this field are rejected with reject code **0284**.

If field 25 has a POS-only value of 71 in an ATM cash disbursement transaction, the transaction will be rejected with code **0018**.

Authorization requests that include a request to verify an address must include field 123. Field 25 can contain any code except **51**, and field 18 can contain any value. Address verification-only requests must include field 123, field 25, which must be **51**, and field 18, which can contain any value.

For PIN management transactions, if the issuer does not send field 25 in a response, V.I.P. rejects it with reject code **0284**.

Issuer responses that do not contain field 25 will be rejected with reject code **0284**.

Prepaid Transactions: In a non-U.S. original prepaid load request, if the value in this field is **05**, the transaction is rejected with code **0592**.

Recurring Payment Processing: V.I.P. rejects recurring transactions submitted with POS condition code **73** with Reject Code **0018**—Invalid Value.

4.18.5 Reject Codes

0592 = Value inconsistent with field 3.

0018 = Invalid value.

0284 = Field missing

4.18.6 Valid Values

The following table lists codes acquirers should use. V.I.P. permits other codes defined by ISO 8583. Issuers should be prepared to receive ISO 8583-defined codes. Code **10** applies to check acceptance requests only.

Table 4-8 Field 25 POS Condition Codes

Code	Definition	Usage
00	Normal transaction of this type	In authorization requests for Visa and Visa Electron, 00 indicates card and cardholder are present at merchant outlet (face-to-face transaction).
01	Cardholder not present	Not used for Visa Electron.
02	Card and cardholder present, PIN entered	Indicates transaction originated at ATM or unattended cardholder-activated environment, and PIN entered.
03	Merchant suspicious of transaction or card	Indicates transaction may be occurring on lost, stolen, or counterfeit card.

Table 4-8 Field 25 POS Condition Codes (continued)

Code	Definition	Usage
05	Cardholder present, card not present	Indicates cardholder present at merchant outlet, but card not present. Under these circumstances, cardholder gave merchant card data, maintained on file for billing. For instance, transaction at automated fuel dispenser, toll road, or toll bridge initiated with merchant proprietary proximity device.
06	Completion advice	Preauthorization completion advices contain 06 .
08	Mail/phone order/recurring transaction	Indicates transaction originated by mail or telephone. 08 also identifies ecurring transaction when: <ul style="list-style-type: none"> • Field 126.13 contains R, or • Field 60.8 contains 02.
10	Customer identity verified (used for check acceptance only)	Not used for Visa and Visa Electron.
11	Suspected fraud	n/a.
12	Security	n/a.
51	Request for account number verification without authorization, account number verification and address verification without authorization, or account number and CVV2 verification without authorization Request for product eligibility information without authorization MasterCard POS account status inquiry	Requests address verification, account number verification, or CVV2 verification without requesting authorization. Requests product eligibility without requesting authorization. Indicates MasterCard POS account status inquiry submitted with zero in field 4. Not used for Crediário eligibility inquiry messages.
59	E-commerce request through public network	Internet transaction.
71	Card present, magnetic stripe cannot be read (key-entered)—U.S. only	Account information obtained by key entry because POT terminal couldn't read magnetic stripe (magnetic stripe read failure). NOTE: <i>Code 71 applies to POS only.</i>

4.19 Field 26—Point-of-Service PIN Capture Code

4.19.1 Attributes

fixed length

2 N, 4-bit BCD (unsigned packed); 1 byte

4.19.2 Description

Field 26 contains a value indicating the maximum number of PIN characters that can be accepted by the point-of-service device.

4.19.3 Usage

VisaNet, Plus: Field 26 is used in requests and advices with PINs only if Field 52—PIN Data, is present, and the point-of-sale or point-of-service device cannot accept the standard maximum PIN length of **12** (as defined in ISO/TC68/SC2/WG6,draft proposal 9546/1). It is not used in responses or in advice responses. When Visa verifies the PIN as part of the PIN Verification Service, this field is deleted from the request rather than being forwarded to the issuer.

Check Acceptance: Not applicable to field 26.

STIP and Switch Advices: Field 26 is present in a 0120 advice if it was in the request.

4.19.4 Field Edits

VisaNet, Plus: If field 26 is present, the value must be **00** (unknown or unspecified), or between **04** and **12**. A value of **00** means that the number of digits the acquirer can accept is unknown or unspecified.

4.19.5 Reject Codes

0070 = Invalid value

4.20 Field 28—Amount, Transaction Fee

4.20.1 Attributes

fixed length
1 AN, EBCDIC +
8 N, EBCDIC
total: 9 bytes

4.20.2 Description

Field 28 contains the following types of fees, for informational purposes only:

- Acquirer-assessed ATM transaction access fee.
- Money transfer service fee in an account funding transaction (AFT).

NOTE
This capability does not apply to Visa Europe clients connected to the Visa Europe Authorisation Service.

- Surcharge assessed on MasterCard credit purchase transactions by merchants in the U.S. and U.S. territories.
- Surcharge assessed on consumer and commercial POS transactions by merchants in the U.S. and U.S. territories.
- Manual cash access fees.

The fee designated in field 28 is included in the field 4 amount and is in the same currency as the field 4 amount. The currency code in field 49 applies.

The field 28 position assignments are as follows:

Positions:	
1	2–9
Prefix	Surcharge Amount
Byte 1	Bytes 2–9

Position 1, Prefix: This value is used to specify that the surcharge is a credit or debit to a cardholder account. Except for AFT money transfer service fees, the values are:

- C** = Credit to cardholder
- D** = Debit to cardholder

For AFT money transfer service fees, this subfield must contain a value of **D** for originals, reversals and adjustments.

Positions 2–9, Surcharge Amount: To determine the amount of a purchase, this value is added to or subtracted from the amount in field 4 of the request.

When field 28 is used in an AFT request, this subfield contains the optional AFT money transfer service fee.

The number of decimal places assumed for this field depends on the currency. If that currency is defined with three decimal places, the last digit of field 28 must be **zero**. See the appendix titled “Country and Currency Codes” for currency codes and implied decimal places.

4.20.3 Usage

Visa and Plus ATM : Except as noted, field 28 is required in all international and domestic Visa and Plus ATM transactions, including original requests and their reversals. If an access fee is not assessed on an ATM transaction, the field must be present and populated with zeros.

NOTE

Visa Europe acquirers connected to Visa Europe Authorisation Services are not required to submit field 28.

The access fee amount contained in this field must be included in field 4 and also in field 95. Field 28 is an information-only field. Although acquirers must submit this field in ATM requests, its receipt is optional for issuers, except in the U.S., where issuers must receive it. The field is present in 0120 or 0420 STIP advices if it was in the request.

For reversals, the value should be the same as that in the original, because it is the amount in field 4 that will be reversed.

NOTE

If an access fee is attempted on a debit POS transaction, the subsequent advice for the declined transaction may contain a field 39 response code of B1 (access fee amount not permitted on Visa cards).

Field 28 is for informational rather than for settlement purposes. The amount in field 28 must be added to or subtracted from the amount in field 4 in the request to determine the amount dispensed.

A value of **D** designates that the access fee is a debit to the cardholder's account.

EXAMPLE

A cardholder requests US\$20 and the acquirer imposes an access fee of US\$1. Field 4 would contain US\$21, and field 28 would contain a D in byte 1 and US\$1 in the amount portion of the field. The cardholder receives US\$20 from the ATM but the cardholder's account is debited for US\$21.

A value of **C** is used in the request when the access fee is a credit to the cardholder, such as if the acquirer is paying the cardholder as an incentive to use the ATM.

EXAMPLE

A cardholder requests US\$20 and the acquirer access fee is a US\$1 credit. Field 4 would contain US\$19, and field 28 would contain a C in byte 1 and US\$1 in the amount portion of the field. The cardholder receives US\$20 but the cardholder's account is debited for US\$19.

ATM Message Requirements: Field 28 must be included in certain messages with the access fee or zero-filled and submitted as a credit or debit as defined. The following table shows messages that must include field 28, the value in the prefix, and the amount that must be submitted.

Table 4-9 Message Requirements for Field 28

Message Type	Amount in Field 28	Value in Field 28 Prefix
0100 Authorization	Must contain the access fee amount or zero-filled and be submitted as a debit	D

Table 4-9 Message Requirements for Field 28 (continued)

Message Type	Amount in Field 28	Value in Field 28 Prefix
0100 Balance Inquiry	Must be zero-filled and submitted as a debit or credit NOTE: <i>The access fee is not supported for these transactions. V.I.P. will drop the field before delivery to the issuer.</i>	D or C
0400/0420 ATM Cash Transaction Reversal	Must contain the access fee amount from the original request NOTE: <i>Acquirers may retain the field 28 prefix value from the original. Issuers must be prepared to receive the value of C or D.</i>	C
0420 ATM Partial Reversal NOTE: <i>This transaction is supported for BASE I and V.I.P. Authorization-Only endpoints.</i>	Must contain the access fee amount from the original request and be submitted as a debit	D

AFT Money Transfer Service Fees: When field 3 contains a value of **10** (account funding), field 28 contains optional AFT money transfer service fees in the following messages:

- 0100 authorization requests.
- 0120 completion advices.
- 0400 reversals and 0420 reversal advices.

NOTE

*Unlike ATM transactions, the values for each of the subfields in field 28 for AFT service fees must be the same in reversals as in original messages. The Prefix subfield must contain **D** for originals and reversals.*

The field is not used in 0110 or 0410 responses.

When field 28 is present in an AFT request message, acquirers and originators include its value in the field 4 amount.

If the issuer has chosen not to receive field 28 in AFTs, the issuer will be unable to determine what portion of field 4 is the AFT service fee. Issuers should not return field 28 in responses.

AFT foreign exchange markup fees are carried in field 54. See "Field 54."

MasterCard POS Credit Purchase Transactions: In 0100 authorizations originated in the U.S. and U.S. territories by merchants that assess a surcharge for MasterCard credit purchase transactions, this field must contain the merchant-assessed surcharge. For transactions containing a surcharge, the value in each field 28 subfield must be the same in reversals as in the original messages. The Prefix subfield must contain the value of **D** in originals and reversals.

Surcharge Amount in MasterCard Transactions: If present, acquirers must include the surcharge amount in this field for authorization advice messages. Position 1 of this field must be a **C** or **D**; otherwise, V.I.P. rejects the transaction with reject code **0134**.

Surcharge Amounts in U.S. POS Transactions: Acquirers that support merchants that assess surcharges on transactions originated in the U.S. and U.S. territories are required to forward surcharge information in this field of authorizations and reversals (including partial reversals).

For transactions containing a surcharge, the Prefix subfield must contain **D** in originals and reversals. Visa forwards this field to issuers that have successfully tested their systems to receive surcharge information, and when:

- The request contains surcharge information.
- The request is submitted on network 0002.

Plus Alliance—ATM Surcharge Free Transactions: This field must contain a surcharge amount of zero. Acquirers that support transactions originating from surcharge-free Plus Alliance ATMs must submit this field in 0100 authorization requests and 0400/0420 reversals (including partial reversals). V.I.P. includes this field in 0120 STIP advices and 0420 switch advices.

Manual Cash Disbursement: Acquirers must include access fee amount information in this field. Field 28 is included in the following manual cash disbursement messages:

- 0100 authorization requests and 0120 STIP advices.
- 0400 reversals and 0420 STIP advices.

4.20.4 Field Edits

The prefix must be **D** to designate that the access fee is a debit to a cardholder's account or **C** to designate that the access fee is a credit to a cardholder's account. The eight digits for the fee amount must be numeric; all **zeros** allowed.

Except as noted, if an acquirer submits an international or domestic Visa/Plus ATM authorization without field 28, the message will be rejected with reject code **0308**.

NOTE

Visa Europe acquirers connected to Visa Europe Authorisation Services are not required to submit field 28.

4.20.5 Reject Codes

0134 = Invalid value

0308 = Field missing

0623 = Field present when not allowed

4.21 Field 32—Acquiring Institution Identification Code

4.21.1 Attributes

variable length

1 byte, binary +

11 N, 4-bit BCD (unsigned packed); maximum 7 bytes

4.21.2 Description

This code identifies the financial institution acting as the acquirer of this customer transaction. The acquirer is the client or system user that signed the merchant, installed the ATM or unattended cardholder-activated environment, or dispensed cash.

The ID can be a Visa BIN or another code that identifies the financial institution. Visa BINs are usually 6 digits, but the code may be a maximum 11 digits long. For ATM requests only, U.S. clients use 6-digit Routing IDs (RIDs) that begin with a **2**. Codes other than Visa BINs can be supported. For instance, a routing and transit number that complies with the ISO 7812 standard may be used by prearrangement with Visa.

For processing centers handling multiple acquirers, this code identifies the individual acquirer or system user, not the overall processing center.

The value specifies the number of digits in the ID code. If the ID code contains an odd number of digits, a leading zero is required to pad the first unused half-byte of data. Because this zero is a filler—and not part of the ID—it is *not* counted for the length subfield.

4.21.3 Usage

This acquirer BIN field is a key data element used to match a message with others in a given transaction set. The value in the original request must be the same in the response and all other messages in that set. It is used in the following messages:

- 0100 authorizations, including incremental authorizations and ATM balance inquiries; 0110 responses; 0120 advices
- Acquirer-generated 0300 Merchant Central File maintenance requests and their 0310 responses; 0322 file update advices
- 0400 reversals, 0410 responses, and 0420 advices

The value in field 32 should be the Visa BIN of the client that signed the merchant, installed the ATM/ADM, or dispensed cash.

In acquirer-generated requests involving the Merchant Central File Service, field 32 must contain a 6- to 11-digit Visa BIN as listed in the V.I.P. system tables.

PIN Processing: The BIN in field 32 identifies the one associated with the Acquirer Working Key (AWK) used to encrypt the PIN. If the AWKs are not present in the BIN, V.I.P. uses the keys from the source PCR.

CVV/iCVV: Field 32 must contain the BIN of a BASE I participating acquirer or the transaction will be downgraded.

File Processing: Field 32 is used in all 0300 file update and inquiry requests. The BIN in this field is a key in accessing the Merchant Central File's acquirer information. This value is returned in the 0310 response.

The acquirer originating a file update or inquiry must be the one responsible for this merchant data.

For Exception File updates, this field usually indicates which Visa service initiated the file update. In an Enhanced Authorization Response advice, this field contains the issuer ID rather than the acquirer ID from the 0100 request. The values are:

GCAS = **400085**

Auto-CDB = **400004**

Check Acceptance: Field 32 is required in the 0100 requests and 0110 responses.

0120 and 0322 File Update Advices: Field 32 is present in these advices.

STIP and Switch Advices: Field 32 is present in 0120 or 0420 advices.

Authorization Gateway Transactions—Discover: Acquirers can include a Discover-assigned ID in field 32 of authorization messages destined to Discover. The ID is also included in the 0110 response message returned to acquirers.

NOTE

Acquirers should confirm that the Discover-assigned ID has been set up in Visa systems as a Discover BIN.

Authorization Gateway Transactions—MasterCard: Acquirers include their six-digit Visa BINs in Visa field 32, which V.I.P. uses to retrieve the MasterCard ICA for DE 32.

NOTE

Acquirers must set up and confirm their Visa BIN-to-MC ICA number relationships in the Visa system tables.

See the *Authorization Gateway Service Cross-Reference Guide*.

Authorization Gateway Transactions—MasterCard AFD: In an 0120 confirmation advice, the code in this field must match the value in the original 0100 request. See the *Authorization Gateway Service Cross-Reference Guide*.

AFD Status Check and Acquirer Confirmation (U.S. Only): The 0100 status check request and the 0120 acquirer confirmation advice must contain the same value in this field.

4.21.4 Field Edits

Field 32 is required in all 01xx, 0300 and 0310, and 04xx messages. The entry cannot be all **zeros**. The value in the length subfield must not exceed 11 and must be numeric. Visa BINs are 6- to 11-digits in length.

NOTE

Acquirers connected to the V.I.P. System must use values recognized by Visa in this field; messages containing unrecognized values will be rejected with reject code 0021.

For all ATM requests, including international CPS/ATM requests, if field 33 is not present in the message, field 32 must contain a 6-digit Visa BIN Routing ID (RID) or a 6- to 11-digit Visa BIN; otherwise, the message will be rejected with reject code **0021**.

If a PIN is present, the header field 6 source station ID must be authorized to use the source PCR. Violation of this requirement results in reject code **0021**.

4.21.5 Reject Codes

0020 = Invalid length

0021 = Invalid value

0287 = Field missing

0514 = Unsolicited response (value changed in response message)

0531 = Non-domestic transaction

4.21.6 File Edits

The value in an 0300 file update request must be a 6-to 11-digit Visa BIN.

4.21.7 File Maintenance Error Codes

0807 = Invalid value

4.22 Field 33—Forwarding Institution Identification Code

4.22.1 Attributes

variable length

1 byte, binary +

11 N, 4-bit BCD (unsigned packed); maximum 7 bytes

4.22.2 Description

Field 33 contains a code identifying the institution forwarding a request to the VIC. The code can be a Visa BIN or a prearranged institution ID. The length value specifies the number of ID code digits. If the ID code contains an odd number of digits, a leading zero is required to pad the first unused half-byte of data. Because this zero is a filler and not part of the ID, it is *not* counted for the length subfield.

In U.S. domestic-only PIN transactions for cash disbursements or balance inquiries, field 33 contains the processing center ID. It is required only when the field 32 value does not point to the Acquirer Working Key (AWK). For example, if an acquirer supports several financial institutions but uses only one AWK for outgoing PINs, the acquirer's ID used at the VIC to determine the AWK is placed in this field.

4.22.3 Usage

Field 33 is required in 0100 messages only when the ID in field 32 cannot identify the encryption AWK source.¹ When field 33 is present in an original request, it is also present in related advices. It is recommended that this field be included in subsequent reversals. V.I.P. drops field 33 from 0400 requests to issuers.

NOTE

When field 32 and field 33 identify an encryption AWK source, V.I.P. uses the field 33 value.

When present in a request or advice message, the field must contain a Visa BIN or prearranged institution ID.

4.22.4 Field Edits

The length subfield value must not exceed 11.

If an authorization or reversal message is submitted with an invalid value in this field, Visa rejects the message.

4.22.5 Reject Codes

0033 = Field missing

0056 = Invalid length

0057 = Invalid value

1. If an acquirer wants to use this field to identify the AWK used for PIN encryption, they must contact their Visa representative and make prior arrangements.

4.23 Field 35—Track 2 Data

4.23.1 Attributes

variable length

1 byte, binary +

37 N, 4-bit BCD (unsigned packed); maximum 20 bytes

4.23.2 Description

Field 35 contains the information encoded on Track 2 of the magnetic stripe, including field separators but excluding beginning and ending sentinels and LRC characters.

NOTE

The Track 2 delimiter/separator character (^) must be encoded as X'D' (binary 1101).

The length is the total number of hexadecimal digits (not bytes). If this field's Track 2 data equals an odd number of digits, one leading zero is required in the first unused half-byte of data for padding.

NOTE

*The length indicated above includes the field delimiter but not leading **zeros**.*

See the *Payment Technology Standards Manual*.

4.23.3 Usage

Field 35 is used in original authorization requests but not in responses, advice responses, or reversals. Its presence depends on the card program, and it is present only when track 2 data has been read at the terminal; otherwise, it must be omitted.

VisaNet: The following ATM transactions require field 35 (Track 2):

- 0100 authorization, CPS/ATM with PIN
- 0100 ATM stand-alone balance inquiry

If Track 1 and Track 2 are present in a message, V.I.P. gives preference to Track 2.

Non-Visa Card: Track 2 is used in magnetic stripe-based requests. Field 35 must contain Track 2 data in its entirety.

Visa Card: Used for magnetic stripe-based POS transactions and should contain the entire stripe content. For all Visa card-present transactions, if field 22 = **90**, field 35 or field 45 must contain the entire stripe.

CPS: This field or field 45 must be present in non-key-entered card present authorization requests. For international CPS information, see the CPS ATM and CPS POS chapters in *V.I.P. System Services*, and for U.S. CPS programs, see the latest edition of the *U.S. Interchange Reimbursement Fee Rate Qualification Guide*.

CVV2: If field 35 and field 126.10 (CVV2 data) are present in the request, BASE I removes field 126.10.

V.I.P. does not support track data in the following nonoriginals:

VSDC: If field 22 contains **05**, **07**, or **95**, it must contain track data from the chip image, not the magnetic stripe. If Track 1 and Track 2 are present, V.I.P. gives preference to Track 2.

Visa Token Service: Contains token data. Issuers can receive track data instead of token data in this field. Required for application-based e-commerce and NFC Visa payWave messages using Visa Token Service.

Visa Cloud-based payment token data elements are:

- Token
- Token expiration date
- Service code
- Issuer discretionary data in *hhhhccaaaaxxx* format where:
 - hhhh* = timestamp received as part of account parameter index
 - cc* = counter received as part of account parameter index
 - aaaa* = application transaction counter
 - xxx* = magnetic-stripe verification value

If request is submitted with token data, participating issuers must support:

- iCVV Convert Service: This field contains the cardholder PAN, card expiration date and service code for magnetic stripe, and the CVV according to issuer configuration.
- Full and Early chip: This field contains the token, token expiration date, and the dCVV or iCVV based on the token.

VisaNet-generated track data elements are:

- Primary account number (PAN)
- PAN expiry date
- Service code with value assigned by VisaNet
- CVV
- PVV
- Issuer discretionary data

NOTE

The iCVV Convert Service doesn't support Interlink transactions initiated using non-Visa cards. Non-Visa card Interlink transactions are supported using early chip data and full chip data messages.

NOTE

The issuer discretionary data does not contain issuer data if present in the magnetic-stripe or chip card.

IMPORTANT

The dCVV and iCVV authentication data does not apply to non-Visa cards. The authentication data for non-Visa cards will be based on the token. For more information, contact your regional Client Support representative.

Cashback Service (Australia): This field should contain the track data from the chip image when a VSDC chip card is used. If this field is present, the first digit of the Service Code subfield must contain one of the following values:

- **2** (International Card—EMV chip, debit, or credit)
- **6** (National use only—EMV chip, debit, or credit)

NOTE

Although BASE I and V.I.P. messages can contain field 35 or field 45, VSDC acquirers should send field 35.

Visa Fleet Cards: This field is used in authorizations, reversals, and related advices. Issuers may specify point-of-sale (POS) prompts for the driver or vehicle identification, vehicle odometer, or both, based on the magnetic-stripe encoding of the Visa Fleet card.

If field 35 is present, Visa Fleet cards must contain instructions for POS prompts in the Discretionary Data subfield. Only the last two positions before the End Sentinel are used for Visa Fleet card data. The following table lists the magnetic stripe encoding criteria for field 35.

NOTE

These magnetic-stripe encoding requirements apply only to Visa Fleet cards.

Table 4-10 Magnetic-Stripe Encoding for Visa Fleet Cards

Field Position	Field Name	Encoding Edit Criteria
1	Reserved	Reserved for future use. The default value is 0 (zero).
2	Service Enhancement Indicator	Fleet managers may limit what their Visa Fleet cardholders can purchase at eligible POS locations. Values: 0 = Fleet, no restriction (fuel, maintenance, and non-fuel purchases) 1 = Fleet (fuel and maintenance only purchases) 2 = Fleet (fuel only purchases) 3–9 = Reserved
3	Service Prompt	Fleet managers may select the service options that drive data collection at the POS. Values: 0 = Reserved (no prompt required) 1 = Identification (ID) and odometer reading 2 = Vehicle ID and odometer reading 3 = Driver ID and odometer reading 4 = Odometer reading 5 = No prompt 6 = ID (Cardholder enters the six-digit numeric vehicle, driver, or generic ID)
End Sentinel	n/a	n/a

Visa iCVV Convert: If a request is submitted to a participating issuer and chip data for Online CAM is present in the request message, V.I.P. performs Online CAM validation. If the transaction passes Online CAM validation, V.I.P. replaces the iCVV in the track data of field 35 (or field 45) with a V.I.P.-generated CVV. In this instance, iCVV checking is not performed. However, if the transaction fails Online CAM validation, V.I.P. declines the transaction with response code **05**.

If chip data for Online CAM validation is not present in the request message, V.I.P. performs iCVV validation. If the transaction passes iCVV validation, V.I.P. replaces the iCVV in the track data of field 35 (or field 45) with a V.I.P.-generated CVV. However, if the transaction fails iCVV validation, V.I.P. declines the transaction with response code **05**.

If Track 1 data (field 45) and Track 2 data (field 35) are present in the request message, V.I.P. replaces only the iCVV in field 35 with the V.I.P.-generated CVV and drops field 45 from the message.

4.23.4 Field Edits

If field 35 is present, the value in the length subfield must not exceed **37**.

Authorization request messages will be rejected with reject code **0142** if field 22 = **90** or **91** but neither magnetic stripe content field (field 35 or field 45) is present.

Track 2 Data, *except for X'D' delimiters*, must be numeric.

The account number in this field must agree with the account number in field 2; otherwise, reject code **0521**.

VisaNet: If the following ATM transactions are not submitted with field 35 (Track 2), they are rejected with reject code **0291**:

- 0100 authorization, CPS/ATM with PIN
- 0100 ATM stand-alone balance inquiry

Visa Electron: This field must be present if a PIN is present in field 52; otherwise, V.I.P. rejects the transaction with reject code **0291**.

If field 52 is present, field 22, positions 1–2, cannot be **01** (manual entry).

Visa: The Service Code must be a code that is specified in the *Payment Technology Standards Manual*. If field 14 is omitted, this field cannot be present.

Cashback Service (Australia): If this field is present in a cashback request and does not contain a value of **2** or **6** in the first digit of the Service Code subfield, Visa will reject the transaction with reject code **0106**.

4.23.5 Reject Codes

0024 = Invalid length (track data too long)

0027 = Invalid track data

0106 = Invalid value

0142 = Magnetic stripe data missing when field 22 = **90** or **91**

0291 = Field missing

0521 = Track 2 account number is missing or does not agree with field 2

4.24 Field 37—Retrieval Reference Number

4.24.1 Attributes

fixed length

12 AN [content limited to numerics], EBCDIC; 12 bytes

format: *yddhnnnnnnnn*

4.24.2 Description

Field 37 contains a number used with other key data elements to identify and track all messages related to a given cardholder transaction (referred to as a transaction set). It is usually assigned by the acquirer, but it may be assigned by a merchant or by an individual electronic terminal. V.I.P. also generates the retrieval reference number for transactions it initiates.

This field contains two parts. The first four digits are usually a *yddd* date (Julian date format). The date is defined to be the same day as the date in Field 7—Transmission Date and Time, of the original request. The last eight digits are a numeric transaction identification number. The value in field 37 can be based on the content of fields 7 and 11 in the original request or advice as shown in the recommendation below:

- Positions 1–4: the *yddd* equivalent of the field 7 date
- Positions 5–6: the hours from the time in field 7
- Positions 7–12: the value from field 11

4.24.3 Usage

The retrieval reference number is a key data element for matching a message to others within a given transaction set. Field 37 is **mandatory** in all 01xx, 03xx, 04xx, and 06xx request and response messages. It is also used in 08xx messages.

This field is required in ATM balance inquiries and 0120 and 0322 advices.

NOTE

If the field 37 value in one request is used in a new request within 10 seconds of the first one, BASE I will discard the new message containing the duplicate field 37 value—this does not apply to repeat requests (0101 messages). The value in field 37 should not be used again for 48 hours or the transaction may be rejected.

Incremental Transactions: In incremental 0100 authorization messages and their reversals, this field must contain the value from the original authorization request message.

Reversals: A reversal from an acquirer must contain the value from the original request.

File Maintenance Messages: Regardless of message format, for client processing center-generated 0300 and 0302 file maintenance requests, a new number must be assigned. The same number is returned in the response.

Network Management Messages: Field 37 is not required in V.I.P.-format 0800 and 0810 messages. For the 0810 response, clients can optionally return the one they receive in the request or they can assign a new one.

Field 37 is used in echo test messages only for clients that use the Common Member Interface (CMI). V.I.P. does not send this field to non-CMI stations. (Station setting changes are performed through a client's Visa representative.)

Check Acceptance: Field 37 is required in all messages.

0120 and 0322 File Update Advices: Field 37 is present in these advices.

STIP and Switch Advices: Field 37 is present in 0120 or 0420 advices.

Authorization Gateway Transactions—MasterCard AFD: In an 0120 confirmation advice, the code in this field must match the value in the original 0100 request. See the *Authorization Gateway Service Cross-Reference Guide*.

AFD Status Check and Acquirer Confirmation (U.S. Only): The 0100 status check request and the 0120 acquirer confirmation advice must contain the same value in this field.

4.24.4 Field Edits

V.I.P. Message Format: Field 37 is required in all requests, advices, and responses related to a cardholder transaction; the response value must match that in the request.

The first four digits must be a date in Julian date format, *yddd*, where the first digit = **0–9** and the next three digits = **001–366**. Otherwise, V.I.P. rejects the message with reject code **0094**.

4.24.5 Reject Codes

0094 = Invalid value in first four digits

0095 = Invalid value

0310 = Field missing

0514 = Response value does not match request value

4.25 Field 38—Authorization Identification Response

4.25.1 Attributes

fixed length

6 AN, EBCDIC; 6 bytes

4.25.2 Description

Field 38 contains the authorization code provided by the issuer when a transaction is approved or a “no reason to decline” code provided for successful verifications.

Table 4-11 contains code length (number of significant digits, not field entry length) and format examples for different programs. See “Field Edits” for rules concerning acceptable characters.

Table 4-11 Field 38 Length and Format Guidelines

Code Length and Format	Program	Field Fill
6 AN	Check Acceptance Cirrus ATM Diners Club Discover JCB Proprietary card Visa	n/a
≤6 AN	American Express	Left-justified space
≤6 AN	MasterCard	Left-justified, no spaces or special characters

NOTE

A STIP authorization code is derived from the retrieval reference number, account number, date, and time, and the algorithm can generate 99,999 unique combinations. It is therefore possible to receive identical authorization numbers for different transactions.

4.25.3 Usage

The issuer must provide 6 positions for field 38, even when fewer than 6 positions are meaningful. The values assigned to field 38 should be as unique as possible to verify that the issuer approved the transaction.

This field *should not* contain all **zeros** or all **spaces**, although acquirers must be able to receive all **zeros** or all **spaces**. No special characters are allowed.

NOTE

*Visa strongly recommends that issuers populate field 38 with an authorization code, not all **zeros** or all **spaces**.*

Field 38 is required in 0110 authorization responses *if* field 39 is **00**, **10**, or **85**. This requirement includes check acceptance responses if field 39 is **00**. If present in the original response, it is also required in check acceptance responses.

This field is conditional in 0400 reversals, partial reversals, and 0420 reversal advices. For reversals, acquirers must populate this field with the value from the 0110 authorization response. If the acquirer did not receive an authorization response containing field 38, the reversal can be sent without it.

NOTE

BASE II requires alpha codes for requests with manually entered authorization source codes or codes inserted offline. This requirement also applies to Japan domestic transactions receiving post-authorization approvals for CAFIS-generated responses.

Verification Requests: Field 38 is used in “no reason to decline” responses to verification requests, that is, when the response code is **85**.

Address Verification: If BASE I STIP provides the authorization decision after the issuer has supplied the address verification response (as in some airline transactions) the acquirer receives the authorization code assigned by STIP, instead of the code assigned by the issuer—unless the issuer has inserted a response code in field 39 other than **00** or **85**.

Check Acceptance: Field 38 is required in approval responses.

STIP and Switch Advices: Field 38 is present in 0120 and 0420 advices if it was present in the 0110 approval response or 0400 reversal request.

Account-Level Processing: U.S. issuers are no longer required to send the product ID in position 6 of field 38. Acquirers must use field 62.23 to identify the applicable product ID for a transaction.

Authorization Gateway Transactions—Discover: Position 6 of this field contains account category information for Discover transactions. Acquirers must support the Discover values listed in the Valid Values section.

Visa assigns a value of **Z** (Unspecified Product Type) in the response message sent to the acquirer when the Discover transaction is processed in STIP. The account category value in field 38 is included in the STIP advice sent to the Discover gateway. If present in an 0110 response, the field is required in the 0400 reversal message.

Authorization Gateway Transactions—MasterCard: This field is used in responses and reversals coming from MasterCard. Acquirers that process MasterCard transactions in Visa Europe must support fields 38 and 62.17 when these fields are used in connection with the MasterCard Account-Level Management (ALM) service.

Visa passes ALM data as received from MasterCard in position 6 of this field. The transmission of ALM data is supported in the following countries:

- Australia, where the ALM program is defined as a product graduation service required for acquirers in Australia.
- Ukraine, where the ALM program is defined as an enhanced value service required for acquirers in Ukraine.

AFD Status Check and Acquirer Confirmation (U.S. Only): The value in this field of the 0120 acquirer confirmation advice must be the same as the value in the associated 0110 status check response.

NOTE
VisaNet generate new values in field 38 and field 62.2 when the acquirer does not send these fields in the 0120 acquirer confirmation advice, and V.I.P. cannot find the original status check in the transaction history. If this happens, these fields in the advice may not match the values in the 0100 status check message.

4.25.4 Field Edits

Acceptable characters are **A** through **Z** in uppercase, **0** through **9**, and spaces. In issuer responses, field 38 *should not* contain all **zeros** or all **spaces**. No special characters are allowed.

Check Acceptance: Field 38 is required in an 0110 response if field 39 contains a value of **00** (approval).

High-Value and Payment Token Transactions: Field 38 must contain an authorization identification response for an approved authorization request including account verification and balance inquiry response messages. V.I.P. rejects invalid authorization responses with reject code **0034**.

Invalid values for the 0110 response are:

- **00000** (all **zeros** in the last five positions of the six-byte field)
- **^^^^^** (all **spaces** in the last five positions of the six-byte field)
- **X** (**X** in the last position of the six-byte field)
- **0000^** (four **zeros** followed by a **space** in the last five positions of the six-byte field)
- **0000N** (four **zeros** followed by **N** in the last five positions of the six-byte field)
- **0000Y** (four **zeros** followed by **Y** in the last five positions of the six-byte field)
- **0000P** (four **zeros** followed by **P** in the last five positions of the six-byte field)
- **SVC** (**SVC** in the first three positions of the six-byte field)

4.25.5 Reject Codes

- 0293** = Field missing
- 0034** = Invalid value

4.25.6 Valid Values

Table 4-12 Field 38, Position 6—MasterCard Values

Value	Description
Z	Does not participate (default)
B	Enhanced value
C	Consumer World
D	Consumer World Elite
G	Business World
H	Business World Elite

Table 4-12 Field 38, Position 6—MasterCard Values (continued)

Value	Description
I	Corporate World
J	Corporate World Elite
M	MasterCard Enhanced Value Platform and MasterCard Product Graduation
P	MasterCard Product Graduation only
S	Account qualifies for MasterCard High-Value
T	Account qualifies for MasterCard Product Graduation and MasterCard High-Value

Table 4-13 Field 38, Position 6—Small Business Spend Processing Account Category Codes for MasterCard (U.S. Only)

Value	Description
C	Level 1
D	Level 1 and Product Graduation
E	Level 2
F	Level 2 and Product Graduation
G	Level 3
H	Level 3 and Product Graduation
J	Level 4
K	Level 4 and Product Graduation

Table 4-14 Field 38, Position 6—Spend Shortfall Account Category Codes for MasterCard (U.S. Only)

Value	Description
W	Spend Shortfall
Y	Spend Shortfall and Product Graduation

Table 4-15 Field 38, Position 6—Discover Values

Value	Description
C	Consumer Core Credit
R	Consumer Rewards Credit
P	Consumer Premium Credit
B	Commercial Credit
Z	Unspecified Product Type

4.26 Field 39—Response Code

4.26.1 Attributes

fixed length

2 AN, EBCDIC; 2 bytes

4.26.2 Description

Field 39 contains a code that defines the response to a request or the message disposition. Code **00** or **10** indicates approval (a positive authorization decision), and acceptance (acknowledgment that a transaction or message was received). The codes for this field are defined in the Valid Values section.

Referral response codes **01** and **02** are limited by the *Visa Core Rules and Visa Product and Service Rules*.

NOTE

Field 39 response codes are not the same response source or reason codes used in field 44.1 to identify the source of the response (the issuer or STIP). Discard message reason codes identify why message processing has been terminated (for example, a late reversal response). Discard message reason codes are found in message logprints. See the chapter titled Message Matching for more information about discard message reason codes.

4.26.3 Usage

Field 39 is used in all responses, including those for network management messages. V.I.P. also uses field 39 in certain requests to the issuer.

Address Verification With Authorization Requests: Depending on issuer specifications, the decision reflected in the field 39 response code may or may not depend on the outcome of the address verification check as reflected in the field 44.2 result code.

When an airline transaction authorization request includes an address verification request, and the amount is under the issuer limit, and the issuer does its own address verification, the issuer handles the address verification-only part of the request, and BASE I STIP handles the authorization decision. When the VIC receives the standard address verification-only response code (**85**, and others), the **85** response code in field 39 is changed to the STIP authorization response code (**00**, and others) before the response is sent to the acquirer. A referral or negative response code from the issuer takes precedence over a STIP approval, and is returned to the acquirer.

CPS: All transactions must be approved (**00** or **10**) to qualify for CPS. See the CPS/ATM and CPS/POS chapters in *V.I.P. System Services* and the *U.S. Interchange Reimbursement Fee Rate Qualification Guide*.

CVV/iCVV, dCVV: If Visa performs CVV or iCVV checking and detects an invalid CVV or iCVV, and if the issuer elects to receive CVV results through field 39, this field will contain code **82** in the following messages forwarded to the issuer: an 0100 authorization request, an account verification request, an 0100 cash disbursement, or an ATM or U.S. POS balance inquiry. Code **82** also appears in requests with a negative dCVV. Issuers can optionally receive positive and negative validation results in field 44.5. When recovering advice messages, the issuer should note that a response code of **82** means the acquirer received the issuer's default response code.

NOTE

When BASE I acquirers forward CVV- or iCVV -based requests to SMS issuers, the acquirer BIN indicated in field 32 of the request must have its CVV or iCVV participation flag on. Otherwise, the transaction will be downgraded from 90 to 02 (CVV) or 05 to 95 (CVV or iCVV) in field 22.

CVV2: Response code **N7** indicates that the transaction would have been approved had the CVV2 value been allowed. Issuers also can use **N7** when merchants say no CVV2 was on the card (field 126.10, position 1 = **9**), but issuers know that CVV2 is on the card. When the merchant receives **N7**, it can decline the transaction or resubmit it with a different (or no) CVV2 value.

CVV2 Verification Only: Issuer 0110 responses must contain a response code of **85**, a transaction amount of zero in field 4, and a CVV2 results value in field 44.10. If V.I.P. performs CVV2 validation on behalf of the issuer, V.I.P. will check the CVV2 in all eligible requests and provide results data in responses.

STIP Default-Setting Bypass for CVV2 Processing: Qualified transactions that generate no-match (field 44.10 = **N**) responses in STIP will be processed according to the issuer's CVV2 default response code settings for field 39. However, CVV2-qualified transactions that generate match (field 44.10 = **M**) responses in STIP will be processed normally, bypassing the default settings, and may be approved or declined based on all other conditions of the transaction.

Forward Referrals: Field 39 is present in 0100 and 0400 "forward referrals." *Forward referrals* are requests processed by STIP and sent to the issuer for a decision if the issuer has chosen to receive them. If the issuer has chosen not to receive forward referrals, STIP processes them according to issuer-unavailable limits and approves or declines. A forward referral response code indicates STIP did not respond due to a condition best handled by the issuer when it is available. Forward referral codes are flagged in the table of BASE I response codes in "Valid Values."

Referral Responses: V.I.P. rejects 0110 and 0210 responses that contain referral response codes **01** and **02** with reject code **0087** for Visa transactions. For non-Visa transactions where issuer is behind a gateway or for private-label transactions, response codes **01** and **02** can be used. If issuers fail to respond to rejected responses, STIP approves or declines requests based on issuers' STIP issuer-unavailable processing parameters.

For MOTO transactions (field 25 = **08**), if an issuer responds with a referral response (field 39 = **01** or **02**) to a MOTO request, V.I.P. forwards the response to the acquirer if the amount is greater than USD\$100, or returns the response message to the issuer with an invalid response code if the amount is less than or equal to USD\$100. If issuers do not respond to returned invalid response code transactions within the time limit, STIP generates an approval or decline response to the acquirer based on the issuer's issuer-unavailable activity limits.

For U.S. domestic requests (merchant, acquirer and issuer all within the U.S.), merchants or acquirers cannot convert referred responses to approvals for any amount.

See "Converting Referral Codes" in "Field Edits."

CPS/ATM and Plus Referral Responses From a V.I.P.-Connected Client: V.I.P. converts referrals from the Plus Switch to denials before they are sent to a Visa acquirer (referrals from the Plus Switch are not rejected).

For all Visa cards, response code **57** (transaction not permitted to cardholder) is returned if field 18 does not contain a merchant type for the transaction.

Expired Cards: If STIP responds with code **54** in an authorization request, the VIC attempts to forward the message to the issuer (forward referral) for a final authorization decision.

PIN Verification: For 0100 authorization requests involving Visa PIN verification, V.I.P. inserts **00** in field 39 to inform the issuer that the PIN is correct.

NOTE

If PVS successfully verifies a PIN (field 39 = 00), V.I.P. drops fields 52 and 53 before the request is forwarded to the issuer.

PIN Change/Unblock Requests: Response codes from the issuer are: **57, 81, 85, 86, 91, P5, and P6**.

Approved PIN management transactions receive code **85** (no reason to decline). Declined PIN unblock requests receive response code **P5** in responses. Declined PIN change requests receive response code **P6** in responses. Acquirers not participating in the PIN Management Service receive response code **58**. Issuers not participating in the PIN Management Service receive response code **57**.

STIP responds to the acquirer with response code **91** if: the issuer is unavailable, the issuer's response is late, or if the issuer fails to include field 142 or field 55, Tag 71 or Tag 72, in an approved response. Responses from issuers without field 142 or field 55, Tag 71 or Tag 72, are rejected back to the issuer.

Visa Cashback: U.K and U.S.: If the issuer is not a Visa Cashback participant, the decline response code is **N3** (and no advice is created). If the cashback amount exceeds the issuer limit (or \$200 in the U.S.), or the cashback portion of the total amount is otherwise declined, the decline response code is **N4**. Declined transactions can be resubmitted with lower cashback amounts, or the purchase amount only.

NOTE

Response codes N3 and N4 are not allowed for ATM cash disbursement transactions.

U.S.: If the issuer is unavailable, STIP declines with response code **91**.

Preauthorized Payment Cancellation Service (PPCS): V.I.P. checks the Portfolio File in the cardholder database for stop payment codes corresponding to the request's account number. If a code is found, the request is routed to STIP, which uses the Portfolio file's code as the field 39 response code in the 0110 message, and in the 0120 STIP advice. Decline response code **R0** means the transaction was returned because the cardholder stopped that recurring payment transaction. Decline response code **R1** means the transaction was returned because the cardholder stopped all recurring payment transactions for a merchant account. **R3** means that all recurring payments have been cancelled for the card number in the request.

PPCS (Australia and New Zealand): PPCS is available to Australia and New Zealand issuers only through the Visa Resolve Online User Interface (VROL UI). However, V.I.P. uses an 0120 STIP advice containing a code of **R0, R1, or R3** in this field to notify the issuer of an acquirer-initiated preauthorized payment authorization that has been declined. Issuers in Australia and New Zealand that choose to participate in PPCS must support the PPCS response codes.

Private Label Stored Value: Response codes are **00**, **05**, **10**, and **91**. If the issuer returns response code **10**, field 54 must be present in the response (field 48 will have been present in the request). If field 54 is not present when field 39 = **10**, the message will reject back to the issuer with reject code **0087**.

Check Acceptance: Vendor codes in responses are: **00**, **01**, **03**, **05**, **06**, **13**, **14**, **54**, **57**, **80**, **91**, and **96**. Check Acceptance is a U.S. region service only.

0120 File Update Advices: Field 39 is present and the code is **00** (successful update) or **06** (discrepancy advice).

0322 File Update Advices: Field 39 is present in Auto-CDB advices. If the response code is 06, field 48 contains the error reason code.

STIP and Switch Advices: Field 39 is present in 0120 or 0420 advices and contains the STIP response before conversion for the acquirer.

Partial Authorization: The response code must be **10**.

Healthcare Eligibility Inquiries (U.S. Only): A value of **00** should be used for approvals, and **05** should be used for declines. The inquiry response is in field 104.

Suspected Fraud: When declining a transaction due to suspected fraud, all issuers (including those with fraud mitigation systems that work in conjunction with their online authorization systems) must use response code **59**—suspected fraudulent transaction.

Visa records the value of **59** in the authorization response message from issuers. In addition, when the issuer sends a value of **59** in the response message, V.I.P. changes the response code from **59** to code **05** (do not honor) and sends response code **05** to the acquirer in the response message.

When issuers that participate in Advanced Authorization use response code **59** to decline authorizations for suspicious activity or fraud-related reasons, the product (in collaboration with the issuer's risk control systems) uses this information to identify and forecast risk trends and patterns.

NOTE

*Unlike other response code values for fraudulent transactions that automatically update the Cardholder Database (CDB), code **59** will not cause the card to be added to the CDB.*

When Real Time Decisioning (RTD) determines that an original request meets issuer-provided criteria, V.I.P. will include a response code of **59** (suspected fraud) in 0100 forward referrals, and in 0120 STIP advices, sent to the issuer.

NOTE

For Canada, issuers must also support a value of 9047 (declined by RTD processing) in field 63.4.

Payment Transactions (U.S. Only): If V.I.P. receives an 0100 or 0400 message for a payment transaction but a special arrangement does not exist between the merchant and the issuer, V.I.P. will decline the request with response code **57** (transaction not supported).

Additional requirements and related information can be found in the descriptions for fields 3, 39, 54, 62.1, and field 104, usage 2.

0810 Network Management Responses: Response code **00** is used to acknowledge receipt of an 0800 network management message. V.I.P. includes field 39 in Visa-generated 0810 response messages. In addition, acquirers and issuers can send this field in these responses.

Verification-Only Requests: For account, address, and CVV2 verification-only requests, the positive issuer response is **85** (No Reason to Decline) or **00** (Approved), unless there is a higher priority response in the Exception File.

Account Verification: V.I.P. sends zero-dollar account verification messages (where field 25 = **51**) to issuers when they are available. The issuer must return a value of **85** or **00** in this field if no negative condition is found. Additionally, the issuer must provide validation results for AVS and CVV2 (in fields 44.2 and 44.10, respectively) if AVS field 123 and CVV2 field 126.10 are submitted in the request message.

If the issuer is not available, V.I.P. processes the account verification transaction in STIP and returns a value of **85** in this field, provided no negative condition is found. Additionally, if AVS was requested in the message, V.I.P. returns results for AVS, provided address information is available. Otherwise, **U** is sent. Similarly, if CVV2 validation was requested, V.I.P. sends a results code for CVV2, provided CVV2 keys are available.

Basic Money Transfer Original Credit Transactions: V.I.P. declines transactions initiated as 0100 authorization requests with response code **12**.

Enhanced Original Credit Transactions: V.I.P. declines transactions initiated as 0100 enhanced money transfer OCTs with response code **12**.

Enhanced OCT Velocity Limits: For issuers that support velocity limits, V.I.P. uses the following response codes to decline enhanced original credit transactions submitted by participating acquirers and originators:

- **61** (transaction exceeds approval amount limit)
- **65** (transaction exceeds withdrawal frequency limit)

NOTE

*When the approval amount limit and the withdrawal frequency limit have been exceeded, V.I.P. declines the transaction with response code **61**.*

See "Field 48, usage 37."

Authorization Gateway Transactions—Discover: For partial authorization transactions, this field is mandatory in 0110 responses. **10** in this field indicates that a partial approval was provided in the response.

VSDC: Field 39 is present in 0110 responses, including those for Visa or Plus ATM balance inquiries, and 0120 advices. Early data option issuers participating in the VisaNet Card Authentication Service are notified of card authentication failures in this field with the code **Q1**, which V.I.P. forwards to issuers in 0100 requests (authorization, account verification, cash disbursement, balance inquiries). If issuers include **Q1** as a response code in an 0110 response, V.I.P. rejects the message. A list of STIP default response codes for VSDC transactions is located in Appendix A, Volume 2 of this manual.

V.I.P. declines a transaction with response code **59** (suspected fraud) if all the following apply:

- The account range of the chip card indicates that it supports an alternative PAN.
- Field 22 does not contain **05**, **07**, **91**, or **95**.
- Chip data is not present in field 55 or the third bitmap fields.

Authorization Gateway Transactions—MasterCard Digital Enablement Service: This field is used in authorization responses. If the MasterCard Digital Enablement Service is unable to validate the account number, this field contains the value **14**. If the service cannot perform PAN mapping due to technical reasons, this field contains the value **96**.

AFD Status Check and Acquirer Confirmation (U.S. Only): When an acquirer receives a status check response containing an approval and sends an 0120 acquirer confirmation advice, the issuer must respond with an 0130 response containing **00** in this field.

If an issuer does not respond to the 0120 acquirer confirmation advice with an 0130 response, V.I.P. will send a STIP advice through the normal advice recovery process, with the value of **9020** (response timed out) in Field 63.4—STIP/Switch Reason Code.

Visa iCVV Convert: If a request is submitted to a participating issuer but the issuer's MDK encryption key (Online CAM) and CVK (CVV) are not present and no card validation takes place, V.I.P. will decline the transaction with response code **05**.

VisaNet does not send Online CAM results (response code **82**, **Q1**) or offline approval (**Y1**, **Y3**) and decline (**Z1**, **Z3**) response codes to participating issuers. V.I.P. converts the response codes of **Y1** and **Y3** to **00** (approved) and **Z1** and **Z3** to **05** (do not honor) in advices to participating issuers. However, CVV results are sent in field 44.5 if the issuer chooses to receive them.

If a request is submitted to a participating issuer and chip data for Online CAM is present in the request message, V.I.P. performs Online CAM validation. If the transaction passes Online CAM validation, V.I.P. replaces the iCVV in the track data of field 35 or 45 with a V.I.P.-generated CVV value. In this instance, iCVV checking is not performed. However, if the transaction fails Online CAM validation, V.I.P. declines the transaction with response code **05**.

If chip data for Online CAM validation is not present in the request message, V.I.P. performs iCVV validation. If the transaction passes iCVV validation, V.I.P. replaces the iCVV in the track data of field 35 or 45 with a V.I.P.-generated CVV. However, if the transaction fails iCVV validation, V.I.P. declines the transaction with response code **05**.

Visa Token Service: Token activation requests must contain one of the following response codes: **00** (unconditional approval [provision and activate immediately for payments]); **85** (Conditional approval [provision, but do not activate until additional consumer verification is performed].)

V.I.P. requires a response code of **00** or **85** for 0620 Token Notification Advices and 0630 Token Notification Advice responses that contain message reason code **3700** (Token create) and **3711** (Device provisioning result).

This field must contain a value of **00** or **06** for 0620 Token Notification Advices that contain message reason code **3701** (Token deactivate), **3702** (Token suspend), and **3703** (Token resume).

This field must contain the value of **00** for 0630 Token Notification Advice responses that contain message reason code **3701** (Token deactivate), **3702** (Token suspend), and **3703** (Token resume).

This field must contain a value of **00** or **06** for 0620 Token Notification Advices that contain message reason code **3712** (OTP verification result) and **3714** (Mobile banking app activation).

NOTE

*For response code **06**, see "Field 123, Usage 2, Dataset ID 67, Tag 03."*

This field must contain the value of **00** for 0630 Token Notification Advice responses that contain message reason code **3712** and **3714**.

4.26.4 Field Edits

Field 39 is required in all 0110, 0130, 0310, 0312, 0410, and 0430 responses. Response codes **01** and **02** are invalid for ATM transactions.

Reversal and Advice Responses: Visa requires issuers to respond with response code **00** to the following messages:

- Reversals, partial reversals, and reversal advices.
- Authorization STIP advices.
- Acquirer confirmation advices.

Issuers cannot use response code **92**; it can only be assigned by V.I.P. in responses.

Check Acceptance: Field 39 is required in all 0110 responses.

Converting Referral Codes:

In certain circumstances, VisaNet converts issuer-initiated referral code **01** (refer to card issuer) to **00** (approval), **05** (decline), or **01** (no conversion) for non-MOTO/EC POS transactions when the issuer is unavailable and the transaction amount is USD\$150 or less. Referral code conversion does not apply to POS requests converted to an issuer-specified response for activity-exceeded situations, and it also does not apply to ATM or e-commerce transactions.

Transactions eligible for referral code conversions are those where field 60.1 and field 60.2 each has a value other than zero, and the Merchant Category Group (MCG) is **01** (airlines), **02** (lodging), **03** (auto rental), **04** (restaurants), **05** (mail/telephone order), **07** (other purchase), or **11** (medical).

Depending on the combination of merchant category code (MCC), merchant region, and issuer region, VisaNet may:

- Convert referrals to declines before forwarding the response to the acquirer.
- Reject referral responses from the issuer.

Acquirers receive declines (**05**, do not honor) instead of referral responses (**01**, refer to card issuer, or **02**, refer to card issuer, special condition) in certain interregional and regional STIP, MOTO, AFD, computer network services, door-to-door sales, unattended terminal, and impractical merchant environment transactions that are conducted using a Visa card.

NOTE

In the VE region, these referral-to-decline conversion rules apply to domestic, regional, and interregional transactions.

PIN Tries Exceeded: If the number of allowable invalid PIN attempts is exceeded, the interim response code **75** is assigned and converted to code **05**, although the code **75** is forwarded to the issuer in the 0120 advice. If the issuer returns response code **75** in field 39 of the 0110 response, V.I.P. forwards the field 39 code unchanged to the acquirer; otherwise, V.I.P. inserts the response code **05** in field 39 before forwarding the response to the acquirer.

Restricted Card Response Codes: Response code **62** applies to issuer-defined excluded or embargoed countries.

Discard Message Reason Codes: Discarded messages are those that are identified as not requiring further processing.

Partial Authorization: V.I.P. will reject a partial authorization response (reject code **0603**) back to the issuer when field 54 includes a set containing the original transaction amount and the response code is not **10**. STIP accepts or declines the total transaction amount based on issuer-specified parameters.

Brazil Domestic POS Transactions: Issuers can use response code **78** (blocked when first used) in 0110 messages when the issuer, acquirer, and merchant are in Brazil. The following edits apply:

- Responses with response code **78** that are not 0110 messages are rejected back to the issuer with reject code **0087**. STIP processing handles the response to the acquirer.
- Non-Visa card types sending response code **78** are rejected back to the issuer with reject code **0087**. STIP processing handles the response to the acquirer.
- V.I.P. will change the response code from **78** to **05** (decline) if response code **78** is included in:
 - An ATM transaction.
 - A non-Brazil domestic transaction.
 - A response from an SMS issuer.
 - A response going from a BASE I issuer to an SMS acquirer.

Preauthorization Completion Advice: If an issuer tries to decline an 0120 preauthorization completion advice, this field will contain reject code **0087**.

4.26.5 Reject Codes

0087 = Invalid value

0294 = Field missing

0590 = Invalid value (not **00**)

0603 = Consistency error; response inconsistent with request

4.26.6 Valid Values

Table 4-16 Key to Field 39 BASE I Response Code

Response Category	Category Definitions
Issr	✓Issuer can use code in authorization requests or reversals subject to restrictions noted. Most are for cardholder transactions.
STIP	✓STIP can use code in authorization request or reversal responses.

Table 4-16 Key to Field 39 BASE I Response Code (continued)

Response Category	Category Definitions
Updt	✓Code used in 0310/0312 file update responses.
Inq	✓Code used in 0310/0312 file inquiry responses.
Adv	✓STIP generates code for 0120 and 0420 advices.

Exception file codes are listed in the "Field 127" description.

Table 4-17 Field 39 BASE I Response Codes

Code	Definition	0110 msgs		0410 msgs		031x msgs		0x20
		Issr	STIP	Issr	STIP	Inq	Upd	Adv
00	Successful approval/completion or V.I.P. PIN verification is successful	✓ ¹	✓ ¹	✓	✓	✓	✓	✓
01 ^{2,3}	Refer to card issuer	✓	✓					✓
02 ^{2,3}	Refer to card issuer, special condition	✓						
03	Invalid merchant or service provider	✓						
04 ²	Pick up card	✓	✓					✓
05 ²	Do not honor	✓	✓					✓
06 ⁴	Error	✓				✓ ⁵	✓ ⁵	✓ ⁶
07 ²	Pick up card, special condition (other than lost/stolen card)	✓	✓					✓
10	Partial approval	✓						
11 ⁷	V.I.P. approval							✓
12	Invalid transaction	✓	✓					
13	Invalid amount (currency conversion field overflow); or amount exceeds maximum for card program	✓	✓		✓			
14	Invalid account number (no such number)	✓	✓		✓	⁸		
15 ⁹	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						✓	
39	No credit account	✓						
41 ²	Pick up card (lost card)	✓	✓					✓
43 ²	Pick up card (stolen card)	✓	✓					✓
51	Insufficient funds	✓						
52	No checking account	✓						
53	No savings account	✓						
54 ²	Expired card	✓	✓					✓

Table 4-17 Field 39 BASE I Response Codes (continued)

Code	Definition	0110 msgs		0410 msgs		031x msgs		0x20
		Issr	STIP	Issr	STIP	Inq	Upd	Adv
55	Incorrect PIN	✓	✓					✓
57	Transaction not permitted to cardholder	✓	✓					
58	Transaction not allowed at terminal	✓	✓					✓
59	Suspected fraud	✓	✓					✓
61 ¹⁰	Activity amount limit exceeded							✓
62	Restricted card (for instance, in Country Exclusion table)	✓	✓					
63	Security violation					✓		
64	Transaction does not fulfill AML requirement		✓		✓			✓
65 ¹⁰	Activity count limit exceeded							✓
75	Allowable number of PIN-entry tries exceeded	✓						✓
76	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 inconsistent with original message	✓						
78 ¹¹	"Blocked, first used"—Transaction from new cardholder, and card not properly unblocked	✓						
79	Transaction reversed				✓			
80	Visa transactions: credit issuer unavailable. Private label and check acceptance: invalid date	✓						
81	PIN cryptographic error found (error found by VIC security module during PIN decryption)		✓					
82	Negative Online CAM, dCVV, iCVV, or CVV results Or Offline PIN authentication interrupted							✓
85	No reason to decline request for account number verification, address verification, CVV2 verification, or credit voucher or merchandise return	✓ ¹	✓ ¹					✓
86	Cannot verify PIN	✓	✓					✓
91	Issuer unavailable or switch inoperative (STIP not applicable or available for this transaction) Issuers can respond with this code, which V.I.P. passes to the acquirer without invoking stand-in processing (STIP). Issuer processors use the code to indicate they cannot perform authorization on issuers' behalf. Code causes decline at POS.	¹²	✓		✓			✓
92 ¹⁴	Financial institution or intermediate network facility cannot be found for routing		✓		✓			✓
93 ¹⁵	Transaction cannot be completed; violation of law	✓						

Table 4-17 Field 39 BASE I Response Codes (continued)

Code	Definition	0110 msgs		0410 msgs		031x msgs		0x20
		Issr	STIP	Issr	STIP	Inq	Upd	Adv
94	Duplicate transaction. Transaction submitted containing values in tracing data fields that duplicate values in a previous transaction.		✓		✓			
96	System malfunction	✓				✓	✓	
	System malfunction or certain field error conditions		✓		✓			✓
B1 ¹⁶	Surcharge amount not permitted on Visa cards (U.S. acquirers only)		✓		✓			
N0 ¹³	Force STIP	✓						
N3 ¹⁷	Cash service not available	✓	✓					
N4	Cashback request exceeds issuer limit	✓	✓					
N7	Decline for CVV2 failure	✓	✓					✓
N8	Transaction amount exceeds pre-authorized approval amount		✓					
P2	Invalid biller information	✓						
P5	PIN change/unblock request declined	✓						
P6	Unsafe PIN	✓						
R0	Stop payment order	✓	✓					
R1	Revocation of authorization order	✓	✓					
R3	Revocation of all authorizations order	✓	✓					
Z3 ¹⁸	Unable to go online; declined	✓	✓					
XA ¹⁹	Forward to issuer							
XD ¹⁹	Forward to issuer							
Q1 ²⁰	Card authentication failed		✓					
	Or Offline PIN authentication interrupted							

Table 4-18 Footnotes for BASE I Response Codes

Number	Definition
1	The response message must contain field 38.
2	Eligible for forward referrals if issuers have elected to receive them. See this field description's "Converting Referral Codes" section for non-U.S. issuer conversion options.
3	Invalid for ATM transactions. BASE I converts issuer-generated 01/02 codes to 05 only for Visa Cashback requests. For ATM or UCAT requests handled by BASE I STIP, STIP-generated 01 codes are converted to 05 .
4	Code 06 is valid in 0110 responses from check acceptance vendors only. Field 48—Additional Data—Private, contains error text for POS terminal display.
5	In 0310 and 0312 responses containing code 06, Field 48—Additional Data—Private, identifies the error reason.

Table 4-18 Footnotes for BASE I Response Codes (continued)

Number	Definition
6	Valid for 0120 Enhanced Authorization Response discrepancy advices (field 48 is not present).
7	For security reasons, this code should not be used by the issuer. If code 11 is received at the VIC, it is changed to 00 before the response is returned to the acquirer.
8	0312 responses only.
9	Specifically, Field 100—Receiving Institution Identification Code, is not an allowed destination.
10	This code is eligible for optional forward referral; otherwise, it is only in advices.
11	Response code 78 applies to Brazil domestic POS transactions only. Allowed in 0110 Visa responses.
12	A center with a back-end link to another center or network may use this code to indicate unavailability of that link or the other system, and that Visa should not provide STIP. Allowed in 0110 and 0410 responses.
13	Used by issuers to request “forced” STIP on a single transaction basis only. For field 39 = NO transactions, V.I.P. invokes Issuer Unavailable STIP and processes the message according to the issuer's Issuer Unavailable parameters.
14	Response code 92 can be assigned only by V.I.P.
15	Response code 93 is used for blocked messages. An issuer advice is not created for response code 93 .
16	BASE I issuers may see response code B1 in Visa transaction research reports. The B1 response code is sent to U.S. acquirers requesting a surcharge amount on a card that is not PIN Debit Gateway or Interlink. The code applies to POS only, not ATM.
17	Not allowed for ATM cash disbursement transactions.
18	Z3 is used only by V.I.P. in non-cardholder requests such as advices. Issuers should never use this response code.
19	This code is an Exception File Listing Status and only for forward referrals if issuers have elected to receive them.
20	Although issuers can receive Q1 in requests from STIP, they should not return it in the response; otherwise, V.I.P. will return the message with reject code 0087 .

4.27 Field 41—Card Acceptor Terminal Identification

4.27.1 Attributes

fixed length
8 ANS, EBCDIC; 8 bytes

4.27.2 Description

Field 41 contains a code that identifies the card acceptor terminal or ATM. For electronic point-of-sale or point-of-service (POS) terminals, when the ID is not unique to a terminal, Field 42—Card Acceptor Identification Code can be used along with this field. ATM terminal IDs must be unique within the acquirer's network.

An identification code of fewer than 8 positions must be left-justified and the remainder of the field space-filled.

NOTE

For check acceptance, BASE I adds the Terminal ID to the MCFS file as the value in field 127M.2, Merchant Data 1 is received in an 0300 MCFS message. BASE I does not consider the Terminal ID as right- or left-justified and does not arrange the value in field 127M.2, Merchant Data 1 accordingly before adding the value to the MCFS file.

4.27.3 Usage

When present in a POS or ATM request, the field must be preserved and returned unchanged in the response; it is a key data element in the ITT and is used to match a BASE I response to its request. If a match cannot be made, BASE I responds using ATR rules.

NOTE

Field 41 is not used as a key data element for message matching American Express or Diners Club reversal requests and responses.

Whether or not this field is required in reversals depends on the transaction type. For ATM transactions, this field is required in 04xx reversals and must contain a non-zero value.

POS: Field 41 is required in all POS 01xx and 04xx messages only when the electronic POS terminal, rather than the acquiring institution or card acceptor, generates the retrieval reference number (field 37) for an original 0100 authorization request. Field 41 is used only when needed to fully identify the terminal.

It is optional in voice authorizations. Otherwise, field 41 is omitted when no electronic authorization terminal or ECR is used at the point of service or sale or at the bank branch. If present in voice authorization originals, include it in subsequent reversals. This field is required in U.S. POS balance inquiry requests.

ATM and CPS/ATM: Field 41 with a non-zero value is required in all Visa ATM cash disbursement and ATM balance inquiry requests.

NOTE

Fields 42 and 43 with non-zero values are also required in all ATM transactions.

See the CPS/ATM and CPS/POS chapters in *V.I.P. System Services* and the *U.S. Interchange Reimbursement Fee Rate Qualification Guide*.

VSDC PIN Change/Unblock Requests: This field must be present with a non-zero value per ATM submission requirements.

File Processing: Field 41 must be numeric. In a Visa 0300 Merchant Central File update request, this field may be used to help identify the terminal for which a file record is established. It can be used for the remainder of the terminal ID when the entire terminal ID does not fit in field 42 (for example, for a second-generation dial terminal).

In an American Express, Discover, or MasterCard 0300 Merchant Central File update request, field 41 may be used to identify the terminal for which a file record is established only if field 42 is not used for this identification.

NOTE

See Chapter 6 in *BASE I Processing Specifications* about using fields 41 and 42 for the key to merchant IDs.

Authorization Gateway Transactions—MasterCard: This field is used as a key for locating Merchant Central File data for insertion in the authorization request. If no MCF data is found, the V.I.P. gateway function uses whatever data is in Visa field 41 for DE 41. Otherwise, the data element is left blank.

See *Authorization Gateway Service Cross-Reference Guide* for field-by-field data transfer descriptions between VisaNet-format dual-message 0100 authorization requests and responses, and American Express- and MasterCard-format authorization requests and responses.

Check Acceptance: If field 41 is present in the 0100, it is returned in the 0110 response.

STIP and Switch Advices: Field 41 is present in STIP-generated 0120 or 0420 advices if it was in the original request and it must be returned unchanged in their responses. It must contain the original authorization transaction value, and it must be returned in 0430 responses. It is not required in 0130 responses.

Visa Data Quality Improvement Program: This is a priority data field. Visa monitors priority data fields submitted in V.I.P. and BASE II POS transactions to ensure that the values are accurate, descriptive, and consistent between authorization and clearing transactions.

AFD Status Check and Acquirer Confirmation (U.S. Only): In 0120 acquirer confirmation advices, must have same value as provided by V.I.P. in status check request message.

4.27.4 Field Edits

Card Present POS Transactions: If field 41 is missing or contains all **spaces** or all **zeros**, V.I.P. inserts all **nines** before forwarding messages to issuers. Issuers must return contents of field 41 in response messages or V.I.P. rejects response with Reject Code **0514**—Unsolicited Response (Value Changed in Response Message). V.I.P. restores field 41 in response messages sent to acquirers if V.I.P. has populated it with all **nines**. Visa excludes the following transactions from edits:

- Token Activation
- Original Credits

Its presence in POS authorization requests is required only when the electronic POS terminal, rather than the acquiring institution or card acceptor, generates the retrieval reference number (field 37).

In voice authorizations, if it is returned in responses, the value must be that from the request.

NOTE

Field 41 is a retain and return field. Full service issuers must also retain the value in field 41 received in full-financial messages for exception processing.

ATM Transactions: This field is required in ATM 01xx or 04xx messages from an Acquirer and must contain a non-**zero** value. If field 41 is missing or contains all **spaces**, V.I.P. rejects the request with reject code **0289** (Field missing). If this field contain all zeros, V.I.P. inserts all nines before forwarding the message to issuers. Issuers must return the contents of field 41 in the response message or V.I.P. rejects the response with reject code **0514** (Unsolicited response). V.I.P. restores field 41 in response message sent to acquirers if V.I.P. has populated it with all **nines**.

4.27.5 Reject Codes

0289 = Field missing

0514 = Unsolicited response (value changed in response message)

4.27.6 File Edits

When field 41 is present in a file update request for the Merchant Central File, the VIC's File Management Function edits to ensure that the code is numeric for all nonuniversal MCFS record types, and that for non-Visa updates using 0300 requests, field 42 also is not present.

4.27.7 File Maintenance Error Codes

0802 = Invalid use of this field in 0300 request (fields 41 and 42 are present)

0806 = Non-numeric value in 0300 request

4.28 Field 42—Card Acceptor Identification Code

4.28.1 Attributes

fixed length
15 ANS, EBCDIC; 15 bytes

4.28.2 Description

Field 42 contains the identifier of the card acceptor operating the point-of-sale or point-of-service terminal or at the ATM in local and in interchange environments.

Depending on the acquirer or merchant billing and reporting requirements, the acquirer-assigned code can represent a merchant, a merchant location, or a merchant location terminal.

The values in field 42 and Field 32—Acquiring Institution Identification Code, uniquely identify the merchant. The values in fields 42, 32, and if necessary 41, identify the authorization terminal. If the ID code is less than 15 positions, it must be left-justified and space-filled.

4.28.3 Usage

POS and ATM: Field 42 is required in all 01xx and 04xx POS transactions except those for voice authorizations. If present in the request, it must contain a non-zero value. The field is used in the ITT; the value must be returned unchanged in the response so the response and request can be matched. If a match cannot be made, BASE I responds using ATR rules.

Issuers must return contents of field 42 in responses.

NOTE

Fields 41 and 43 with non-zero values are also required in all ATM transactions.

In voice authorizations, if it is returned in responses, the value must be that from the request. If the field is present in original requests, include it in subsequent reversals.

CPS: The card acceptor's ID is required in all POS authorization requests, including U.S. cashback requests. For ATM requests, this field must contain the ATM owner's name and must contain a non-**zero** value. See the CPS/ATM and CPS/POS chapters in *V.I.P. System Services* and the *U.S. Interchange Reimbursement Fee Rate Qualification Guide*.

VSDC PIN Change/Unblock Requests: This field must be present with a non-zero value per ATM submission requirements.

File Processing: In a Visa 0300 Merchant Central File update request, this field may be used to help identify the terminal for which a file record is established. In an American Express, Discover, or MasterCard 0300 Merchant Central File update request, this field may be used to identify the terminal for which a file record is established only if field 41 is not used for this identification.

NOTE

See Chapter 6 in BASE I Processing Specifications about using fields 41 and 42 for the key to merchant IDs.

Preauthorized Payment Cancellation Service (PPCS): Issuers may submit this field in certain PPCS 0302 transactions. If the field is present in the request, V.I.P. returns the field in responses. For stop codes **R0** and **R1** in field 127.PF, at least one of the following fields must be present in a PPCS 0302 add or replace message: field 42 (card acceptor ID), field 43 (merchant name), or field 62.20 (MVV). For stop code **R3**, however, none of these can be present in the message. See “Field 127.PF,”

Check Acceptance: Used in all requests and responses. This code is a merchant ID assigned by the check acceptance vendor, not by the acquirer.

STIP and Switch Advices: Field 42 is present in 0120 or 0420 advices and must be returned unchanged in their responses.

Authorization Gateway Transactions—MasterCard: This field is required in all 0100 POS transactions submitted with a field 3 transaction type of 00. If field 3 contains a value of 00 and field 42 is missing, the 0110 message will contain a field 39 response code of **96** (system malfunction or certain field error conditions). Field 42 is required in an 0400 reversal if it was present in the 0110 response.

When the acquirer includes field 42 in a POS request, the gateway transfers the content to DE 42 in the Banknet-format request to the MasterCard endpoint. In responses, V.I.P. uses the field 42 value from the request, regardless of what MasterCard returns in DE 42 of its response.

Visa Data Quality Improvement Program: Visa monitors priority data fields submitted in V.I.P. and BASE II POS transactions to ensure that the values are accurate, descriptive, and consistent between authorization and clearing transactions.

This priority data field is mandatory in authorization transactions (except voice authorizations) and in clearing transactions. The value must be the same in the authorization and clearing transaction, unless two different entities provided the information.

Authorization Gateway Transactions—American Express: Acquirers that process American Express transactions for airline aggregators must submit a service establishment number in this field in authorization requests. Format details of the service establishment number follow.

Table 4-19 Formats for Service Establishment Number

Format	Value	Description
1	10-digit American Express service establishment number	This format must be numeric.

Table 4-19 Formats for Service Establishment Number (continued)

Format	Value	Description
2	2-character alphanumeric airline code and travel agent's International Air Transport Association (IATA) number	<p>This value must be in the format AAspaceTXXXXXXX, where:</p> <ul style="list-style-type: none"> • AA is the 2-character alphanumeric airline code. • space contains a space. • T is a constant value that indicates that the value that follows is a travel agent number. • XXXXXXX is a 7–8 digit IATA travel agent ID, where: <ul style="list-style-type: none"> - The first two positions contain the state or country code. - The next five positions contain the 5-digit core number. - The eighth position optionally contains a check digit. If unused, the position must be filled with a character space.

AFD Status Check and Acquirer Confirmation (U.S. Only): This field of the 0120 acquirer confirmation advice must have the same value as the one provided by V.I.P. in the status check request message.

4.28.4 Field Edits

Card-Present and Card-Not-Present Transactions: If field 42 is missing, contains all **spaces** or all **zeros**, V.I.P. rejects request messages with reject code **0311**—Field Missing, excluding the following transactions:

- Original Credits
- Token Activation

If present, field 42 must contain a non-**zero** value.

CPS: Field 42 must be present in 01xx and 04xx messages and must contain a non-**zero** value.

ATM: Field 42 is required in messages related to a cardholder transaction. Otherwise, V.I.P. rejects the transaction with **0311**.

Discover: If field 42 is present, V.I.P. performs the Discover check-digit routine and checks the Merchant Central File for data augmentation. If a Discover request fails the check digit edit, it is rejected with reject code **0096**. See Merchant Central File Service (MCFS) in *V.I.P. System Services*.

American Express: If field 42 is present, it must comply with the American Express check-digit routine. If it is not present, V.I.P. assigns a default value unless there is a different value on the Merchant Central File.

Check Acceptance: Field 42 is required in all 0100 and 0110 messages.

4.28.5 Reject Codes

0096 = Invalid value (Discover)

0311 = Field missing

0514 = Unsolicited response (value changed in response message)

4.28.6 File Edits

When field 42 is present in a Merchant Central File update request, the VIC File Management Function edits to ensure that the code is numeric for all non-Universal Data Format MCFS record types. For non-Visa updates using 0300 requests, field 41 is not present.

PPCS: If an R0/R1 0302 add/replace message is submitted without at least one of the fields in the optional field group of field 42, field 43, or field 62.20, V.I.P. returns the transaction with error code **0589**.

If an **R3** 0302 add/replace message is submitted with one or more of the fields in the optional field group of field 42, field 43, or field 62.20, V.I.P. returns the transaction with error code **0586**.

4.28.7 File Maintenance Error Codes

0586 = Fields 42, 43, and 62.20 are not allowed with field 127.PF stop code **R3**.

0589 = Field missing.

0802 = Invalid use of this field in 0300 request (fields 41 and 42 are present)

0806 = Non-numeric value in 0300 request

4.29 Field 43—Card Acceptor Name/Location

4.29.1 Attributes

fixed length

40 ANS, EBCDIC; 40 bytes

4.29.2 Description

Field 43 contains the name and location of the card acceptor (such as merchant or ATM), including the city name and country code. Field 43 has one fixed-length format, but the content of positions 1–25 depends on whether the request is for a POS transaction or a Visa or Plus ATM transaction.

Positions:

1–25

26–38

39–40

card acceptor name or ATM location	city name	country code
Byte 1–25	Byte 26–38	Byte 39–40

For Visa POS and ATM, and Plus ATM transactions, when the point of service is not in the same country as the acquirer, field 43 must identify the card acceptor country. Field 43 identifies the merchant or ATM location, while field 19 identifies the acquirer location.

Positions 1–25, Card Acceptor Name:

POS: Merchant name as known to the cardholder; or, for original credit money transfers or enhanced prepaid loads, see "Usage."

ATM: The ATM location, branch number, or street address only (institution name is in field 42).

Positions 26–38, City Name:

POS: City where the customer transaction occurs.

Card-Not-Present Transactions: Instead of the city name, these positions must contain the merchant's customer service telephone number.

ATM: City where the ATM is located. The institution name is in field 42.

Positions 39–40, Country Code:

POS and ATM: The 2-character alpha code in uppercase format for the country where the cardholder transaction occurs or the ATM is located. These codes are provided in the appendix titled "Country and Currency Codes".

For U.S. military bases, embassies and consulates, and overseas traveling merchants, the country code must be US; field 19 must be **840**; field 59, positions 1–2, must be **99**.

4.29.3 Usage

POS: Field 43 is required in 0100 and 0400 POS requests, including voice authorizations, to identify the point-of-service country. Except for voice authorizations, this rule applies even when the point of service (or card acceptor) is in the same country as the acquirer. (Field 19 also identifies the acquirer location when merchant and acquirer are in the same

country.) If present in 0100 or 0400 requests, field 43 is included in 0120 and 0420 advices. It is not included in responses. If the field is present in voice authorization requests, include it in subsequent reversals (full or partial).

ATM: Field 43 is required with a non-zero value in all 01xx and 04xx ATM transactions including balance inquiries. The merchant name and location cannot contain binary zeros. The country code cannot be missing, or contain blanks or zeros. For ATM transactions, field 19 and field 43 must be present even if the acquirer and merchant are in the same country. It is included in 0120 and 0420 advices. It is not included in responses.

NOTE

Fields 41 and 42 with non-zero values are also required in all ATM transactions.

CPS: This field is required in all-card-present and card-not-present POS and ATM authorization requests. It is also required in U.S. cashback requests. See the CPS/ATM and CPS/POS chapters in *V.I.P. System Services* and the *U.S. Interchange Reimbursement Fee Rate Qualification Guide*.

VSDC PIN Change/Unblock Requests: This field must be present with a non-zero value per ATM submission requirements.

Non-U.S. National Payment Services: Field 43 is optional for Retail, including Petroleum and Restaurant transactions. If it is present, the country be able to receive an ACI of **E**.

EIRF Non-CPS Transactions: The ticket number must be in positions 13–25.

Plus: Field 43 is required in all 0100 and 0400 requests acquired outside the U.S.

Preauthorized Payment Cancellation Service (PPCS): Issuers may submit this field in certain PPCS transactions. If the field is present in the request, V.I.P. returns it in the response. For stop codes **R0** and **R1** in field 127.PF, at least one of the following fields must be present in a PPCS 0302 add or replace message: field 42 (card acceptor ID), field 43 (merchant name), or field 62.20 (MVV). For stop code **R3**, however, none of these can be present in the message. For more information about PPCS, see "Field 127.PF."

Authorization Gateway—American Express: Acquirers must submit this field in 0100 authorization requests. More than one Visa field can map to the corresponding American Express field. If card acceptor name and location data is submitted in tag 12 of field 104, usage 2, dataset ID 66, Visa populates the same before forwarding the request to American Express. See the *Authorization Gateway Service Cross-Reference Guide*.

Authorization Gateway—MasterCard: If this field is present in the Visa request, V.I.P. transfers the data to DE 43 and also uses the data to build DE 61.13, POS Country Code. See the *Authorization Gateway Service Cross-Reference Guide*.

Check Acceptance: Not applicable to field 43.

STIP and Switch Advices: Field 43 is present in 0120 or 0420 advices if it was in the request. Issuers must be able to receive this field in these advices.

Visa Data Quality Improvement Program: Visa monitors priority data fields submitted in V.I.P. and BASE II POS transactions to ensure that the values are accurate, descriptive, and consistent between authorization and clearing transactions. This priority data field is mandatory in authorization and clearing transactions. The value must be the same in

the authorization and clearing transaction, unless two different entities provided the information.

Original Credit Money Transfer: Basic and enhanced money transfer original credit transactions must meet the following requirements:

- For U.S.-domestic and all cross-border participants, positions 1–25 must contain the sender's name.
- For non-U.S.-domestic transactions, positions 1–25 can include the sender's name, client's name, name of a third-party agent (if applicable), or a generic identifier such as "Visa Money Transfer".

Recipients of mVisa merchant payment and cash-out original credit transactions must populate this field with the merchant information in responses. The country code in positions 39–40 must match the country name in merchant's profile; otherwise, V.I.P. rejects the transaction with reject code **0169**.

For all enhanced original credit transactions, additional requirements are specified in descriptions for fields 18 and 104, usage 2.

Enhanced Original Credit Money Transfer: Enhanced money transfer original credit transactions must meet the following requirements:

- For U.S. domestic and all cross-border participants, positions 1–25 must contain the sender's name.
- For non-U.S. domestic transactions in countries with a Visa NNSS (National Net Settlement Service), positions 1–25 may include the sender's name, client's name, name of a third-party agent (if applicable), or a generic identifier such as "Visa Money Transfer". In countries that do not have a Visa NNSS, positions 1–25 of this field must contain the sender's name. If the sender's name is greater than 25 characters, use the first 25 characters.
- Positions 26–38 must contain the value of "Visa Direct".
- Positions 39–40 must contain a 2-character alpha country code that matches the 3-digit numeric value of the acquiring institution country code in field 19.

Enhanced Prepaid Load Original Credit Transactions (Non-U.S.): The following requirements apply.

- Positions 1–25 of this field must contain the name of the load partner or bank providing the reload service.
- Positions 26–38 must contain the value of "Visa Direct".
- Positions 39–40 must contain a 2-character alpha country code that matches the 3-digit numeric value of the acquiring institution country code in field 19.

Prepaid Transactions: For the activation and loading of prepaid cards, the jurisdiction of the merchant, acquirer BIN and issuer BIN must be domestic, except for Visa Europe, where acquirer, merchant and issuer countries can be different but must be in Visa Europe. Otherwise, the transaction is declined with response code **57**.

Authorization Gateway Transactions—MasterCard AFD: In 0100 status checks and 0120 confirmations, this field must contain the merchant name, city, and country. See the *Authorization Gateway Service Cross-Reference Guide*.

AFD Status Check and Acquirer Confirmation (U.S. Only): The 0100 status check request and the 0120 acquirer confirmation advice must include the merchant name, city, and country.

U.S. Tax Payment Transactions: The value in the Country Code subfield (positions 39–40) must be US. For other requirements, see the descriptions for fields 4, 18, 62.20, and 63.1.

American Express POS Transactions: In 0100 authorizations, acquirers with merchants defined as payment service providers (PSPs) must send the following details in the merchant name section of field 43, in this order:

- The last 10 characters of the PSP-assigned seller account ID.
- An equals sign (=), used as a delimiter.
- The seller business name (no spaces).

The elements provided in this subfield should be spelled out completely. To meet the length requirements for this subfield, acquirers must truncate the information instead of using abbreviations.

4.29.4 Field Edits

When this field is present, the Card Acceptor Name or ATM location (positions 1–25) and City Name (positions 26–38) cannot be all **zeros** or **spaces**. Otherwise, V.I.P. rejects it.

Field 43 is required in ATM cash disbursement messages. The ATM location in position 1–25 and the city name in position 26–38 must be left-justified. The country code must be in uppercase (for example, **CA** for Canada)

NOTE

CA is the V.I.P.-internal code for Canada. Elsewhere, the abbreviation used for Canada is **CAN**.

4.29.5 Reject Codes

0169 = Invalid value

0312 = Field missing

4.29.6 File Edits

PPCS: If an R0/R1 0302 add/replace message is submitted without at least one of the fields in the optional field group of field 42, field 43, or field 62.20, V.I.P. returns the transaction with error code **0589**.

If an **R3** 0302 add/replace message is submitted with one or more of the fields in the optional field group of field 42, field 43, or field 62.20, V.I.P. returns the transaction with error code **0586**.

If this field is present, the system edits the card acceptor name (positions 1–25). If positions 1–25 are all blanks, V.I.P. returns the transaction with error code **0312** in the 0312 response message.

4.29.7 File Maintenance Error Codes

0312 = Field 43 positions 1–25 (card acceptor name) must not be all blanks.

0586 = Fields 42, 43, and 62.20 are not allowed with field 127.PF stop code R3.

0589 = Field missing.

4.30 Field 44—Additional Response Data

4.30.1 Attributes

variable length
1 byte, binary +
25 ANS, EBCDIC; maximum 26 bytes

4.30.2 Description

Field 44 contains miscellaneous response message data. Acquirers receive field 44 in all 0110 authorization responses, and Visa uses it for the following special codes:

- 44.1—Response Source/Reason Code
- 44.2—Address Verification Result Code
- 44.3—Reserved
- 44.4—Reserved
- 44.5—CVV/iCVV Results Code (requests and responses)
- 44.6—PACM Diversion Level
- 44.7—PACM Diversion Reason Code
- 44.8—Card Authentication Results Code
- 44.9—Reserved
- 44.10—CVV2 Result Code
- 44.11—Original Response Code—SMS only
- 44.12—Check Settlement Code (U.S. only)—SMS only
- 44.13—CAVV Results Code
- 44.14—Response Reason Code
- 44.15—Primary Account Number, Last Four Digits for Receipt
- 44.16—CVM Requirement for PIN-less

Many of the fields begin with a length subfield, which specifies the number of bytes present in the field following the length subfield itself. The length subfields are typically "position zero."

Positions:				
	1	2	3	4
	Field 44.1	Field 44.2	Field 44.3	Field 44.4
length	response source/ reason code	address verification result code	reserved	Reserved
Byte 1	Byte 2	Byte 3	Byte 4	Byte 5
5	6–7	8	9	10
Field 44.5	Field 44.6	Field 44.7	Field 44.8	Field 44.9
CVV/iCVV results code	PACM diversion level	PACM diversion reason code	card authentication results code	Reserved
Byte 6	Byte 7–8	Byte 9	Byte 10	Byte 11
11	12–13	14	15	16–19
Field 44.10	Field 44.11	Field 44.12	Field 44.13	Field 44.14
CVV2 results code	original response code	check settlement code (U.S. only)	CAVV result code	response reason code
Byte 12	Byte 13–14	Byte 15	Byte 16	Byte 17–20
20–23	24			
Field 44.15	Field 44.16			
Primary Account Number, Last Four Digits for Receipt	CVM Requirement for PIN-less			
Byte 21–24	Byte 25			

Field 44 content depends on message usage. Unused subfields between the response source code (44.1) and the first value-filled subfield must be spaces and passed with the message. All unused subfields following the last value-filled subfield, including all trailing spaces, are omitted. If, for example, field 44.1 and field 44.5 are present in the 0110 response, field 44 appears as illustrated below.

Field	Length	44.1	44.2	44.3	44.4	44.5	44.6	44.7	44.8	44.9	44.10– 44.13	44.14	44.15	44.16
Content	10	value	space	space	space	value	space	space	space	space	not present	value	value	value

Fields 44.10 through 44.13 are not included in the 0110 response because their content is not involved in the transaction.

4.30.3 Usage

Acquirers receive field 44 in all 0110 authorization responses. Issuers include this field in the 0110 message only when they must supply field 44 subfields. Otherwise, field 44 is omitted until the response reaches the VIC, where V.I.P. supplies at least Field 44.1—Response Source/Reason Code. The individual subfield descriptions explain when the VIC adds this field to requests and responses.

NOTE

Fields 44.11 and 44.12 are SMS fields and are not used in BASE I processing. They are listed here only to inform the reader that the subfields numbers are in use.

Check Acceptance: See the "field 44.1" subfield description. No other field 44 subfields are applicable.

STIP and Switch Advices: Usage varies by subfield. See the individual "Field 44" descriptions that follow.

This field is not required for chargebacks, representments, or adjustments.

Authorization Gateway Transactions—American Express: For a detailed explanation of Visa settings in various subfields (including 44.1, 44.2, and 44.10), see the *Authorization Gateway Service Cross-Reference Guide*.

4.30.4 Field Edits

Field 44 must be present in a response to an 0100 request containing field 123.

The value in the length subfield must not exceed **25**.

4.30.5 Reject Codes

0071 = Invalid length

0379 = Field missing

4.31 Field 44.1—Response Source/Reason Code

4.31.1 Attributes

fixed length

1 ANS, EBCDIC; 1 byte

4.31.2 Description

Field 44.1 is used by Visa only and contains the response source/reason code that identifies the source of the field 39 response decision. For example, an approval response code of **00** in field 39 might have been issued by STIP, which would be shown in field 44.1 as 1. The codes and their definitions are in the table titled "Field 44.1 Response Source/Reason Codes" in the Valid Values section.

NOTE

Issuers must refer to field 63.4 for additional STIP processing information.

Authorization source values **7**, **8**, and **9** used in V.I.P. online responses differ from the meaning of the same values in the BASE II record's authorization source code field. Subfield codes can be used to distinguish a Visa-generated 0120 file update advice from a normal STIP-generated 0120 authorization advice.

NOTE

The response source/reason code is different from a discard message reason code. Discard message reason codes identify why processing has been terminated for a message (for example, a late reversal response). Discard message reason codes are found in message logprints. See Chapter 1 of this manual for more information about discard message reason codes.

4.31.3 Usage

V.I.P. adds this subfield to all 0110 and 0410 responses before they are returned to the acquirer. The values placed in field 44.1 by issuers are removed when the response reaches the VIC.

Verification Services: Field 44.1 is set to **2** when STIP provides the response to an account or address verification request.

Authorization Gateway Transactions—American Express: For details about the Visa setting in this field, see the *Authorization Gateway Service Cross-Reference Guide*.

Authorization Gateway Transactions—MasterCard: V.I.P. inserts code **5** in the Visa response to the acquirer. See the *Authorization Gateway Service Cross-Reference Guide*.

Check Acceptance: The only values are **5** or **4** (when the issuer is unavailable).

0120 File Update Advices: Field 44.1 is present and contains **0** for an Exception File update.

0322 File Update Advices: Not applicable to field 44.1.

STIP and Switch Advices: Field 44.1 is present in 0120 or 0420 advices.

Reversal Matching: U.S. issuers must be able to receive this field in all reversal messages. V.I.P. attempts to match reversals to original authorization messages received within 10

seconds prior, and informs U.S. issuers of the results. A value of **7** indicates a successful match, and a value of **8** indicates an unsuccessful matching attempt. V.I.P. adds this field to 0400/0420 reversals, partial reversals, acquirer authorization reversal advices, and STIP authorization reversal advices.

Visa Transaction Advisor Service: In 0110 authorization, preauthorization and status check responses a value of **B** indicates Visa Transaction Advisor Service criteria has been met for an AFD transaction.

4.31.4 Field Edits

None.

4.31.5 Reject Codes

None.

4.31.6 Valid Values

Table 4-20 Field 44.1 Response Source/Reason Codes

Code ¹	Definition
0	Advice of Exception file change initiated by Global Customer Assistance Service (GCAS) or Automatic Cardholder Database Update Service (Auto-CDB).
1	Response provided by STIP because the request was timed out by Switch (Assured Transaction Response) or the response contained invalid data.
2	Response provided by STIP because the transaction amount was below issuer limit (PCAS processing), or transaction amount is below sliding dollar limit (PACM processing), or in response to a verification request.
3	VE only.
4	Response provided by STIP because issuer was not available for processing
5	Response provided by issuer.
7 ²	Reversal message matched to the original authorization request message. ³
8 ²	No matching original authorization request message found. BASE I attempts to match reversals with originals when possible; however, 8 does not guarantee that an original was not received. ³
B	Response provided by STIP: Transaction met Visa Transaction Advisor Service criteria.
C	Response provided by STIP for conditions not listed.
	NOTE: Refer to field 63.4 for additional information regarding the reason for STIP.

- Codes not defined for V.I.P. use can be used elsewhere within VisaNet, for instance, by BASE II.
- Values **7**, and **8** only appear on reversals or issuer advices, never in responses to acquirers.
- Values **7** and **8** are used in reversal matching only for U.S. issuers.

4.32 Field 44.2—Address Verification Result Code

4.32.1 Attributes

fixed length
1 AN, EBCDIC; 1 byte

4.32.2 Description

Field 44.2 contains a Visa-defined code that describes the results of a Visa address verification. The Visa Address Verification Service can be used for all merchants that include field 123 in their authorization or financial requests. It can also be used for MasterCard, American Express, Discover, and in the U.S., proprietary and private label transactions. The codes are in [Table 4-21](#) of the Valid Values section. See "Field 123."

Depending on issuer participation options and transaction characteristics, some transactions can be routed to the issuer for authorization while Visa verifies the address. Issuers can choose whether field 123 address data is included in these forwarded authorization requests. Issuers can also request that V.I.P. include the result code in advices sent to issuers.

4.32.3 Usage

Field 44.2 is used in responses to original card-present and card-not-present requests that include address verification data in field 123. The result code is provided by the party verifying the address: AVS at VisaNet; a BASE I or SMS issuer; or a MasterCard issuer through the BASE I BankNet gateway. It is not used in 0410 reversal responses.

It does not apply to incremental authorizations.

[Table 4-21](#) contains values for this field. V.I.P. may convert result codes generated by the issuer depending on transaction jurisdiction and acquirer capabilities. See [Table 4-22](#) and [Table 4-23](#) for code conversions.

If participating U.S.-domestic issuers direct Visa to verify the address but have the authorization routed to them under issuer-available conditions for the final decision, issuers can choose whether field 123 address data is included in these forwarded authorization requests. Issuers can also request that V.I.P. also include the result code in advices sent to issuers.

If the issuer ordinarily performs its own address verification but is unavailable, the VIC inserts an R (retry) in the response. If V.I.P. performs address verification on the issuer's behalf but the account is not on file, V.I.P. inserts code **U** (address not verified for domestic transaction) or code **G** (address not verified for international transaction) in the response.

If a U.S. issuer receives all **zeros** for the postal code, the result code should be **A** or **N**. If all **zeros** are received for the street address, the code should be **Z** or **N**.

U.S. acquirers submit the postal code or the street address (or both).

If STIP provides the authorization decision after the issuer provides the address verification response, the acquirer receives the code **2** in field 44.1. (The authorization source takes precedence over the address verification source.)

If an issuer must return other information in a response, it can use field 48 for the response text.

See Field 123" and Address Verification Service in *V.I.P. System Services*.

If an acquirer requests the Address Verification Service without providing address data in field 123 of the request message, V.I.P. responds with AVS Result Code **N**. Transactions that involve AVS in CPS qualification receive Authorization Characteristics Indicator **N** (not qualified). This processing ensures that acquirers are not afforded a better CPS rate and chargeback protection when requesting address verification without supplying address data for the issuer to verify.

CPS: This field is present in responses to requests that included address verification data. See the CPS/ATM and CPS/POS chapter in *V.I.P. System Services* and the *U.S. Interchange Reimbursement Fee Rate Qualification Guide*. See "Field 62.3" for downgrade reason codes.

Authorization Gateway Transactions—American Express: See the *Authorization Gateway Service Cross-Reference Guide*.

Authorization Gateway Transactions—MasterCard: V.I.P. changes MasterCard response code **X** to **Y** before forwarding the Visa response to the acquirer. See the *Authorization Gateway Service Cross-Reference Guide*.

Cirrus Transactions: V.I.P. changes response code **X** to **Y** before forwarding the Visa response to the acquirer.

Check Acceptance (U.S. Only): Not applicable to field 44.2.

STIP and Switch Advices: Field 44.2 is present in 0120 advices.

MasterCard Digital Secure Remote Payment: Field 44.2 must be present in 0110 authorization response messages.

4.32.4 Field Edits

If the issuer receives field 123 in the request, it must include one of the codes listed in [Table 4-21](#) of the Valid Values section in this field in the response; otherwise, V.I.P. inserts a **U** before the response is forwarded to the acquirer.

If a request containing address data is bound for a nonparticipating issuer, the request is accepted but field 123 is dropped before the message is passed to the nonparticipating issuer. When the response is received at the VIC, the result code **U** is added for the acquirer.

4.32.5 Reject Codes

0127 = Invalid value

0379 = Field missing

4.32.6 Valid Values

Table 4-21 Field 44.2 Address Verification Results Codes

Code	Definition	Code Applies to	
		Domestic	International
A	Address matches, ZIP does not. Acquirer rights not implied.	✓	✓
B	Street addresses match. Postal code not verified due to incompatible formats. (Acquirer sent street address and postal code.)	✓	✓
C	Street address and postal code not verified due to incompatible formats. (Acquirer sent street address and postal code.)	✓	✓
D	Street addresses and postal codes match.		✓
F	Street address and postal code match. Applies to U.K.-issued cards.	✓	✓
G	Address information not verified for international transaction. Issuer is not an AVS participant, or AVS data was present in the request but issuer did not return an AVS result, or Visa performs AVS on behalf of the issuer and there was no address record on file for this account.		✓
I	Address information not verified.		✓
M	Street address and postal code match.		✓
N	No match. Acquirer sent postal/ZIP code only, or street address only, or postal code and street address. Also used when acquirer requests AVS but sends no AVS data in field 123.	✓	✓
P	Postal code match. Acquirer sent postal code and street address, but street address not verified due to incompatible formats.	✓	✓
R	Retry: System unavailable or timed out. Issuer ordinarily performs AVS but was unavailable. The code R is used by V.I.P. when issuers are unavailable. Issuers should refrain from using this code.	✓	
S	Not applicable. If present, replaced with U (for domestic) or G (for international) by V.I.P. Available for U.S. issuers only.	✓	
U	Address not verified for domestic transaction. Issuer is not an AVS participant, or AVS data was present in the request but issuer did not return an AVS result, or Visa performs AVS on behalf of the issuer and there was no address record on file for this account.	✓	
W	Not applicable. If present, replaced with Z by V.I.P. Available for U.S. issuers only.	✓	
X	Not applicable. If present, replaced with Y by V.I.P. Available for U.S. issuers only.	✓	
Y	Street address and postal code match.	✓	
Z	Postal/ZIP matches; street address does not match or street address not included in request.	✓	✓

NOTE

Issuers can send codes **S**, **W**, and **X**, but V.I.P. converts them at the VIC to **G**, **U**, **Z**, and **Y** before it forwards the message to the acquirer.

4.32.6.1 Result Code Conversion Based on Jurisdiction and Representment Rights

Depending on transaction jurisdiction and client participation options, V.I.P. converts the issuer's AVS result code to reflect the transaction's correct representment rights status.

Table 4-22 AVS Result Code Conversions Based on Jurisdiction and Representment Rights

Issuer or V.I.P. Result Code	Converted Result Code to Acquirer		
		International Transaction	
		Representment Rights	No Representment Rights
Y	F (in the United Kingdom)	M	D
M ¹	Y (United States) or F (United Kingdom)		D
D ¹	Y (United States) or F (United Kingdom)	M	
U		I	G
I ²	U		G
G ²	U	I	

1. Only V.I.P. should use these codes. Issuers should use **Y** (F in the United Kingdom).

2. Only V.I.P. should use these codes. Issuers should use **U**.

4.32.6.2 Result Code Conversion Based on Acquirer Participation (U.K. and U.S. Only)

If an acquirer cannot receive the IAVS result codes (**B**, **P**, **C**, **D**, **I**, **M**, or **G**), V.I.P. converts them as indicated in Table 4-23 before forwarding the response to the acquirer. If the acquirer cannot receive the first replacement code from V.I.P. or from the issuer, V.I.P. uses the second, or default, replacement code.

Table 4-23 AVS Result Code Conversion Based on Acquirer Participation

Issuer or V.I.P. Result Code	First Replacement Code	Second Replacement Code
B	A	
C	G	U
D	Y	
I	U	
M	Y or F (U.K.)	
P	Z	

4.33 Field 44.5—CVV/iCVV Results Code

4.33.1 Attributes

fixed length
1 ANS, EBCDIC; 1 byte

4.33.2 Description

Field 44.5 contains a Visa-defined code indicating Card Verification Value (CVV), iCVV (Integrated Chip Card CVV), or dCVV (dynamic CVV) verification results. When acquired as a contactless transaction, the field may contain the Online Card Authentication Method (Online CAM) results. The system assumes that the data used for authentication is from the chip and not the magnetic stripe if field 22 is **05**, **07**, or **95**.

4.33.3 Usage

Requests: Field 44.5 is used in 0100 authorization and account verification requests, 0100 cash disbursements and balance inquiries, and 0120 advices.

If Visa validates the CVV, iCVV, or dCVV on the issuer's behalf, V.I.P. forwards the positive or negative results to the issuer in this field if the issuer elects to receive them here rather than in field 39.

Issuers must have successfully completed testing to receive verification results in this field.

Responses: Field 44.5 is used in 0110 authorization responses to communicate the issuer's verification results to the acquirer through Visa. If the issuer does not perform the validation and Visa does, V.I.P. inserts the result in this field and forwards it in the response to the acquirer.

Acquirers must have successfully completed testing to receive verification results in this field.

If Visa performs authentication on the issuer's behalf under issuer-unavailable conditions, V.I.P. inserts the results of the verification in the response to the acquirer.

NOTE

If the response is a denial (field 39 is a non-zero value), V.I.P. removes the CVV/iCVV result from the response.

Contactless Chip: If field 22 is **07**, and Visa performs Online CAM on the issuer's behalf, V.I.P. forwards the positive or negative results to the issuer in this field if the issuer is not a VSDC full data option participant and elects to receive the result in this field rather than in field 39.

Contactless Magnetic Stripe: If field 22 is **91**, and Visa performs Online CAM on the issuer's behalf, V.I.P. forwards the positive or negative results to the issuer in this field if the issuer elects to receive the results in this field rather than in field 39.

Authorization Gateway Transactions—MasterCard: This field is *not* used in CVC1 Visa responses to the acquirer. V.I.P. transfers CVC1 result code **Y** (invalid CVC1) to Visa field 62.3 in the Visa response. Positive CVC1 validation results are implied in a positive field 39 response code. See the *Authorization Gateway Service Cross-Reference Guide* for field-by-field data transfer descriptions between VisaNet-format dual-message 0100

authorization requests and responses, and American Express- and MasterCard-format authorization requests and responses.

STIP and Switch Advices: Field 44.5 is present in 0120 advices if CVV, iCVV, dCVV, or Online CAM authentication was performed.

PIN Change/Unblock: This field can be present in 0100 requests and may be present in reversals.

4.33.4 Field Edits

None.

4.33.5 Reject Codes

None.

4.33.6 Valid Values

Table 4-24 Field 44.5 CVV Verification Results Codes

Code	Definition
(Blank) or not present	CVV, iCVV, or dCVV was not verified.
1	CVV, iCVV, dCVV, or Online CAM failed verification, or Offline PIN authentication was interrupted.
2	CVV, iCVV, dCVV, or Online CAM passed verification.
3	Transaction passed CVV, Emergency Replacement Card (ERC) service value only, which is used exclusively by the Global Customer Assistance Service (GCAS).

4.34 Field 44.6—PACM Diversion-Level Code

4.34.1 Attributes

fixed length
2 ANS, EBCDIC; 2 bytes

4.34.2 Description

Field 44.6 contains a Visa-defined code to indicate the applicable diversion level when Positive Authorization Capacity Management (PACM) processing is used to route 0100 authorization requests or 0400 requests.

PACM determines which transactions are processed in STIP and which are forwarded to issuers based on the processing capacity of the PCR. There are 21 PACM diversion levels, and each one indicates a specific dollar amount below which transactions are processed by STIP. Other transactions apply only when the card range is for PACM.

See [Table 4-25](#) in "Valid Values" for PACM division levels. PACM does not apply to cash disbursements, balance inquiries, status checks, MOTO or e-commerce transactions.

4.34.3 Usage

STIP and Switch Advices: This PACM field is present in 0120 and 0420 STIP and switch advices for participating issuers when PACM diversion occurs. It is not required in advice responses.

This subfield is not used in 0110 and 0410 responses. When it is not applicable, it is omitted.

Check Acceptance (U.S. Only): Not applicable to field 44.6.

4.34.4 Field Edits

None.

4.34.5 Reject Codes

None.

4.34.6 Valid Values

[Table 4-25](#) provides the values for field 44.6:

1 = United States (US)

2 = Canada (CA); CA is the V.I.P.-internal code for Canada. Elsewhere, the abbreviation used for Canada is CAN.

3 = Europe (VE)

4 = Asia-Pacific (AP)

5 = Latin America (including Caribbean) (LAC)

6 = Central Europe, Middle East, and Africa (CEMEA)

Table 4-25 BASE I PACM Diversion Tables by Visa Region

Diversion Level	Percentage of Eligible Transactions Diverted to STIP	BASE I DIVERSION TABLES Dollar Value of Diverted Transactions (Eligible if Below Listed Amount)		
		Regions 1 (US), 2 (CA), 5 (LAC)	Region 3 (VE), 6 (CEMEA)	Region 4 (AP)
00	00	0	0	0
01	05	8	14	11
02	10	12	20	14
03	15	14	26	16
04	20	17	31	19
05	25	19	38	22
06	30	22	44	25
07	35	25	52	29
08	40	28	59	33
09	45	31	68	38
10	50	36	76	45
11	55	40	87	54
12	60	46	102	64
13	65	52	118	75
14	70	59	140	89
15	75	70	160	107
16	80	85	188	131
17	85	105	235	160
18	90	151	314	212
19	95	253	403	321
20	100	99,999	99,999	99,999

4.35 Field 44.7—PACM Diversion Reason Code

4.35.1 Attributes

fixed length
1 ANS, EBCDIC; 1 byte

4.35.2 Description

Field 44.7 is a code defined and applied by Visa to indicate that PACM diverted a transaction to STIP on the issuer's behalf.

4.35.3 Usage

This subfield is present only in STIP advices.

STIP and Switch Advices: At the discretion of participating issuers, this subfield is present in 0120 and 0420 advices when PACM diversion occurs. It is not required in advice responses. When this subfield is not applicable, V.I.P. omits it.

4.35.4 Field Edits

None.

4.35.5 Reject Codes

None.

4.35.6 Valid Values

Currently, the only defined value for this subfield is **A** (exceeded capacity).

4.36 Field 44.8—Card Authentication Results Code

4.36.1 Attributes

Fixed length

1 ANS, EBCDIC; 1 byte

4.36.2 Description

Field 44.8 is a VSDC field that contains a Visa-defined code to indicate Online Card Authentication Method (Online CAM) results.

This field is available to Full Data Option (Full chip) participants only.

NOTE

Online Card Authentication Method (Online CAM) is also known as EMV Online Cryptogram results.

4.36.3 Usage

VSDC: For full VSDC transactions, V.I.P. uses this subfield in the following messages to the issuer to communicate Online CAM results when V.I.P. has performed Online CAM validation on the issuer's behalf:

- 0100 authorization requests
- 0100 cash disbursements and balance inquiries
- 0120 stand-in advices
- 0420 switch advices

This subfield is used in 0110 authorization when the issuer or V.I.P. has performed Online CAM. This subfield is passed to acquirers that have elected to receive Online CAM results.

Full chip issuers must include validation results of the EMV online cryptogram in field 44.8 of the response message. If full chip issuer requests V.I.P. validate EMV online cryptogram, the issuer must receive the result in field 44.8.

NOTE

Doesn't apply to results for MSD CVN 17 Card Authentication results. The pass or fail status for Early-Chip Data and Full-Chip Data issuers is in field 44.5. Field 44.8 is not used.

PIN Change/Unblock: This field can be present in 0100 requests and can be present in reversals.

Visa iCVV Convert: V.I.P. removes this field before forwarding chip-based requests to participating issuers.

Visa Token Convert Service: V.I.P. removes this field before forwarding requests to participating issuers.

4.36.4 Field Edits

None.

4.36.5 Reject Codes

None.

4.36.6 Valid Values

Table 4-26 Field 44.8 Card Authentication Results Code

Code	Definition
(Blank) or not present	Online CAM was not performed, or some other situation or problem prevented verification. For example, issuer is not participating in Online CAM, or a system or cryptographic error occurred.
1	The Authorization Request Cryptogram (ARQC) was checked but failed verification.
2	The ARQC was checked and passed verification.

4.37 Field 44.10—CVV2 Result Code

4.37.1 Attributes

Fixed length

1 ANS, EBCDIC; 1 byte

4.37.2 Description

Field 44.10 contains a Card Verification Value 2 (CVV2) verification result for card-not-present transactions and also for card-present CVV2 verification-only requests. The *Visa Core Rules and Visa Product and Service Rules* require issuers to print the CVV2 value on the back of all Visa credit and debit cards.

CVV2 participation is optional. Participating merchants must manually enter the CVV2 values. All CVV2 participating issuers, acquirers, and merchants must be prepared to send and receive CVV2 data. Participating issuers may choose to have Visa perform or bypass CVV2 validation.

NOTE

V.I.P. does not process field 126.10 (CVV2) in a card-present purchase transaction. However, in a card-present Account Verification transaction V.I.P. accepts field 126.10 (CVV2).

4.37.3 Usage

Field 44.10 is used in card-not-present 0100 authorization requests, 0110 authorization responses, and in 0120 advices. It is also used in card-present account verification requests and responses.

This subfield depends on the content of Field 126.10—CVV2 Authorization Request Data.

Request and Response Processing Rules

The following rules apply to processing requests (0100 authorization and 0200 full financial) and their responses:

- If the issuer wants V.I.P. to verify CVV2 and has provided Visa with its CVV2 encryption keys, Visa validates the CVV2 value and passes the CVV2 result in the request to the issuer for the approval or decline decision. An **M** in field 44.10 indicates a match. An **N** indicates no match. For the response, the issuer can override the V.I.P.-assigned result code with a different code (**M**, **N**, **P**, or **S**); V.I.P. forwards field 44.10 to the acquirer as it was received from the issuer. Otherwise, V.I.P. returns the V.I.P.-assigned code in the response to the acquirer.
- For issuer verified CVV2, V.I.P. inserts a **P** (not processed) in field 44.10 and forwards the request to the issuer for the approval or decline decision. For the response, the issuer can override the V.I.P.-assigned result code with a different code (**M**, **N**, **P**, or **S**); V.I.P.

forwards field 44.10 to the acquirer as it was received from the issuer. Otherwise, V.I.P. returns the **P** in field 44.10 in the response to the acquirer.

- If the issuer is unavailable, V.I.P. forwards the request to STIP, which returns the **P** in field 44.10 in the response to the acquirer.
- If the issuer wants Visa to verify CVV2 but has not provided Visa with its CVV2 encryption keys, V.I.P. inserts a **U** in field 44.10 in the request and passes the message to the issuer for the approval or decline decision. For the response, the issuer may override the V.I.P.-assigned result code **U** with a different code (**M**, **N**, **P**, or **S**). However, V.I.P. restores the value of **U** in the CVV2 Result Code field when forwarding the message to the acquirer.

The acquirer can receive field 44.10 = **U** under the following conditions:

- STIP has responded to an issuer-unavailable request.
- The Issuer is not a CVV2 participant.
- The Issuer has not provided Visa with its encryption keys.

Because the field 14 expiration date determines which key to use, field 14 is required for CVV2 validation. When a participating acquirer submits an authorization request and the expiration date is not present, V.I.P. edits the transaction. If the transaction passes all tests, V.I.P. inserts a value of **P** or **U** in field 44.10 and forwards the request to the issuer for further processing. When the expiration date is missing, V.I.P. uses code **P** if the issuer has provided Visa with keys, and it uses code **U** if the issuer did not provide Visa with keys.

The merchant has the option of receiving the CVV2 result in the authorization response. If the merchant has indicated that the CVV2 result is not to be returned (response type = **0** in position 2 of field 126.10), Visa removes the CVV2 result from the request response. Visa does not return field 126.10 in response messages.

NOTE

*If CVV2 fails (field 44.10 = **N**) but the transaction authorization is approved, the merchant may refuse the sale. The merchant must submit a full reversal.*

CVV2 Verification-Only: Issuer 0110 responses must contain a CVV2 results value in this field, a transaction amount of zero in field 4, and a response code of **85**. If V.I.P. performs CVV2 validation on behalf of the issuer, V.I.P. will check the CVV2 in all eligible requests and provide results data in responses.

dCVV2: V.I.P. populates this field with dCVV2 verification results in requests. If the issuer is not a dCVV2 participant, V.I.P. replaces the dCVV2 result value in this field with a CVV2 result value of **M** or **N**.

CPS: See the CPS/ATM and CPS/POS chapters in *V.I.P. System Services* and the *U.S. Interchange Reimbursement Fee Rate Qualification Guide*.

Authorization Gateway Transactions

American Express: V.I.P. inserts code **U** (not checked) in this field if field 126.10 position 2 in the 0100 Visa request was **1** (include field 44.10 result code in response). See the *Authorization Gateway Service Cross-Reference Guide*.

Discover: V.I.P. includes this field in a response to the acquirer if field 126.10 position 2 was set to **1** in the request.

NOTE

The gateway does not convert Discover requests from the VisaNet format; they are forwarded as Visa 0100 authorization requests to their Discover issuers, and returned as 0110 responses.

JCB: The gateway does not convert JCB requests from the VisaNet format; they are forwarded as Visa 0100 authorization requests to their JCB issuers, and returned as 0110 responses. The CAV (Card Authentication Value) is optional in all JCB 0100 authorization requests.

JCB performs its own validation and returns field 44.10 in the 0110 response with one of the following Visa-defined values: **M** (CVV2 match), **N** (CVV2 no match), **P** (not processed), or **S** (CVV2 should be on the card but the merchant indicates it is not). If field 126.10 was not present in the request, acquirers may receive field 39 response code **N7** (decline for CVV2, no match) in addition to field 44.10 = **N**, **P**, or **S**.

MasterCard: This field contains MasterCard's CVC2 validation result code. Acquirers receive this field if the MasterCard response code is **M** (valid CVC2), **N** (invalid CVC2, non-match), **P** (cannot process), or **U** (unregistered issuer). See the *Authorization Gateway Service Cross-Reference Guide*.

Check Acceptance (U.S. Only): Not applicable to field 44.10.

STIP and Switch Advices: Field 44.10 contains the result determined by STIP.

STIP Default-Setting Bypass for CVV2 Processing: Qualified transactions that generate no-match (field 44.10 = **N**) responses in STIP will be processed according to the issuer's CVV2 default response code settings for field 39. However, CVV2-qualified transactions that generate match (field 44.10 = **M**) responses in STIP will be processed normally, bypassing the default settings, and may be approved or declined based on all other conditions of the transaction.

MasterCard Digital Secure Remote Payment: Field 44.10 must be present in 0100/0110 authorization request and response messages.

Visa Token Service: For cloud-based payment transactions with Magnetic Secure Transmission (MST).

- Issuers must not send field 44.10 in responses that contain CVV2 data

4.37.4 Field Edits

If the issuer put an invalid CVV2 result value in a response, Visa rejects the response and sends it back to the issuer and also returns the Visa CVV2 result to the acquirer.

4.37.5 Reject Codes

0149 = Invalid value

4.37.6 Valid Values

Table 4-27 Field 44.10 CVV2 Result Codes

Code	Definition	Usage
C	dCVV2 Match	Indicates that Visa or the issuer was able to verify the dCVV2 value and the merchant does not participate in the service.
D	dCVV2 No Match	Indicates that neither Visa nor the issuer was able to validate the dCVV2 value and the merchant does not participate in the service.
K	dCVV2 Match with merchant participation	Indicates that Visa or the issuer was able to verify the dCVV2 value and the merchant participates in the service.
L	dCVV2 No match with merchant participation	Indicates that neither Visa nor the issuer was able to validate the dCVV2 value and the merchant participates in the service.
M	CVV2 Match	Indicates that Visa or the issuer was able to verify the CVV2 value provided by the merchant.
N	CVV2 No Match	Indicates that Visa or the issuer was not able to verify the CVV2 value provided by the merchant.
P	Not processed	Indicates that VisaNet or the issuer was unable to verify the CVV2 value provided by the merchant because their verification system was not functioning or not all information needed to verify the CVV2 value (such as the expiration date) was included in the request.
S	CVV2 should be on the card	Indicates that Visa or the issuer was unable to perform CVV2 verification, and notifies the merchant that the card should contain a CVV2 value.
U	Issuer does not participate in CVV2 service or participates but has not provided Visa with encryption keys, or both	Indicates that the issuer is not participating in the CVV2 service, or has not provided Visa with encryption keys needed to perform verification, or that STIP has responded to an issuer-unavailable response.

4.38 Field 44.11—Original Response Code

4.38.1 Attributes

fixed length
2 ANS, EBCDIC; 2 bytes

4.38.2 Description

When V.I.P. encounters a duplicate transaction, this field contains the field 39 response code from the original transaction.

4.38.3 Usage

Field 44.11 is not used in BASE I processing. BASE I acquirers do *not* populate this field or use spaces if field 44.13 is being included. If this field is present in a BASE I message, V.I.P. removes it.

4.39 Field 44.12—Check Settlement Code

4.39.1 Attributes

fixed length
1 ANS, EBCDIC; 1 byte

4.39.2 Description

This is an SMS field. Visa provides this U.S.-only field in responses to indicate the settlement disposition of POS Check Service transactions.

4.39.3 Usage

Field 44.12 is not used in BASE I processing. If this field is present in a BASE I message, V.I.P. removes it.

4.40 Field 44.13—CAVV Results Code

4.40.1 Attributes

Fixed length

1 ANS, EBCDIC; 1 byte

4.40.2 Description

Field 44.13 contains the Cardholder Authentication Verification Value (CAVV) results code that identifies the outcome of CAVV validation. The value in field 44.13 also indicates who performed the authentication, VisaNet or the issuer, and the classification of the transaction. The transaction is classified as:

- Non-secure: Acquirer and issuer don't participate in Verified by Visa (VbV)
- Attempt: Issuer or cardholder doesn't participate in VbV
- Authentication: Cardholder, acquirer, and issuer participate in VbV

The CAVV is a tool used to authenticate the cardholder in e-commerce transactions. Liability for a transaction can shift depending on client participation and the outcome of the validation.

Verified by Visa participation requirements are determined by each region. Regardless of the region, CAVV Verification Service participation is mandatory if the issuer is participating in Verified by Visa. All participating issuers, acquirers, and merchants must be prepared to send and receive the new information. Participating issuers may choose to have Visa perform or bypass CAVV validation.

4.40.3 Usage

Field 44.13 is used in 0100 and 0110 authorization messages and in 0120 advices.

Related fields to Verified by Visa service are:

- Field 60.8—which contains the electronic commerce indicator
- Field 126.9—3-D Secure CAVV, Usage 2 or 3, which contains the CAVV data

V.I.P. processes e-commerce transactions based on the processing option selected by participating issuers for authentication or attempt transactions. Options are defined for normal and stand-in processing.

[Table 4-28](#) summarizes the normal V.I.P. processing performed on e-commerce transactions based on the issuer-selected options.

See CAVV Verification Service in *V.I.P. System Services* about normal V.I.P. processing of e-commerce transactions that are classified as authentication or attempt transactions.

Table 4-28 Issuer Authentication and Attempt Options for Normal Processing of E-Commerce Transactions

Option Type	V.I.P. Processing
Authentications	
Authentication option 1: (Standard service)	The participating issuer has provided Visa with its CAVV DES key(s). V.I.P. will perform all CAVV validation on the issuer's behalf, decline transactions when CAVV validation fails, and forward the status results on transactions that were not declined to the issuer. A value 2 in this field indicates a match; a value 0 indicates no match. The issuer is not required to include field 44.13 in the response.
Authentication option 2: (All results to issuer)	The participating issuer has provided Visa with its CAVV DES key(s). V.I.P. will validate the CAVV value and forward all results to the issuer regardless of outcome. The issuer is not required to include field 44.13 in the response.
Authentication option 3: (Issuer supports own validation)	V.I.P. will forward the transaction to the issuer without validating the CAVV value. The issuer is required to include the results in field 44.13 in the response.
Attempts	
Attempt option 1: (Standard service)	The participating issuer has provided Visa with its CAVV DES key(s). V.I.P. will perform all CAVV validation on the issuer's behalf, decline transactions when CAVV validation fails, and forward the status results on transactions that were not declined to the issuer. A value 3 , 8 , or A in this field indicates a match; a value 0 , 4 , 7 , or 9 indicates no match. The issuer is not required to include field 44.13 in the response.
Attempt option 2: (All results to issuer)	The participating issuer has provided Visa with its CAVV DES key(s). V.I.P. will validate the CAVV value and pass all results to the issuer regardless of outcome. The issuer is not required to include field 44.13 in the response.
Attempt option 3: (Issuer supports own validation)	V.I.P. will forward the transaction to the issuer without validating the CAVV value. The issuer is required to include the results in field 44.13 in the response.

Table 4-29 summarizes STIP processing V.I.P. performs on e-commerce transactions based on the issuer selected options for authentication and attempt transactions.

Table 4-29 Issuer Authentication and Attempt Options for STIP Processing of E-Commerce Transactions

Option Type	V.I.P. Processing
Authentications	
STIP Authentication option 1 and 2 (Standard service)	The participating issuer has provided Visa with its CAVV DES key(s). V.I.P. validates the CAVV value and process the transaction according to issuer STIP parameters. V.I.P. forwards the CAVV result for all transactions to the issuer in the advice message.
Authentication option 3: (Issuer supports own validation)	The issuer has not provided Visa with its CAVV DES key(s). CAVV validation does not occur. V.I.P. processes the transaction according to issuer STIP parameters and declines all transactions that contain a CAVV or ignores the presence or content of field 126.9.
Attempts	

Table 4-29 Issuer Authentication and Attempt Options for STIP Processing of E-Commerce Transactions (continued)

Option Type	V.I.P. Processing
STIP Attempt option 1 and 2 (Standard service)	The participating issuer has provided Visa with its CAVV DES key(s). V.I.P. validates the CAVV value and processes the transaction according to issuer STIP parameters. V.I.P. forwards the CAVV result for all transactions to the issuer in the advice message. A 0 , 4 , 7 , or 9 in this field indicates no match.
STIP Attempt option 3: (Issuer supports own validation)	The issuer has not provided Visa with its CAVV DES key(s). CAVV validation does not occur. V.I.P. processes the transaction according to issuer STIP parameters and declines all transactions that contain a CAVV or ignores the presence or content of field 126.9.

For BASE-I, if the CAVV Attempt/Authentication option is F or V, V.I.P. forwards the Field 44.13 CAVV result code in the request to the issuer. If the issuer responds with a code other than the one it received, V.I.P. sends to the acquirer the code V.I.P. selected in the request rather than the code from the issuer.

NOTE

If field 44.13 does not apply but subsequent subfields do, this subfield is space-filled. If no other subfields are involved, all trailing spaces are truncated.

STIP and Switch Advices: Field 44.13 will contain the result determined by STIP.

Authorization Gateway Transactions—American Express: This field is used to return American Express Safekey verification results. Acquirers that participate in American Express Safekey processing for electronic commerce transactions must support the receipt of this field in 0110 responses.

The values in this field are mapped from the equivalent American Express results codes. Values include codes **1–4**, **6–9**, and **A**. Codes **B**, **C**, and **D** are not used for American Express Safekey processing.

Authorization Gateway Transactions—MasterCard: V.I.P. uses this field for the result code in the Visa response if MasterCard returns it. See the *Authorization Gateway Service Cross-Reference Guide* for field-by-field data transfer descriptions between VisaNet-format dual-message 0100 authorization requests and responses, and American Express- and MasterCard-format authorization requests and responses.

Visa Token Service: For E-Commerce transactions containing token data this field must be present with a value of **0**, **1**, or **2**.

4.40.4 Field Edits

If the issuer puts an invalid CAVV result value in a response, V.I.P. rejects the response with reject code **0193** (invalid CAVV result value).

4.40.5 Reject Codes

0193 = Invalid CAVV results code value

4.40.6 Valid Values

Table 4-30 Field 44.13 CAVV Results Codes

Code	Definition
Blank or not present	CAVV not present
0	CAVV authentication results invalid
1	CAVV failed validation—authentication
2	CAVV passed validation—authentication
3	CAVV passed validation—attempt. A Verified by Visa authentication value of 7 from the issuer's ACS indicates that authentication was attempted. (Determined that the issuer ACS generated this value from the use of the issuer's CAVV key[s].)
4	CAVV failed validation—attempt. A Verified by Visa authentication value of 7 from the issuer's ACS indicates authentication was attempted. (Determined that the issuer's ACS generated this value from the use of the issuer's CAVV key[s].)
5	Not used (reserved for future use)
6	CAVV not validated, issuer not participating in CAVV validation (for Visa use only, except as noted). NOTE: <i>Code 6 is also for American Express Safekey responses.</i>
7 ¹	CAVV failed validation—attempt (U.S.-issued cards only, except as noted). NOTE: <i>Code 7 is also for American Express Safekey responses, including those for non-U.S. cards.</i> A Verified by Visa authentication value of 7 from Visa's ACS indicates that an authentication attempt was performed. (Determined that Visa generated this value from the use of Visa CAVV key[s].)
8 ¹	CAVV passed validation—attempt (U.S.-issued cards only, except as noted). NOTE: <i>Code 8 is also for American Express Safekey responses, including those for non-U.S. cards.</i> A Verified by Visa authentication value of 7 from Visa's ACS indicates that an authentication attempt was performed. (Determined that Visa generated this value from the use of Visa CAVV key[s].)
9 ¹	CAVV failed validation—attempt (U.S.-issued cards only, except as noted). NOTE: <i>Code 9 is also for American Express Safekey responses, including those for non-U.S. cards.</i> A Verified by Visa authentication value of 8 from Visa's ACS indicates that an authentication attempt was performed when the issuer's ACS was not available. (Determined that Visa generated this value from the use of Visa CAVV key[s].)
A ¹	CAVV passed validation—attempt (U.S.-issued cards only, except as noted). NOTE: <i>Code A is also for American Express Safekey responses, including those for non-U.S. cards.</i> A Verified by Visa authentication value of 8 from Visa's ACS indicates that an authentication attempt was performed when the issuer's ACS was not available. (Determined that Visa generated this value from the use of Visa CAVV key[s].)

Table 4-30 Field 44.13 CAVV Results Codes (continued)

Code	Definition
B ²	CAVV passed validation—information only, no liability shift. Only Visa generates this code, issuers do not.
C ^{2,3}	CAVV was not validated—attempt (for Visa use only). If field 126.9 (position 1) = 07 or 08 ; and the issuer did not return a CAVV results code in the authorization response, or field 44.13 = 0 in the response message and the CAVV encryption keys do not exist in V.I.P., V.I.P. sets the value to C in field 44.13.
D ^{2,3}	CAVV was not validated—authentication (for Visa use only). If field 126.9 (position 1) = 00 ; and the issuer did not return a CAVV results code in the authorization response, or field 44.13 = 0 in the response message and the CAVV encryption keys do not exist in V.I.P., V.I.P. sets the value to D in field 44.13.

1. Non-U.S.-acquired transactions that occur on cards issued in the U.S. region can receive a CAVV results code of **7**, **8**, **9**, or **A**. However, the U.S.-card requirement does not apply to American Express Safekey responses.
2. Codes **B**, **C**, and **D** are not used for American Express Safekey processing.
3. V.I.P. rejects a transaction with Reject Reason Code **0193** (invalid value) when an issuer returns the response message with the value **C** or **D** in field 44.13.

4.41 Field 44.14—Response Reason Code

4.41.1 Attributes

fixed length
4 bytes, AN

4.41.2 Description

Authorization Gateway Transactions—MasterCard: This field contains the merchant advice code value received from MasterCard authorization response messages. See the *Authorization Gateway Service Cross-Reference Guide* for field-by-field data transfer descriptions between VisaNet-format dual-message 0100 authorization requests and responses, and American Express- and MasterCard-format authorization requests and responses.

4.41.3 Usage

NOTE

This field applies only to response messages received from MasterCard. If field 44.14 is submitted in a Visa transaction, V.I.P. drops the field from the authorization response message.

4.41.4 Field Edits

None.

4.41.5 Reject Codes

None.

4.41.6 Valid Values

Table 4-31 Field 44.14 Response Code Formats and Descriptions

Code ¹	MC Code (DE 48.84)	Description
M001	01	New account information available
M002	02	Try again later
M003	03	Do not try again for recurring payments transaction
M004	04	Token requirements not fulfilled for this token type
M021	21	Recurring payment cancellation service. See the <i>Authorization Gateway Service Cross-Reference Guide</i> .

1. The first two bytes indicate that the code is a MasterCard transaction value.

4.42 Field 44.15—Primary Account Number, Last Four Digits for Receipt

4.42.1 Attributes

4 ANS, EBCDIC

4 bytes

4.42.2 Description

This field contains the last four digits of the cardholder primary account number (PAN).

4.42.3 Usage

Visa Token Service: Field 44.15 contains the last four digits of the PAN.

This field is used in the following messages:

- 0110/0130 authorization and advice responses
- 0210/0230 full financial and acquirer advice responses
- 0230 adjustment response
- 0230 preauthorization completion and advice responses
- 0282 representment status advice
- 0410/0430 reversal, partial reversal, and reversal advice responses
- 0410/0430 financial reversal and acquirer advice responses
- 0422 chargeback and chargeback reversals

4.42.4 Field Edits

None.

4.42.5 Reject Codes

None.

4.43 Field 44.16—CVM Requirement for PIN-less

4.43.1 Attributes

Fixed length
1 ANS, EBCDIC; 1 byte

4.43.2 Description

Field 44.16 informs acquirers of the card verification method (CVM) requirement for PIN-less transactions.

4.43.3 Usage

This field is included in transactions on PIN Debit Gateway (PDG) networks that support PIN-less point of sale (POS). It is used in responses to the acquirer to indicate that a signature must be captured at the point of sale.

4.43.4 Field Edits

None.

4.43.5 Reject Codes

None.

4.43.6 Valid Values

Table 4-32 Field 44.16 CVM Requirement for PIN-less Values

Code	Definition
0	No card verification method (CVM) required.
1	Signature prompt required.

4.44 Field 45—Track 1 Data

4.44.1 Attributes

variable length
1 byte, binary +
76 ANS, EBCDIC; maximum 77 bytes

4.44.2 Description

Field 45 contains the information encoded on Track 1 of the magnetic stripe, including field separators but excluding beginning and ending sentinels and LRC characters.

NOTE

The Track 1 delimiter/separator character (^) must be encoded as X'5F' or '^' in EBCDIC.

The length specifies the number of Track 1 data characters (including separators). See the *Payment Technology Standards Manual* or ISO 7813 for more information about Track 1 card location and content.

4.44.3 Usage

Field 45 is used in authorization requests but not in their responses, advices, or reversals. Its presence depends on the card program, and it is present **only** when Track 1 data has been read at the terminal; otherwise, it must be omitted. If Track 1 and Track 2 are present in a message, V.I.P. gives preference to Track 2.

Non-Visa Card: Track 1 is used in magnetic stripe-based requests. If present, field 45 must contain Track 1 data in its entirety even if it does not comply with ISO 7813. Field 45 is not included in the request if field 35 contains Track 2 data. For ATM including Plus, field 45 does not apply. For POS, field 45 should be present. Field 45 or Field 35 track data must be present in the message if field 22 = **90**.

Visa: May be used for magnetic stripe-based POS transactions, and should contain the entire stripe content. For all Visa card-present transactions, if field 22 = **90**, field 45 or field 35 must contain the entire stripe.

CPS: This field or field 35 must be present in non-key entered card-present authorization requests. For international CPS information, see the CPS ATM and CPS POS chapters in *V.I.P. System Services*, and for U.S. CPS programs, see the latest edition of the *U.S. Interchange Reimbursement Fee Rate Qualification Guide*.

CVV2: If field 45 and field 126.10 (CVV2 data) are present in the request, field 126.10 is removed.

Authorization Gateway Transactions—MasterCard: Field 45 is present only when Track 1 instead of Track 2 is read at the terminal. See the *Authorization Gateway Service Cross-Reference Guide* for field-by-field data transfer descriptions between VisaNet-format dual-message 0100 authorization requests and responses, and American Express- and MasterCard-format authorization requests and responses.

VSDC: If field 22 is **05** or **95**, this field must contain the track data from the chip image, not from the magnetic stripe. If Track 1 and Track 2 are present in a message, V.I.P. gives preference to Track 2.

Cashback Service (Australia): This field should contain the track data from the chip image when a VSDC chip card is used. If this field is present, the first digit of the Service Code subfield must contain one of the following values:

- **2** (International Card—EMV chip, debit, or credit)
- **6** (National use only—EMV chip, debit, or credit)

NOTE

Although BASE I and V.I.P. messages can contain field 45 or field 35, VSDC acquirers should send field 35.

Visa Fleet Cards: This field is used in authorizations, financial requests, reversals, and related advices. Issuers may specify point-of-sale (POS) prompts for the driver or vehicle identification, vehicle odometer, or both, based on the magnetic-stripe encoding of the Visa Fleet card.

If field 45 is present, Visa Fleet cards must contain instructions for POS prompts in the Visa Reserved subfield. Only the last two positions before the End Sentinel are used for Visa Fleet card. The following table lists the magnetic stripe encoding criteria for field 45.

NOTE

These magnetic-stripe encoding requirements apply only to Visa Fleet cards.

Table 4-33 Magnetic-Stripe Encoding for Visa Fleet Cards

Field Position	Field Name	Encoding Edit Criteria
1	Reserved	Reserved for future use. The default value is 0 (zero).
2	Service Enhancement Indicator	Fleet managers may limit what their Visa Fleet cardholders can purchase at eligible POS locations. Values: 0 = Fleet, no restriction (fuel, maintenance, and non-fuel purchases) 1 = Fleet (fuel and maintenance only purchases) 2 = Fleet (fuel only purchases) 3–9 = Reserved
3	Service Prompt	Fleet managers may select the service options that drive data collection at the POS. Values: 0 = Reserved (no prompt required) 1 = Identification (ID) and odometer reading 2 = Vehicle ID and odometer reading 3 = Driver ID and odometer reading 4 = Odometer reading 5 = No prompt 6 = ID (Cardholder enters the six-digit numeric vehicle, driver, or generic ID)
End Sentinel	n/a	n/a

Visa iCVV Convert: If a request is submitted to a participating issuer and chip data for Online CAM is present in the request message, V.I.P. performs Online CAM validation. If the transaction passes Online CAM validation, V.I.P. replaces the iCVV in the track data of field 45 (or field 35) with a V.I.P.-generated CVV. In this instance, iCVV checking is not performed. However, if the transaction fails Online CAM validation, V.I.P. declines the transaction with response code **05**.

If chip data for Online CAM validation is not present in the request message, V.I.P. performs iCVV validation. If the transaction passes iCVV validation, V.I.P. replaces the iCVV in the track data of field 45 (or field 35) with a V.I.P.-generated CVV. However, if the transaction fails iCVV validation, V.I.P. declines the transaction with response code **05**.

If Track 1 data (field 45) and Track 2 data (field 35) are present in the request message, V.I.P. replaces only the iCVV in field 35 with the V.I.P.-generated CVV and drops field 45 from the message.

Visa Token Service: This field contains token data. Issuers can choose to receive track data instead of token data in this field. This field is required for application-based e-Commerce and NFC Visa payWave messages using the Visa Token Service.

Visa Cloud-Based Payment Token data elements are as follows:

- Token
- Token expiration date
- Service code
- Issuer discretionary data in the format **hhhhccaaaaxxx** where:
 - hhhh** = timestamp received as part of the account parameter index
 - cc** = counter received as part of the account parameter index
 - aaaa** = application transaction counter
 - xxx** = magnetic-stripe verification value

If a request is submitted with token data, participating issuers must support the following:

- iCVV Convert Service: This field contains the cardholder PAN, card expiration date and service code for magnetic stripe, and the CVV according to issuer configuration.
- Full and Early Chip: This field contains the token, token expiration date, and the dCVV or iCVV based on the token.

Visa-generated track data elements are as follows:

- Primary account number (PAN)
- PAN expiry date
- Service code with the value assigned by Visa
- CVV
- Issuer discretionary data (contains all **zeros**)

NOTE

The iCVV Convert Service does not support Interlink transactions initiated using non-Visa cards. Non-Visa card Interlink transactions are supported using early chip data and full chip data messages

NOTE

The issuer discretionary data does not contain issuer-specific data if present in the magnetic-stripe or chip card.

IMPORTANT

The dCVV and iCVV authentication data does not apply to non-Visa cards. The authentication data for non-Visa cards will be based on the token. For more information, contact your regional Client Support representative.

Visa Token Convert Service: This field is required for application-based E-Commerce and NFC Visa payWave messages using the Visa Token Convert Service.

4.44.4 Field Edits

If field 45 is present, the value in the length subfield must not exceed **76**.

If field 22 = **90** or **91**, and field 45 is present in the message rather than in field 35, field 45 must contain the entire, unaltered Track 1 data from the magnetic stripe or chip including trailing **blanks** or **spaces**. If neither field 35 or field 45 is present when field 22 contains **90** or **91**, V.I.P. rejects the request.

If the track data is present and meets system requirements but the issuer is not a CVV or iCVV participant or has not successfully tested for code **90** or **05** in field 22, code **90** or **05** is changed to code **02** or **95**, respectively.

The service code must be a code for Visa cards, as specified in the *Payment Technology Standards Manual*.

ATM transactions are submitted with Track 2 data in field 35. If ATM transactions are submitted with Track 1 data in field 45, they will be rejected with reject code **0291** (field 35 missing).

Cashback Service (Australia): If this field is present in a cashback request and does not contain a value of **2** or **6** in the first digit of the Service Code subfield, Visa will reject the transaction with reject code **0106**.

4.44.5 Reject Codes

0102 = Invalid length

0142 = Magnetic stripe data missing when field 22 = **90**.

4.45 Field 48—Additional Data—Private

4.45.1 Attributes

variable length

1 byte, binary +

255 bytes, variable by usage; maximum 256 bytes

4.45.2 Description

Field 48 is a Visa private-use field for miscellaneous information that involves multiple uses and field formats for different types of transactions and messages. The current usages are as follows:

- Field 48, Usage 1a—CVV Error Codes for Emergency Card Replacement
- Field 48, Usage 1b—Error Codes in 0310/0312 Responses and 0322 Advices
- Field 48, Usage 1c—Cardholder Maintenance File Reject Codes
- Field 48, Usage 2—Unformatted Text in Authorization/Reversal Messages
- Field 48, Usage 3—Error Reason Text in Check Acceptance Responses
- Field 48, Usage 9a—Text Messages
- Field 48, Usage 15—Billing/Reporting/Other Data for Visa Use
- Field 48, Usage 17—Reserved
- Field 48, Usage 26—MasterCard Corporate Fleet Card Data
- Field 48, Usage 27—Commercial Card Type Request
- Field 48, Usage 29—Reserved
- Field 48, Usage 36—Purchasing Card Data
- Field 48, Usage 37—Original Credit Transaction
- Field 48, Usage 38—Additional Data for mVisa OCTs

Regardless of format, the length subfield specifies the number of bytes that follow the length subfield.

Authorization Gateway Transactions—American Express: If the American Express Extended Payment Indicator is present in the Visa request, V.I.P. transfers the six-position value to American Express field 43 in the American Express request. American Express does not return field 43 in responses.

See the *Authorization Gateway Service Cross-Reference Guide* for field-by-field data transfer descriptions between VisaNet-format dual-message 0100 authorization requests and responses, and American Express- and MasterCard-format authorization requests and responses.

Authorization Gateway Transactions—MasterCard: For responses, MasterCard uses DE 48 data to build Visa field 44 *after* MasterCard transfers DE 44 data to field 48. See the *Authorization Gateway Service Cross-Reference Guide*.

4.45.3 Usage

See usage descriptions.

4.45.4 Field Edits

See usage descriptions.

4.45.5 Reject Codes

See usage descriptions.

4.46 Field 48, Usage 1a—CVV Error Codes for Emergency Card Replacement

4.46.1 Attributes

variable length

1 byte Hex +

4–510 N, 4-bit BCD (unsigned packed); maximum 256 bytes

4.46.2 Description

Field 48 is used in 0610 messages for emergency card replacements. In successful replacement transactions, the field contains the new CVV/iCVV or CVV2 data shown in the following table.

Table 4-34 Field 48 CVV Displacement Data

Description	Length (Byte 1)	(Position 1-2) CVV Displacement (Bytes 2–5)	(Positions 3-6) CVV/CVV2 Value (Bytes 6–7)
Returned CVV value	03	2–digit displacement of CVV on track	3–digit CVV and 1 leading 0
Returned CVV2 value	03	00	3–digit CVV2 and 1 leading 0

When the system is unable to successfully calculate CVV/iCVV or CVV2s, the system generates CVV/iCVV or CVV2 error codes that are returned to the issuer in this field. In this case, the field has one subfield following the length subfield.

Positions: 1–4	
length	error code
Byte 1	Byte 2–3

Length Subfield: The number of bytes following the length subfield.

Positions 1–4, Error Code: These positions comprise a 4-digit code describing the error in the 0302 request.

The error codes are listed in the following table.

Table 4-35 CVV Error Codes for Emergency Replacement Cards

Error Code	Length (Bytes)	Description	System
1000	02	ERC participation flag not on for source station	BASE I
1001	02	Issuer does not participate in CVV	BASE I, SMS
1002	02	Card product is invalid for ERC (Visa Electron card)	BASE I, SMS
1004	02	Required CVV/CVV2 data is not present in globals (start dates, keys, etc.)	BASE I, SMS

Table 4-35 CVV Error Codes for Emergency Replacement Cards (continued)

Error Code	Length (Bytes)	Description	System
1005	02	Error return from security module	BASE I, SMS
1006	02	Security module could not be accessed	BASE I, SMS
1007	02	Issuer did not specify a CVV option (STIP, ALL, ALL RESPOND)	BASE I, SMS
1008	02	Expiration date before CVV start date.	BASE I, SMS
1009	02	Invalid account number (not in range)	BASE I, SMS

4.46.3 Usage

Usage 1a applies only to 0610 responses generated by the File Management Function at the VIC. Field content is limited to emergency card replacement information.

CVV2: This field can contain CVV2 data.

4.46.4 Field Edits

None.

4.46.5 Reject Codes

None.

4.47 Field 48, Usage 1b—Error Codes in 0310/0312 Responses and 0322 Advices

4.47.1 Attributes

variable length
1 byte, binary +
4 N, 4-bit BCD (unsigned packed); maximum 3 bytes

4.47.2 Description

Field 48, usage 1b, describes the first error that the VIC found in an 0300 or 0302 file maintenance request message. It occurs when the field 39 response code in an 0310 or 0312 response is **06**.

The field has one subfield following the length subfield.

Positions: 1–4	
length	error code
Byte 1	Byte 2–3

Length Subfield: The number of bytes following the length subfield.

Positions 1–4, Error Code: These positions comprise a 4-digit code describing the error in the 0300 or 0302 request or the 0110 authorization response. Possible error codes can be found in the File Maintenance Error Codes appendix.

4.47.3 Usage

Usage 1b is present in 0310 or 0312 responses (including Auto-CDB responses) and 0322 advices generated by the VIC File Management Function.

Check Acceptance: Not applicable to usage 1b.

4.47.4 Field Edits

There are no field edits for field 48, usage 1b.

4.47.5 Reject Codes

There are no reject codes for field 48, usage 1b.

4.48 Field 48, Usage 1c—Cardholder Maintenance File Reject Codes

4.48.1 Attributes

- variable length
- 1 byte, binary +
- 2 AN, EBCDIC; maximum 3 bytes

4.48.2 Description

This field contains file maintenance error codes generated by the account-level management platform. The field has one subfield following the length subfield and is defined as follows.

Positions: 1– 2	
length	error code

Length Subfield: Number of bytes following the length subfield.

Positions 1–2, Error Code: A 2-digit code for the error found. See Appendix B, File Maintenance Error Codes, for possible error codes.

4.48.3 Usage

This field is used in 0322/0332 account-level processing (ALP) product cardholder database error advice messages and 0322/0332 account linking error response messages.

4.48.4 Field Edits

None.

4.48.5 Reject Codes

None.

4.49 Field 48, Usage 1d—Result/Error Codes for File Maintenance Messages

4.49.1 Attributes

variable length
1 byte, binary +
4 N, 4-bit BCD (unsigned packed); maximum 256 bytes

4.49.2 Description

This field contains the result code V.I.P. sends in the 0312 file update response message. There can be multiple two-byte result codes occupying adjacent bytes with no separator.

The field has one subfield following the length subfield.

Positions: 1–4	
length	error code
Byte 1	Byte 2–3

Length Subfield: The number of bytes following the length subfield.

Positions 1–4, Error Code: These positions comprise a 4-digit code describing the error.

4.49.3 Usage

Usage 1d is present in 0312 responses generated by the VIC File Management Function.

Table 4-36 Result Codes

Code	Definition	Comments
1001	VAU update successful	Visa Account Updater.
1002	PAN/Token replacement successful	Visa Token Vault.
1003	PPCS update successful	Preauthorized Payment Cancellation Service.

4.49.4 Field Edits

None.

4.49.5 Reject Codes

None.

4.50 Field 48, Usage 2—Unformatted Text in Authorization/Reversal Messages

4.50.1 Attributes

variable length
1 byte, binary +
255 ANS, EBCDIC; maximum 256 bytes

4.50.2 Description

A BASE I processor may use this field for comments. Usage 2 has two subfields after the length subfield.

Positions:		
12–255		
length	identifier:*	unformatted text
Byte 1	Byte 2	Byte 3–256

Length Subfield: This value is the number of bytes following the length subfield.

Position 1, Field Identifier: This is a 1-position code, *(asterisk). This code indicates that this field contains unformatted, user-determined text for the destination acquirer or issuer.

Positions 2–255, Text: In authorization or reversal requests, the input consists of acquirer comments for the issuer. In authorization or reversal request responses, the input consists of issuer comments for the acquirer, such as a referral telephone number.

NOTE

STIP ignores text comments when making authorization decisions on behalf of the issuer.

4.50.3 Usage

This usage applies to 0100/0110 and 0400/0410 messages only.

Endpoints can optionally send this usage in POS and ATM messages. V.I.P. passes the text value in this field from the sender to the receiver.

NOTE

Visa recommends not using the percent sign (%) anywhere in the text—there are conditions when the VIC truncates text following this character.

For responses, the issuer can optionally include new text in this field. If the issuer does not include the field, V.I.P. will insert the value from the request in the response to the acquirer.

Authorization Gateway Transactions—MasterCard: When MasterCard declines certain transactions such as Fleet Card requests, it can include additional codes for further explanation. V.I.P. uses Visa field 48 for these explanatory codes.

For example, if MasterCard declines a Fleet request (DE 39 = **12**), Visa field 48 can contain **01** (incorrect ID number), **02** (incorrect driver number), or **03** (incorrect vehicle number). If MasterCard declines an e-commerce/UCAF request (DE 39 = **30**), Visa field 48 will contain code **61**.

See *Authorization Gateway Service Cross-Reference Guide*. This document includes field-by-field data transfer descriptions between VisaNet-format dual-message 0100 authorization requests and responses, and American Express- and MasterCard-format authorization requests and responses.

STIP and Switch Advices: Usage 2 is sent in 0120 authorization advices and 0420 reversal advices if present in corresponding 0100 original and 0400 reversals.

4.50.4 Field Edits

If this field is present, the length subfield value must not exceed **255**. When this field is generated by an acquirer or an issuer, position 1 must be an asterisk (*).

4.50.5 Reject Codes

0061 = Invalid value in position 1

0063 = Invalid length

4.51 Field 48, Usage 3—Error Reason Text in Check Acceptance Responses

4.51.1 Attributes

variable length
1 byte, binary +
25 ANS, EBCDIC; maximum 25 bytes

4.51.2 Description

Usage 3 is a check acceptance field usage. When a check acceptance vendor detects an error in an authorization request, it has the option of explaining the error condition in this field in an 0110 response. The exact text in this field is displayed at the point-of-sale or point-of-service terminal. There are two subfields after the length subfield.

Positions:		
12–25		
length	identifier:*	unformatted text
Byte 1	Byte 2	Byte 3–26

Length Subfield: This value is the number of bytes following the length subfield.

Position 1, Field Identifier: A 1-position code, * (asterisk). This code means the field contains unformatted, user-determined text for the acquirer.

Positions 2–25, Text: A center host system supporting terminals that process check acceptance requests should be programmed to pass this text to the terminal.

4.51.3 Usage

Check Acceptance (U.S. Only): This field can be used in an 0110 response when field 39 = 06.

4.51.4 Field Edits

Check Acceptance (U.S. Only): Length must not exceed 25.

When this field is generated by an issuer, position 1 must be an asterisk (*).

4.51.5 Reject Codes

0061 = Invalid value in position 1

0063 = Invalid length

4.52 Field 48, Usage 9a—Text Messages

4.52.1 Attributes

variable length
1 byte, binary +
255 ANS, EBCDIC; maximum 256 bytes

4.52.2 Description

In 01xx and 04xx messages, this field is used for unformatted general information. Two subfields are defined after the length subfield.

Positions:		
12–255		
length	identifier: #	unformatted text

Length Subfield: This value is the number of bytes following the length subfield.

Position 1, Field Identifier: This 1-position code, number sign (#), identifies the type of information in this field. It also signifies that the content is passed to the destination center.

Positions 2–x, Text: This subfield contains the information the sender conveys to the recipient, which can be a client or VisaNet.

4.52.3 Usage

Endpoints can optionally send this usage in POS and ATM messages. V.I.P. passes the text value in this field from the sender to the receiver.

For responses, the issuer can optionally include new text in this field. If the issuer does not include the field, V.I.P. will insert the value from the request in the response to the acquirer.

4.52.4 Field Edits

If this field is present, the value in the length subfield must not exceed **255**. The field identifier must be the # character.

4.52.5 Reject Codes

- 0061 = Invalid value or field missing
- 0063 = Invalid length

4.53 Field 48, Usage 15—Billing/Reporting/Other Data for Visa Use

4.53.1 Attributes

variable length
1 byte, binary +
255 ANS, EBCDIC; maximum 256 bytes

4.53.2 Description

In a check acceptance request, usage 15 shows the source of the request (a center host). There are 3 subfields after the length subfield.

Positions:			
	1	2	3–x
length	field identifier:@	source	additional request information
Byte 1	Byte 2	Byte 3	Byte 4–256

NOTE

Check Acceptance is a U.S. region service only.

Length Subfield: This value is the number of bytes after the length subfield.

Position 1, Field Identifier: A 1-position code, @ (“at” sign). This code means the field contains information for the check acceptance vendor.

Position 2, Message Source Information: When a client host generates this field, it must place **M** in this field.

Position 3, Additional Request Information: Optional free-form text field forwarded at the request of the check acceptance vendor.

4.53.3 Usage

Usage 15 applies to all 0100 check acceptance requests. It is not returned in responses.

STIP and Switch Advices: This field is not present in STIP-generated 0120 advices.

4.53.4 Field Edits

The value in the length subfield must not exceed **255**.

For check acceptance requests, the field identifier must be an “at” sign (@). Otherwise, the message will be rejected with reject code **0061**.

4.53.5 Reject Codes

0061 = Invalid value in position 1 (not * or @)

0063 = Invalid length

4.54 Field 48, Usage 26—MasterCard Corporate Fleet Card Data

4.54.1 Attributes

variable length
1 byte, binary +
34 ANS, EDCDIC, maximum 35 bytes

4.54.2 Description

Acquirers use this field in 0100 authorization requests for MasterCard Corporate Fleet Card data. There are two subfields after the length subfield.

Positions:		
1		2–34
length	field identifier: \$	MasterCard Corporate Fleet Card Data
Byte 1	Byte 2	Byte 3–35

Length Subfield: This value is the number of bytes following the length subfield.

Position 1, Field Identifier: This identifier is a 1-position code, \$(dollar sign). It means this field contains MasterCard Corporate Fleet Card data in positions 2 through 34.

Positions 2–34, Data: A maximum of two subfields may occur, each preceded by a dollar sign (\$). Subfield 1 contains a 16–numeric maximum bank ID or driver number. Position 18 = the separator, \$. Subfield 2 contains the 16–numeric maximum vehicle number. The first subfield may be empty, in which case the second dollar sign (\$) immediately follows the first, that is, \$\$.

4.54.3 Usage

Usage 26 applies only to 0100 authorization requests destined for MasterCard. These requests are acquired by Visa and contain certain authorization data entered at the point of sale or point of service, which is not necessary for other MasterCard card products.

If MasterCard declines the transaction (reason code 12 in response DE 39/field 39), because of incorrect data, the incorrect data is identified in response message DE 44/field 48 (usage 2). See MasterCard documentation or the *Authorization Gateway Service Cross-Reference Guide*.

See the *Authorization Gateway Service Cross-Reference Guide*. This document includes field-by-field data transfer descriptions between VisaNet-format dual-message 0100 authorization requests and responses, and American Express- and MasterCard-format authorization requests and responses.

4.54.4 Field Edits

The data must be numeric and be must be preceded by a dollar sign (\$). If two subfields occur, only the first may be empty.

4.54.5 Reject Codes

0061 = Invalid value

4.55 Field 48, Usage 27—Commercial Card Type Request

4.55.1 Attributes

fixed length
1 byte, binary +
4–19 ANS, EBCDIC; maximum 20 bytes

4.55.2 Description

This usage is an indicator requesting the type of Visa commercial purchasing card being used at the point of sale or service. In a response, this field contains a value indicating whether the card is Business, Corporate, or Purchasing. The field has two subfields after the length subfield.

Positions:		
1–3		4–19
length	field identifier: !01	Commercial Card type request/response
Byte 1	Byte 2–4	Byte 5–20

Length Subfield: This value is the number of bytes following the length subfield.

Position 1–3, Field Identifier: This value is a 3-position code, **!01**. It signifies a request for the type of commercial card being used at the point of service. It is present in authorization responses.

Position 4, Commercial Card Type Request/Response: Acquirers enter **0** in authorization requests. In authorization responses for commercial cards, V.I.P. replaces **zero** with **B**, **R**, **S**, **L** or **E**, where:

- B** = Business card
- R** = Corporate card
- S** = Purchasing card
- L** = Business to Business Amount Tolerance—clearing amount must be less than or equal authorization amount
- E** = Business to Business Amount Tolerance—clearing amount must be equal authorization amount

Visa Purchasing cards are identified by BIN ranges.

4.55.3 Usage

Usage 27 is used by merchants and acquirers and is optional in 0100 authorization requests; V.I.P. does not pass it to the issuer. If the card is a commercial card, V.I.P. replaces zero in position 4 with **B**, **R**, **S**, **L** or **E** in the 0110 response. If the card is not a commercial card, V.I.P. returns the zero in position 4 from the authorization request.

Acquirers in all regions can send in the authorization request with this field 48 usage and receive the commercial card type in the response. The commercial card type will be present in the response even when the transaction is declined.

Check Acceptance: Not applicable to usage 27.

4.55.4 Field Edits

None.

NOTE

Although there are no field edits for this usage, if the B2B value of L is received in the 0110 authorization response, Visa will apply a settlement match edit to the subsequent clearing transaction (the Draft Data, TC 05). This edit ensures that the clearing transaction amount matches the authorized amount. Transactions that fail the edit are returned.

4.55.5 Reject Codes

None.

4.56 Field 48, Usage 36—Purchasing Card Data

4.56.1 Attributes

variable length
1 byte, binary +
19 ANS, EBCDIC; maximum 20 bytes

4.56.2 Description

A supplemental data field used in requests from acquirers participating in the Purchasing Card–Visa Fleet Service.

The data is prompted from the cardholder at keypad-equipped, point-of-service or point-of-sale terminals when the Service Enhancement Indicator in the card's magnetic stripe is 1 (Fleet) or 2 (Fleet/fuel-only restriction). The field has two subfields after the length subfield.

Positions:		
1–2		3–19
length	field identifier: \$\$	Visa Fleet Service—Enhanced Authorization Data
Byte 1	Byte 2–3	Byte 4–20

Length Subfield: This value is the number of bytes following the length subfield.

Position 1–2, Field Identifier: This field must contain the value of \$\$ (dollar signs), to indicate that the field contains driver or vehicle identification information for the issuer.

Position 3–19, Visa Fleet Service—Enhanced Authorization Data: This field must contain the driver or vehicle ID.

NOTE

Due to current POS keypad limitations, issuers should use only numerics for driver or vehicle identification schemes. For example, 9\$\$4545454 would be the field's representation of driver ID 4545454.

4.56.3 Usage

When Visa Fleet cardholders are prompted at the POS to provide additional data, such as driver ID, vehicle ID, or odometer reading, acquirers must provide the data in field 48, usage 36. This field usage applies only to Visa Fleet 0100 authorization request messages.

4.56.4 Field Edits

If present, the data must be numeric and be preceded by a field identifier of \$\$\$. If only one dollar sign (\$) is used, V.I.P. drops additional data if present.

4.56.5 Reject Codes

0061 = Invalid value

4.57 Field 48, Usage 37—Original Credit Transaction (OCT)

4.57.1 Attributes

variable length
1 byte, binary +
18 ANS, EBCDIC; maximum 19 bytes

4.57.2 Description

Field 48, usage 37, contains the results of watch list scoring and velocity limit checking. Watch list scoring results can be included in enhanced money transfer OCT requests received by issuers. Velocity limit checking results may be included in enhanced OCT requests received by issuers.

In cross-border enhanced money transfer transactions, the field is required in requests sent to U.S. issuers or to issuers in other countries that require watch list scoring.

Velocity limit checking results can optionally be sent to the issuer in a STIP advice if Visa declines an enhanced OCT on the issuer's behalf.

Five subfields following the length subfield are defined as follows:

	Positions: 1–3	4–7	8–10	11	12–19
Length	Identifier: OCT	reserved, set to spaces	Watch List Management (WLM) Results Code	OCT Activity Check Result	Sender Date of Birth

NOTE

In other documentation, the subfield containing the length byte is counted as the first position. In the V.I.P. System technical specifications, however, the first data byte is counted as position 1.

Length Subfield: This value is the number of bytes following the length subfield. If an acquirer or originator sends Field 48, Usage 37 with sender date of birth, this subfield must have a value of binary 19.

Positions 1–3, Identifier: This subfield contains a value of OCT.

Positions 4–7, Reserved: This field is not supported and is set to spaces.

Positions 8–10, Watch List Management (WLM) Results Code: When watch list scoring is successfully performed, Visa populates this subfield with a value from **000 (zeros)** through **100**. If an acquirer or originator sends field 48, usage 37, this subfield must be all **spaces**.

Position 11, OCT Activity Check Result: This subfield contains OCT activity check results for:

- Recipient issuers that have elected to receive the transaction when a count or amount limit for velocity limit checking has been exceeded.
- Recipient issuers that have elected to receive a STIP advice when velocity limits have been exceeded. A STIP advice is sent only if the issuer has requested that Visa decline OCTs on its behalf when a count or amount limit has been exceeded.

Values:

- **1** = 1-day count or amount exceeded
- **2** = 7-day count or amount exceeded
- **3** = 30-day count or amount exceeded

NOTE

V.I.P. populates this subfield with the priority order of 1, 2, then 3.

This subfield is present when velocity limit checking has been performed. When only watch list scoring has been performed, the subfield is dropped. If an acquirer or originator sends field 48, usage 37, this subfield must be a space.

Position 12–19, Sender Date of Birth: This subfield contains the sender date of birth in format, *mmddyyyy*.

4.57.3 Usage

Visa performs WLM scoring during the processing of an enhanced money transfer OCT, and automatically populates field 48, usage 37 with the sender's WLM scoring results in the 0100 authorization request sent to a recipient issuer in a country for which watch list scoring is required.

The velocity limits option allows recipient issuers to designate the total volume and cumulative maximum amounts allowed for their accounts over certain periods of time for all incoming enhanced OCTs.

Acquirers and originators can send this field if they include the sender's date of birth subfield in domestic and cross-border enhanced OCTs.

Recipient issuers that do not participate in Watch List Scoring or Velocity Limits can receive this field.

NOTE

Recipient issuers should not include field 48, usage 37 in response messages.

4.57.4 Field Edits

None.

4.57.5 Reject Codes

None.

4.58 Field 48, Usage 38—Additional Data for mVisa OCTs

4.58.1 Attributes

variable length
1 byte, binary +
28 AN, EBCDIC; maximum 29 bytes

4.58.2 Description

Field 48, usage 38, contains the card acceptor terminal identification and card acceptor identification code.

Three subfields following the length subfield are defined as follows:

Positions:			
1–5		6–13	14–28
Length	Identifier: MVISA	Card Acceptor Terminal Identification	Card Acceptor Identification Code

NOTE
These values typically appear in field 41 and field 42. However, for mVisa cash-out and merchant payment transactions, the recipient must include this information in field 48, usage 38.

Length Subfield: This value is the number of bytes following the length subfield.

Positions 1–5, Identifier: This subfield contains a value of **MVISA**.

Positions 6–13, Card Acceptor Terminal Identification: This subfield contains the card acceptor terminal identification.

Position 14–28, Card Acceptor Identification Code: This subfield contains the card acceptor identification code.

4.58.3 Usage

Merchant payment and mVisa cash-out transactions require the recipient to submit the card acceptor terminal identification and the card acceptor identification code in field 48, usage 38.

4.58.4 Field Edits

None.

4.58.5 Reject Codes

None.

4.59 Field 49—Currency Code, Transaction

4.59.1 Attributes

fixed length

3 N, 4-bit BCD (unsigned packed); 2 bytes

4.59.2 Description

Field 49 contains a code that identifies the currency of the following amount fields:

- Field 4—Amount, Transaction
- Field 54—Additional Amounts
- Field 61.1—Other Amount, Transaction
- Field 95.1—Actual Amount, Transaction

V.I.P. uses the 3-digit numeric code in field 49 to determine the number of decimal places in the above fields. A leading zero is required to pad the first unused half-byte of this field. The zero is a filler, and is not part of the currency code.

The code in this field must reflect the currency in field 4. The currency in field 4 may not be the transaction currency. Transaction amounts from Plus System and sublicensee entities are in U.S. dollars.

4.59.3 Usage

Field 49 is used in messages related to a customer transaction that contains amount fields, even when the amount is **zero** (as in verification requests).

This field is required in:

- 0100/0110 authorization requests and responses
- 0100/0110 balance inquiry and responses
- 0120/0130 completion advices and responses
- 0400/0410 reversal requests and responses
- 0400/0410 partial reversal requests and responses
- 0400/0410/0420 preauthorization reversals, responses, and advices

If this field is not present in responses, V.I.P. rejects the message with reject code **0315**.

Currencies with 3 Decimal Places: For these currencies, the last digit of the amount in fields 4, 28, 61.1, and 95.1 must be zero; that is, the amount must be rounded to two decimal places with a trailing zero.

NOTE

This rounding maintains compatibility with BASE II clearing messages, which do not support amounts with 3 decimals.

ATM and POS Balance Inquiries: This field is required even if field 4 is not present or if the requestor does not participate in multicurrency.

Multicurrency Participants: Message originators can use codes listed in the appendix titled "Country and Currency Codes." For multicurrency processing, the currency code and country code may not match.

Non-Multicurrency Participants: Message originators must use **840** (U.S. dollars).

Authorization Gateway Transactions—MasterCard: The value in this field is handled differently in multicurrency and non-multicurrency transactions. See the *Authorization Gateway Service Cross-Reference Guide*.

Commercial Card Large-Ticket Transactions: The currency code must be **840**.

STIP and Switch Advices: Field 49 is present in 0120 or 0420 advices if it was in the request. It is not used in STIP/Switch responses.

mVisa OCT: V.I.P. rejects mVisa transactions with reject code **0731** if:

- Field doesn't match currency code in field 2 (primary account number).
- Field 104, Usage 2, Dataset ID 57—Business Application Identifier, Tag 01 contains **CO** or **MP**.

4.59.4 Field Edits

This code must be **840** if the message originator does not participate in multicurrency processing. Other values must be one of the 3-digit numeric codes listed in the appendix titled "Country and Currency Codes."

For ATM transactions only, the currency code must match the currency dispensed (Field 4—Amount, Transaction). For non-ATM transactions, the acquirer may submit the authorization in U.S. dollars (field 49 = **840**).

Check Acceptance (U.S. Only): Field 49 is required in 0100 and 0110 messages. Check acceptance is currently only a U.S. service; the value must be **840**.

4.59.5 Reject Codes

0037 = Invalid value

0315 = Field missing

4.60 Field 51—Currency Code, Cardholder Billing

4.60.1 Attributes

fixed length

3 N, 4-bit BCD (unsigned packed); 2 bytes

4.60.2 Description

Field 51 is a multicurrency field. It contains a 3-digit numeric code identifying the currency used by the issuer to bill the cardholder's account (see the appendix titled "Country and Currency Codes," for codes). It also identifies the currency for these amount fields:

- Field 6—Amount, Cardholder Billing
- Field 61.2—Other Amount, Cardholder Billing
- Field 61.3—Other Amount, Replacement Billing

V.I.P. uses this code to determine the number of decimal places in fields 6, 61.2 and 61.3. A leading zero is required to pad the first unused half-byte of this field. The zero is a filler, and is not part of the currency code. If this field is present, these fields also are required:

- Field 6—Amount, Cardholder Billing
- Field 10—Conversion Rate, Cardholder Billing

4.60.3 Usage

Multicurrency Participants: Acquirers do not provide this field. V.I.P. adds it and sends it to the issuer if the issuer is a multicurrency participant. Except as noted, multicurrency issuers should not return this field in responses. For POS transactions only, V.I.P. adds it for participating acquirers if the request was referred to the issuer (field 39 response code is **01** or **02**). The field is not added to ATM responses because referrals are not allowed for ATM transactions.

NOTE

Normally, this field is not required in responses. However, the issuer must return it for partial approvals when field 6 is included.

STIP and Switch Advices: Field 51 is present in 0120 or 0420 advices if it was in the request. It is not present in advice responses.

4.60.4 Field Edits

None.

4.60.5 Reject Codes

There are no reject codes for field 51.

4.61 Field 52—Personal Identification Number (PIN) Data

4.61.1 Attributes

fixed length
64 N, bit string; 8 bytes

4.61.2 Description

Field 52 contains a PIN, encrypted and formatted as a block of 16 hexadecimal digits. (A PIN is a number assigned to a cardholder for unique identification at the point of service or ATM.)

In an acquirer-initiated request, this field format must conform to the PIN Block Format Code in Field 53—Security-Related Control Information. In a request or advice received by the issuer, the format conforms to the PIN Block Format of the issuer, as previously specified to Visa. A customer PIN is never logged, even if it is in an encrypted form.

4.61.3 Usage

Field 52 is required in 0100 requests when the customer enters an online PIN at the point of service or at an ATM. It is required in ATM cash disbursements and balance inquiries. If the VIC successfully verifies the PIN, fields 52 and 53 are dropped from the request before it is forwarded to the issuer. This field is not used in reversal requests or advices, or in responses.

If this field is present, Field 53—Security-Related Control Information must also be present. This field is never allowed when the cardholder is not present; for instance, for mail or telephone order transactions.

NOTE

V.I.P. forwards field 52 and field 53 to the issuer if V.I.P. only translates (but does not verify) the PIN. If the PIN Verification Service (PVS) successfully verifies a PIN, V.I.P. drops these fields from the message.

VSDC PIN Change/Unblock Requests: This field and field 53 must be present with the current PIN information in PIN change and unblock requests. Field 152 contains the new PIN for PIN change requests.

Authorization Gateway Transactions—MasterCard: Visa supports the use of this field in 0100 POS authorization requests destined to MasterCard. PIN support applies to MasterCard transactions.

NOTE

Visa does not authenticate the PIN; PIN authentication is managed by MasterCard.

See *BASE I Processing Specifications* about processing MasterCard transactions. See *V.I.P. System Services* for descriptions of the Visa PIN/No-PIN Split Routing and Visa Shortest Online Path (VSOP) services. See *Authorization Gateway Service Cross-Reference Guide* for field-by-field data transfer descriptions between VisaNet-format dual-message 0100 authorization requests and responses, and American Express- and MasterCard-format authorization requests and responses.

Cashback Service (U.S./Australia/New Zealand): Typically, transactions with a cashback amount are allowed only when the online PIN verification method is used, with the PIN

in field 52 and the PIN security control information in field 53. However, a cashback transaction in the U.S., Australia, or New Zealand can also be performed without field 52 if Offline PIN Verification is performed and does not fail. For field 134 Card Verification Result (CVR) values, see Appendix H, Table H5 for VIS cards and Table H7 for CCD cards.

V.I.P. declines cashback transactions with response code **N3** if:

- Field 52 is not present and Offline PIN Verification was not performed, **or**
- Field 52 is not present, and Offline PIN Verification was performed but failed (per CVR).

Visa Token Service: This field contains token data. V.I.P. converts the PIN block from token to cardholder PAN before forwarding request messages.

Chip-Initiated POS Transactions (Australia): Issuers must decline all domestic chip-initiated authorization transactions where the PIN has been bypassed, with the exception of:

- Transactions initiated with non-PIN-preferring chip cards to accommodate individual cardholder needs.
- Unattended transactions.
- Visa Easy Payment Service transactions, including Visa payWave transactions, that do not require a card verification method (CVM).

Chip-Initiated POS Transactions (New Zealand): Issuers must decline all domestic chip-initiated transactions that require a PIN as the card verification method (CVM) where the PIN has been bypassed, with the exception of:

- Domestic chip-initiated transactions with field 18 = **5812**.
- Transactions initiated with non-PIN-preferring chip cards to accommodate individual cardholder needs.
- Unattended transactions.
- Visa Easy Payment Service transactions, including Visa payWave transactions, that do not require a CVM.

4.61.4 Field Edits

Field 52 is required if field 18 is **6011**.

The VIC's security module edits field content during PIN translation and PIN verification. If there is an error (typically an acquirer key problem), the request message is not rejected; instead, the response code in field 39 of the 0110 response is set to **81**.

If this field is present in an advice, reversal, or response, V.I.P. rejects the message with reject code **0752**.

Visa Electron: This field must not be present if field 22 = **01** (manual entry).

4.61.5 Reject Codes

0295 = Field missing

0592 = Field present when not allowed

0752 = Consistency error—field 52 (PIN) not allowed on this transaction type

4.62 Field 53—Security-Related Control Information

4.62.1 Attributes

fixed length

16 N, 4-bit BCD (unsigned packed); 8 bytes

4.62.2 Description

This field contains the data needed by the issuer or the VIC Security Module to process PINs entered at the point of sale or point of service. See [Table 4-37](#) of the Valid Values section for field codes.

Positions: 1–2	3 –4	5–6	7–8	9–10	11–16
Subfield 53.1: security format code	Subfield 53.2: algorithm ID	Subfield 53.3: PIN block format code	Subfield 53.4: zone key index	Subfield 53.5: PIN Data Type	Subfield 53.6: Visa Reserved
Byte 1	Byte 2	Byte 3	Byte 4	Byte 5	Bytes 6–8

Positions 1–2, Security Format Code (Field 53.1): This code defines the security technique used.

Positions 3–4, PIN Encryption Algorithm Identifier (Field 53.2): This code defines the encryption technique used.

Positions 5–6, PIN Block Format Code (Field 53.3): This code defines the field 52 format. In acquirer-to-VIC requests, it describes the acquirer's PIN block format. In VIC-to-issuer requests, it describes the issuer's PIN block format.

Positions 7–8, Zone Key Index (Field 53.4): This value indicates the key used to encrypt the PIN. In acquirer-to-VIC requests, the index points to the acquirer key used to encrypt the PIN block. In VIC-to-issuer requests, it points to the zone key the VIC used to encrypt the PIN block before it was forwarded.

Positions 9–10, PIN Data Type (Field 53.5): Not applicable—reserved. Positions 9–10 are zero-filled if BASE I uses positions 11–16 (subfield 53.6).

Positions 11–16, Visa Reserved (Field 53.6): This subfield is used by the BASE I Switch.

NOTE

Acquirers that want to submit double-length DES keys must contact their Visa representative.

4.62.3 Usage

Field 53 is required in messages containing a PIN (field 52); otherwise, it is not used. Acquirers must place **zeros** in positions 9–6. Issuers receive values set by the VIC.

NOTE

V.I.P. forwards field 52 and field 53 to the issuer if V.I.P. only translates (but does not verify) the PIN. If the PIN Verification Service (PVS) successfully verifies a PIN, V.I.P. drops these fields from the message.

Position 1–2, Security Format Code: This subfield 53.1 code must be 20 (Zone Encryption) for PIN-based POS or ATM transactions.

VSDC PIN Change/Unblock Requests: This field and field 52 must be present with the current PIN information in PIN change and unblock requests. Field 152 contains the new PIN for PIN change requests.

Authorization Gateway Transactions—MasterCard: Visa supports the use of this field in 0100 POS authorization requests destined to MasterCard. PIN support applies to MasterCard transactions.

NOTE

Visa does not authenticate the PIN; PIN authentication is managed by MasterCard.

See *BASE I Processing Specifications* about processing MasterCard transactions. See *V.I.P. System Services* for descriptions of the Visa PIN/No-PIN Split Routing and Visa Shortest Online Path (VSOP) services. See the *Authorization Gateway Service Cross-Reference Guide* for field-by-field data transfer descriptions between VisaNet-format dual-message 0100 authorization requests and responses, and American Express- and MasterCard-format authorization requests and responses.

Check Acceptance (U.S. Only): Not applicable to field 53.

Cashback Service (U.S./Australia/New Zealand): This field is required in all transactions that include a cashback amount and online PIN verification using data in field 52. Typically, transactions with a cashback amount are allowed only when the online PIN verification method is used, with the PIN security control information in field 53 and the PIN in field 52. However, a cashback transaction in the U.S., Australia, or New Zealand may also be performed without field 52 and field 53 if Offline PIN Verification is performed and does not fail.

NOTE

Field 53 is required in cashback transactions when field 52 contains an online PIN. See the Cashback Service (U.S./Australia/New Zealand) section in field 52.

4.62.4 Field Edits

Field 53 is required if field 52 is present in the message. Field 53 must contain the following subfield values.

- Positions 1–2 (53.1) must be **02** or **20**
- Positions 3–4 (53.2) are not edited
- Positions 5–6 (53.3) must be **01**, **02**, **03**, or **04**
- Positions 7–8 (53.4) must be **01** or **02**
- Positions 9–16 must be **zeros** in outgoing requests

VisaNet, Plus, MasterCard and Cirrus: Positions 5–6 must be **01**, **02**, or **03**.

Other Edits: Visa will reject a message with reject code **0753** if:

- An original request is submitted with field 53 but there is no PIN data in field 52.
- Field 53 is present in an advice, a reversal, or a response message.

4.62.5 Reject Codes

0088 = Invalid value

0384 = Field missing

0753 = Consistency error—invalid use of field 53

4.62.6 Valid Values

Table 4-37 Field 53 Security Control Code

Code	Definition
Positions 1–2: Security Format Code	
02	Issuer Key - Plus ISO
20	Zone encryption
Positions 3–4: PIN Encryption Algorithm Identifier	
01	ANSI DES
Positions 5–6: PIN Block Format Code (per ANSI 9.8)	
01	Format is based on the PIN, the PIN length, and selected rightmost digits of the account number; it is also based on the pad characters 0 and F—combined through an exclusive OR operation. Conforms to ISO Format 0.
02	Format is based on the PIN, the PIN length, and a user-specified numeric pad character. (Docutel)
03	Format is based on the PIN and the F pad character (Diebold-IBM)
04	PIN Block Format (Plus transactions)
Positions 7–8: PIN Zone Key Index	
00	Not applicable
01	Working key 1 is to be changed or used.
02	Working key 2 is to be changed or used.
Positions 9–10: PIN Data Type (Not Applicable)	
00	PIN is present in field 52.
01	Password is present in field 52.

Positions 11–16 are reserved for BASE I use at the VIC. They must be zero-filled by the acquirer.

4.63 Field 54—Additional Amounts

4.63.1 Attributes

variable length
1 byte, binary +
20 ANS, EBCDIC; 21 bytes total
or 40 ANS, EBCDIC; 41 bytes total
or 60 ANS, EBCDIC; 61 bytes total
or 80 ANS, EBCDIC; 81 bytes total
or 100 ANS, EBCDIC; 101 bytes total
or 120 ANS, EBCDIC; 121 bytes total
maximum: 121 bytes

4.63.2 Description

Field 54 contains account balance information for POS or ATM balance inquiries or ATM cash disbursements. Acquirers can display balances at the terminal, print them on the receipt, or both.

This field is used in several types of transactions (such as balance inquiries, prepaid authorizations, and partial authorizations), each requiring one or more unique codes in this field. The codes are listed by transaction type in the Valid Values section.

Field 54 can be used whether or not the issuer or acquirer are multicurrency participants. It comprises sets of account balance information. A set is 20 bytes long, not including the length subfield.

Positions:					
	1–2	3 –4	5–7	8	9–20
length	Account type	amount type	currency code	amount, sign	amount
Byte 1	Byte 2–3	Byte 4–5	Byte 6–8	Byte 9	Byte 10–21

Length Subfield: This value is the number of bytes following the length subfield.

Positions 1–2, Account Type (Field 54.1): This value is a 2-digit code identifying the account type affected by the balance inquiry. See [Table 4-38](#) in the Valid Values section for codes. Subsequent tables list the codes for prepaid transactions, partial authorizations, auto-substantiation transactions, healthcare eligibility inquiry responses, and AFT foreign exchange fees.

Positions 3–4, Amount Type (Field 54.2): This value is a 2-digit code describing the use of the amount indicated in positions 9–20. See [Table 4-38](#) in the Valid Values section for codes. Subsequent tables list the codes for prepaid transactions, partial authorizations, auto-substantiation transactions, healthcare eligibility inquiry responses, and AFT foreign exchange fees.

Positions 5–7, Currency Code (Field 54.3): This value is a 3-digit code that defines the currency used in positions 9–20. See the appendix Country and Currency Codes for a currency code list.

NOTE

For balance inquiries or returns, if an issuer provides spaces or zeros in field 54.3 of the response, Visa will assume the value of Field 51—Currency Code, Cardholder Billing, if present, or 840 if the issuer does not participate in multicurrency.

Position 8, Amount, Sign (Field 54.4): This value is a 1-digit code that defines the value of the amount as positive or negative, where:

C = positive balance

D = negative balance

Positions 9–20, Amount (Field 54.5): This value is a 12-character amount that is right-justified and contains leading zeros. The amount also includes an implied decimal relative to the currency code specified in positions 5–7.

Currency Processing for ATM Balance Inquiry: The issuer or customer financial institution responding to an ATM balance inquiry can provide one or two balance information sets. The following table describes how ATM balances are populated in field 54. This structured format does not apply to the POS balance inquiry and POS balance return.

If the field in the issuer response contains:		The field in the response contains (along with account type, amount type, currency code, and positive/negative balance code):			
Number of balances supplied by issuer	Currency conversion required?	Subfield 1, positions 1–20 (54A)	Subfield 2, positions 21–40 (54B)	Subfield 3, positions 41–60 (54C)	Subfield 4, positions 61–80 (54D)
One	No	Balance A amount in cardholder billing currency	Not returned	Not returned	Not returned
One	Yes	Balance A amount in cardholder billing currency	Zero-filled	Balance A amount in acquirer transaction currency	Not returned
Two	No	Balance A amount in cardholder billing currency	Balance B amount in cardholder billing currency	Not returned	Not returned
Two	Yes	Balance A amount in cardholder billing currency	Balance B amount in cardholder billing currency	Balance A amount in acquirer transaction currency	Balance B amount in acquirer transaction currency

Currency Processing for POS Balance Inquiry and POS Balance Return: The following table describes how POS balance inquiries and POS balance returns are populated in field 54.

If the field in the issuer response contains:		The field in the response contains (along with account type, amount type, currency code, and positive/negative balance code):	
Number of balances supplied by issuer	Currency conversion required?	Subfield <i>n</i> (no restriction on exact subfield as long as there are no preceding blank subfields).	Subfield <i>n</i> (no restriction on exact subfield as long as there are no preceding blank subfields).
One	Does not matter	Issuer provides balance A amount in cardholder billing currency. V.I.P. ensures acquirer receives balance A amount in transaction currency.	Not populated with balance return information.
Two	Does not matter	Issuer provides balance A amount in cardholder billing currency. V.I.P. ensures acquirer receives balance A amount in transaction currency.	Issuer provides balance B amount in cardholder billing currency. V.I.P. ensures acquirer receives balance B amount in transaction currency.

Multicurrency Processing: V.I.P. converts cardholder billing currency amounts provided by the issuer or customer financial institution to their transaction currency amounts before it forwards the response to the acquirer or service provider.

For ATM balance inquiry and ATM withdrawal with balance return: When currency conversion is required (because the transaction currency and cardholder billing currency are different), the response message that Visa forwards to the acquirer contains balances expressed in both currencies.

For POS balance inquiry and POS balance return: The acquirer receives balances expressed in transaction currency, irrespective of whether the transaction currency is the same as the issuer-provided currency code.

Non-Multicurrency Participating Acquirer: For ATM balance inquiry: Visa replaces the balance amount in positions 1–20 (and positions 21–40, if present) with the equivalent transaction amounts. Non-Multicurrency acquirers will not receive positions 41–60 and 61–80.

For POS balance inquiry and POS balance return: The acquirer receives balances expressed in transaction currency, irrespective of whether the transaction currency is the same as the issuer-provided currency code.

Overflow Amount: If the field 54 converted amount in transaction currency overflows 12-Character Amount field in converted Set, the converted amount will be shown as **999999999999**.

4.63.3 Usage

This field is used in approved magnetic-stripe-based ATM or POS balance inquiries. POS balance inquiries can be stand-alone (balance inquiry) or part of a purchase authorization request (balance return).

Acquirers submitting requests containing an account type of **10** or **20** will receive the value **40** from issuers in countries that do not support account selection.

Account Type Coding: If the issuer provides two amounts in a balance inquiry or card transaction response, they must have the same account type. If the account type (field 3, positions 3–4) in a request is **00**, the account type for the responses may be **00** or it can be changed to the proper code for the amount being provided. The account type subfield code of every data set in this field must be the account type code in field 3 of the response.

If the account type in a request is (not **00**), that code must be used in the response in field 3 and all field 54 datasets.

For balance inquiries, if only one balance is included, it is recommended that it be the current account ledger balance. For credit card accounts, the current account ledger balance refers to the amount of credit remaining to the customer.

Because issuers can return negative balances, acquirers must be able to receive positive or negative balances.

V.I.P. drops this field from the issuer's response message if the field 39 response code indicates a lost or stolen card (response code **41** or **43**) or requests that the card be surrendered (**04** or **07**).

CPS/ATM: Field 54 is used in approved magnetic-stripe-based ATM balance inquiry and cash disbursement responses.

VSDC Transactions: This field is used in balance inquiry responses.

Prepaid Transactions: This field is optional in all response messages for all activation and load transactions. See "Valid Values."

See "Field 3" and "Field 4."

Partial Authorization: This field contains original amounts in 0110 responses. When an issuer receives an 0100 message that contains the purchase amount in field 4 and a value of **1** in field 60.10, position 12, the issuer may process the request and respond with an approved partial amount (indicated by a response code of **10** in field 39).

Field 54 contains the field 4 original amount from the request and field 49 currency code. If the original transaction amount is not present in field 54 for partial approval, V.I.P. will insert the original amount in field 54 before forwarding the response to the acquirer.

Non-multicurrency issuers return the approved partial amount in field 4.

Multicurrency issuers return the approved partial amount in field 6 in the cardholder billing currency (field 51).

For applicable field 54 edits, see "Field Edits." Also see related edits for fields 4, 6, and 39.

Acquirers that need to reverse a partial approval transaction must send an 0400 reversal message with the partial approval amount and not the original amount from the 0100 request.

For field 54 values in partial authorizations, see "Valid Values section."

Auto-Substantiation Transactions: Only U.S. issuers can approve these transactions, which include various types of healthcare point-of-sale purchases that are covered in full or in part by cards associated with Flexible Spending Accounts (FSAs) and Healthcare Reimbursement Arrangements (HRAs). Point-of-sale transit purchases are also supported. Partial authorizations are available for FSA and HRA cards.

These transactions are identified by an MSDI (field 62.4) value of **M** (healthcare) or **T** (transit).

In a card-present, 0100 request message, this field contains the amount of a qualified healthcare or transit purchase. This field is also used in 0400/0420 reversals. This usage of field 54 is not present in original responses, reversal responses, or advice responses.

This usage of field 54 is included in 0120 and 0420 STIP advices when it is present in the original request or reversal.

In original healthcare auto-substantiation requests, participating merchants must insert the total amount of qualified healthcare products as amount type **4S**, which may include one or more of the following:

- An over-the-counter (OTC) amount only (**4S**)
- The total of all amounts from the following healthcare categories:
 - Prescription/Rx (amount type **4U**)
 - Vision or optical services (amount type **4V**)
 - Clinics or other qualified medical services (amount type **4W**)
 - Dental (amount type **4X**)
- OTC amount plus the total of all amounts contained within each healthcare category (**4U**, **4V**, **4W**, and **4X**)

Each amount type included in the request requires its own 20-byte set (starting with Account Type and ending with Amount). This means that the field length can range from 20 bytes to 120 bytes, depending on the number of amount types in the field.

Acquirers must include this field in 0100 healthcare auto-substantiation requests. If V.I.P. receives an 0100 or 0400 message that contains this usage of field 54 and field 62.20 does not include a MVV for a SIGIS-certified merchant, V.I.P. will remove all field 54 amount sets from the request message. V.I.P. will also reset the value in field 62.4 from **M** (healthcare) to **N** (failed market-specific data edit, or not applicable).

NOTE

A field 54 set with healthcare information is not required for healthcare auto-substantiation 0400/0420 reversal messages, but if it is included, the acquirer should also include field 62.4 and field 62.20.

Eligibility Inquiries (U.S. Only): This field is optional in 0110 responses. Issuers include an amount type of **3S** (amount co-payment) and an account type of **00**, along with other healthcare eligibility values specified in the Valid Values section. Related material appears in the descriptions for field 3 and field 104, usage 2.

Using Multiple Sets: Six field 54 sets can be present in one transaction. When an issuer populates a field 54 set for a POS transaction, the first available set must be used; otherwise, the transaction is rejected back to the issuer. Rejected transactions can be authorized under issuer-specified STIP processing rules.

There is no guaranteed order of field 54 sets in POS responses. When an acquirer receives a field 54 set in a POS transaction, the account type, amount type, and currency code subfields must be interrogated to determine the use of the set.

Payment Transactions (U.S. Only): A payment response message may contain balance information from the issuer in this field.

Additional requirements and related information can be found in the descriptions for fields 3, 62.1, and field 104, usage 2.

ATM Access Fee Data: For issuers that choose to receive this field (and that process multicurrency transactions), Visa will populate this field with an amount set containing access fee data from field 28, in the cardholder billing currency. Issuers will receive field 54 in the following Visa and Plus ATM domestic and international messages:

- 0100 authorizations and 0120 authorization advices.
- 0400 and 0420 full reversals.
- 0420 ATM partial reversals.

NOTE

Acquirers do not receive this field 54 amount set in messages.

Authorization Gateway Transactions—American Express: If the response from American Express contains balance return information, Visa will forward it to the acquirer, provided the acquirer can receive balance return information in this field.

More than one American Express field can map to field 54. If an original amount and an available balance are included in the issuer response, Visa will build a field 54 set for each. See the *Authorization Gateway Service Cross-Reference Guide*.

Authorization Gateway Transactions—Discover: If the response from Discover contains balance information in this field, Visa will forward the information to the acquirer, provided the acquirer has elected to receive it.

This field is also forwarded to the acquirer in 0110 partial authorization responses from Discover. In this instance, the field contains the original amount from the authorization request, along with an account type of 57. Field 4 contains the partial approval amount.

Multiple occurrences, or sets, of field 54 data may be present in one transaction. See "Using Multiple Sets."

Authorization Gateway Transactions—MasterCard Balance Information: If the response from MasterCard contains balance return information, Visa will forward it to the acquirer, provided the acquirer can receive balance return information in this field. Acquirers in the U.S. region must support field 54 for all MasterCard transactions.

More than one occurrence, or set, of field 54 data may be present in a response from MasterCard. Hence, acquirers must be prepared to support multiple sets. See "Using Multiple Sets."

NOTE

Acquirers that can't receive balance return information are not compliant with the MasterCard mandate for this field.

MasterCard transactions processed through the Authorization Gateway (that is, credit POS and signature debit transactions) may contain balance information for approved or declined partial authorizations. See the *Authorization Gateway Service Cross-Reference Guide*.

Authorization Gateway Transactions—MasterCard Healthcare Requests: In 0100 requests destined for MasterCard, positions 3–4 of this field may contain **4S** (healthcare). In addition to **4S**, the amount type of **4U** (Prescription/Rx only) will be available for use in real-time substantiation transactions. The amount in **4S** can include: an OTC amount only; or OTC amount plus the amount contained within **4U**. The amount in **4U** must be equal to or less than the total amount in **4S**. See the *Authorization Gateway Service Cross-Reference Guide*.

Authorization Gateway Transactions—MasterCard POS (Colombia): This field must not be present in Colombia-domestic authorization requests, authorization advices, and authorization reversals if field 104, usage 2 contains Tag 11 in dataset ID 65.

Account Funding Transaction (AFT) Foreign Exchange Fee: Visa supports optional AFT foreign exchange fees in 0100 authorization requests and 0400 reversals.

When field 54 is present in an AFT request message, acquirers and originators include its value in field 4. If the issuer has chosen not to receive field 54 in AFTs, the issuer will be unable to determine what portion of field 4 is for an AFT foreign exchange fee.

Issuers should not return field 54 in AFT 0110 authorization responses or 0410 reversal response messages.

If field 54 is present in the request and the Currency Code subfield is not the same value as in field 49, BASE I will decline the request message with a value of **12** (invalid transaction) in field 39. If the value in the Amount subfield is not correctly formatted, the message will be rejected.

Enhanced Prepaid Load Original Credit Transactions (Non-U.S.): If this field is present, positions 1–2 must contain a value of **28** (prepaid load transaction) in the response. Recipient issuers can optionally include field 54 with the updated prepaid card balance information in enhanced prepaid load OCT responses; however, in certain countries the return of this information in responses may be required.

Visa Integrated Redemption Platform (VIRP)—U.S. Only: V.I.P. includes this field in approved U.S. domestic 0110 responses to acquirers for transactions in which a POS discount was applied to field 4. In fully approved and partially approved responses, V.I.P. includes amount type **57** in this field. V.I.P. does not include this field in declined VIRP responses. See "Valid Values section."

Also see the descriptions for field 4 and field 104, usage 2.

Surcharge Amounts in U.S. POS Transactions: For issuers that support multicurrency processing and choose to receive POS surcharge information in requests, V.I.P. calculates the surcharge amount in the cardholder's billing currency and includes it in this field. This processing applies to authorizations, completion advices, reversals (including partial reversals), and STIP advices.

Also see the description for field 28.

Manual Cash Disbursement: For issuers that choose to receive access fee information and that support multicurrency processing, V.I.P. calculates the access fee amount in the cardholder billing currency and includes the calculated amount in field 54. Field 54 is included in the following manual cash disbursement messages:

- 0100 authorization requests and 0120 STIP advices.
- 0400 reversals and 0420 STIP advices.

Also see the description for field 28.

Total Cumulative Amount: Acquirers optionally can use amount type **43** for the cumulative total amount for a series of incremental authorizations. This type can be used in 0100 authorization and 0120 advice messages. See [Table 4-48](#).

4.63.4 Field Edits

The values for a given service or capability must reflect those specified in the applicable table of the Valid Values section. Edits are described below.

Field 54 is required in all responses to approved magnetic stripe-based and VSDC-based 0110 balance inquiries. The length subfield value must be **20, 40, 60, 80, 100, or 120**. It should not be present when a balance inquiry is declined, but its presence does not cause a reject.

In responses, every account type code in this field must match field 3 positions 3–4.

The values in the account type and amount type subfields must be one from [Table 4-38](#) of the Valid Values section.

The value in the currency code subfield must be one listed in the appendix titled “Country and Currency Codes.”

The amount sign must be **C** or **D**.

ATM Balance Inquiries: If the issuer supplies only one set (Set A), the acquirer will receive only two sets, not four (only one set if the currencies are equal). BASE I does not zero-fill sets.

Auto-Substantiation Transactions: Except as noted, transactions that fail the following edits receive reject code **0150**.

NOTE

*In healthcare auto-substantiation requests, if the account type in field 54 is **00** or **40**, V.I.P. will change it to match the account type in field 3, positions 3-4, if the value is **00** or **40**. In this instance, no reject or reject code would apply.*

- The account type must be **00** or **40** and match the account type in field 3, positions 3 and 4.
- The **4S** or **4T** amount type in field 54 must be recognizable and consistent with the value in field 62.4 (**M** or **T**), and field 62.4 must be present.
- When one or more of the healthcare amount types **4U**, **4V**, **4W**, and **4X** are present as optional field 54 occurrences in request messages, there must also be an occurrence with **4S**.

NOTE

*V.I.P. does not add up all amounts included in field 54 to ensure that they equal the total amount carried in the **4S** amount. Nor does V.I.P. ensure that the sum of these amounts does not exceed the field 4 amount. However, V.I.P. ensures that the **4S** amount does not exceed the field 4 amount.*

- Except for a reversal of a partial approval, the field 54 amount cannot exceed the field 4 amount, the currency must be **840** (and match the field 49 transaction currency), and the amount sign must be positive. The field 54 amount can exceed the field 4 amount if the original request resulted in a partial approval.

Partial Authorization: The following edits apply to 0110 responses when field 39 = **10**:

- If field 54 does not include a set containing the original transaction amount (amount type = **57**), V.I.P. will reject the response back to the issuer with reject code **0150** (invalid value).
- If field 54 is not present, V.I.P. will reject the response back to the issuer with reject code **0250** (field missing).

If a response is rejected, STIP accepts or declines the total transaction amount based on issuer-specified parameters.

If the acquirer does not elect to receive POS balance returns, neither field 54 balances nor original transaction amounts will be returned to the acquirer. V.I.P. will drop these amounts from the response message.

Also see Partial Authorization edits in the descriptions for fields **4**, **6**, and **39**.

Empty Set Between Populated Sets: If an empty field 54 set exists between two populated sets, V.I.P. will reject the transaction back to the issuer with reject code **0150**.

Account Funding Transaction (AFT) Foreign Exchange Fee: If this field is present in an original request and the value in the Amount subfield is not correctly formatted, the message will be rejected with reject code **0150**.

4.63.5 Reject Codes

0150 = Invalid value

0250 = Field is missing

0517 = Value for account type does not match value in field 3 account type. For prepaid transactions only, the value for account type is not consistent with field 3 *transaction* type.

0518 = Incorrect field usage (client has not successfully completed testing)

4.63.6 Valid Values

Table 4-38 Field 54 ATM/POS Balance Inquiry and POS Balance Return: Account and Amount Type Codes

Code	Definition
Positions 1– 2: Account Type	
00	Not applicable or not specified
10	Savings Account

Table 4-38 Field 54 ATM/POS Balance Inquiry and POS Balance Return: Account and Amount Type Codes (continued)

Code	Definition
20	Checking Account
30	Credit Card Account
40	Universal Account
Positions 3–4: Amount Type	
01	Deposit Accounts: Current ledger (posted) balance Credit Card Accounts: Credit amount remaining for customer (open to buy)
02	Deposit Accounts: Current available balance (typically, ledger balance less outstanding authorizations. Some depository institutions also include pending deposits and the credit or overdraft line associated with the account.) Credit Card Accounts: Customer's credit limit.
56	Client-provided fee

Table 4-39 Visa Integrated Redemption Platform (VIRP): Account and Amount Type Codes

Code	Definition
Positions 1–2: Account Type	
00	Not applicable or not specified
Positions 3–4: Amount Type	
57	Original Transaction Amount: The original transaction amount sent by the acquirer

Table 4-40 Field 54 Prepaid Transaction Values

Position	Name	Description
1–2	Account Type	28 = Prepaid load transaction 72 = Prepaid activation transaction
3–4	Amount Type	00 = Code for payment transactions
5–7	Currency Code	This position contains the currency code of the transaction.
8	Amount, Sign	C = Positive balance.
9–20	Amount	This position contains the card balance.

Table 4-41 Field 54 Partial Authorization Values

Position	Name	Description
1–2	Account Type	00 = Not applicable or not specified
3–4	Amount Type	57 = Original amount
5–7	Currency Code	Contains the currency code of the transaction from field 49 of the request message
8	Amount, Sign	C = Positive balance.
9–20	Amount	Contains the original transaction amount in the transaction currency from field 4 of the request message

Table 4-42 Auto-Substantiation Request Values

Position	Name	Description
1–2	Account Type	Must be 00 or 40 and match the account type in field 3, positions 3 and 4.
3–4	Amount Type	Either: 4S = Total Amount Healthcare 4T = Amount Transit (not applicable to healthcare auto-substantiation transactions) If 4S is present, one of these may also: 4U = Amount Prescription/RX 4V = Amount Vision/Optical 4W = Amount Clinic/Other Qualified Medical 4X = Amount Dental
5–7	Currency Code	This position contains the currency code of the amount in positions 9–20. Must be 840 .
8	Amount, Sign	C = Positive balance
9–20	Amount	This position contains the amount of the qualified expense type.

Table 4-43 MasterCard: Healthcare Real-Time Substantiation Request Values

Position	Name	Description
1–2	Account Type	Indicates the type of account being used. A value of 00 or 40 indicating non-specified type will be used for real-time substantiation transactions.
3–4	Amount Type	4S or 4S and 4U , where: 4S = Total eligible amount healthcare 4U = Amount prescription/Rx If the value of 4T (Amount transit) is submitted in the request message, V.I.P. will drop field 54 before sending the authorization request to MasterCard. The value in this field will be mapped to MasterCard DE 54 as follows: 4S = 10 ; 4U = 11 .
5–7	Currency Code	This position contains the currency code of the amount in positions 9–20. For U.S. dollars, this value is 840 .
8	Amount, Sign	C = Positive balance
9–20	Amount	This position will contain the qualified healthcare amount.

Table 4-44 Field 54 Values in 0110 Healthcare Eligibility Inquiry Responses

Position	Name	Description
1–2	Account Type	Must be 00 .
3–4	Amount Type	3S = Amount co-payment
5–7	Currency Code	This position contains the currency code of the amount in positions 9–20.

Table 4-44 Field 54 Values in 0110 Healthcare Eligibility Inquiry Responses (continued)

Position	Name	Description
8	Amount, Sign	C = Positive balance
9–20	Amount	This position contains the amount specified by the amount type.

Table 4-45 Field 54 ATM Access Fee Data

Position	Name	Format	Description
1–2	Account Type	UN	Account type is not applicable and is set to zeros (0).
3–4	Amount Type	UN	These positions contain the value: 42 = Amount surcharge
5–7	Currency Code	UN	These positions contain a currency code for the cardholder billing currency.
8	Amount, Sign	AN	This position contains one of the following values: D = Negative balance C = Positive balance
9–20	Amount	UN	These positions contain the access fee amount. The amount includes an implied decimal relative to the currency code specified in positions 5–7. Right-justified leading zeros (0).

Table 4-46 Field 54 Values for AFT Foreign Exchange Fees

Position	Name	Description
1–2	Account Type	This subfield must contain a value of 00 (not applicable or not specified).
3–4	Amount Type	This subfield must contain a value of 95 for Visa money transfer (VMT).
5–7	Currency Code	This subfield must contain the same currency code value as in field 49.
8	Amount, Sign	This subfield must contain a value of C (positive balance) or D (negative balance). NOTE: <i>For AFT foreign exchange fees, this field should contain a value of D, which is a debit to the cardholder.</i>
9–20	Amount	This subfield contains an optional AFT foreign exchange fee. This subfield must be right-justified, with leading zeros, and include an implied decimal relative to the currency code specified in field 49.

Table 4-47 POS Surcharge Information

Position	Name	Description
1–2	Account Type	This subfield can contain a current value.
3–4	Amount Type	42 = Amount surcharge

Table 4-47 POS Surcharge Information (continued)

Position	Name	Description
5–7	Currency Code	This subfield contains the cardholder's billing currency code, from Field 51—Currency Code, Cardholder Billing of the request message.
8	Amount, Sign	C = Credit to cardholder D = Debit to cardholder
9–20	Amount	This subfield contains the surcharge amount in the cardholder's billing currency.

Table 4-48 Total Cumulative Amount

Position	Name	Description
1–2	Account Type	Can contain current value.
3–4	Amount Type	43 : Total cumulative amount.
5–7	Currency Code	Contains currency code from Field 49—Currency Code, Transaction. NOTE: <i>If value in positions 5–7 doesn't match transaction currency code in field 49, V.I.P. rejects message with Reject Code 0150—Invalid Value.</i>
8	Amount, Sign	C : Positive balance D : Negative balance
9–20	Amount	Contains total cumulative amount for series of incremental authorization transactions.

4.64 Field 55—Integrated Circuit Card (ICC)-Related Data

4.64.1 Attributes

variable length

1 byte binary +

255 bytes, variable by usage; maximum 256 bytes

4.64.2 Description

This field contains integrated circuit card (ICC)-related data that is transmitted from the ICC to the card issuer and from the card issuer to the ICC. The format of the field is a special form of a composite data element that uses three subfields after the length subfield.

4.64.3 Usage

Field 55 usages and formats are described in the field descriptions for the following field 55 "Usages."

Usage 1—VSDC Chip Data

Usage 2—Chip Card Data

4.64.4 Field Edits

Field edits vary depending on the usage.

4.64.5 Reject Codes

The reject codes vary depending on the usage.

4.65 Field 55, Usage 1—VSDC Chip Data

4.65.1 Attributes

variable length
1 byte binary +
255 bytes (510 hex digits), variable by usage; maximum 256 bytes

4.65.2 Description

This field is carried in VSDC and Contactless Magnetic Stripe transactions and supports ICC data in TLV format. Depending on the tag, some of the data elements are used by VisaNet for processing the transaction and other data elements contain issuer proprietary information. Data elements that are used by VisaNet have a corresponding field in the third bitmap. The tags for data elements that contain issuer proprietary information cannot be mapped into third bitmap and are handled by VisaNet as supplemental data that can be included in the message depending on client options.

VSDC full data acquirers and issuers can choose to use field 55 or the third bitmap fields to exchange chip data. Acquirers and issuers that use the third bitmap can also use field 55 for supplemental data to send and receive issuer proprietary information.

Issuers of Generic EMV cards must use field 55.

Non-VSDC full data acquirers and issuers that support chip data in contactless transactions must use field 55.

Acquirers and issuers that use field 55 to exchange all chip data should be aware that the usage rules for the equivalent third bitmap fields also apply to the TLV data elements in field 55, but the field 55 data must not be replicated in the equivalent third bitmap fields. That is, if field 55 is being used to transport the VSDC data, the equivalent of all mandatory third bitmap fields must be in field 55.

This field 55 VSDC chip data usage contains three subfields after the length subfield.

Positions:			
1		2–3	4–255
Subfield 1:	Subfield 2:	Subfield 3:	Subfield 4:
length	dataset ID	dataset length	Chip Card TLV data elements
			<div><div><div>Tag</div><div>Length</div><div>Value</div></div><div>TLV₁</div></div> <div><div><div>Tag</div><div>Length</div><div>Value</div></div><div>TLV_N</div></div>
Byte 1	Byte 2	Byte 3–4	Byte 5–256

Length Subfield: This is a one-byte binary subfield that contains the number of bytes in this field after the length subfield.

Position 1, Dataset ID: This is a one-byte binary identifier given to each dataset. The identifier is hexadecimal **01**.

Positions 2–3, Dataset Length: This is a 2-byte binary subfield that contains the total length of all TLV elements that follow.

Positions 4–255, Chip Card TLV Data Elements: This is a 252-maximum byte (504 hexadecimal digits) subfield that contains chip data elements in TLV format as follows.

Tag: The tag can be one or two bytes long. The number of bytes used for the tag is determined by the last five bits (bits 4–8) of the first byte of the tag position. If these five bits are all set to 1, the next byte is part of the tag. If all five bits are not set to 1, the tag is only 1 byte long.

Length: The length can be one or two bytes long. The number of bytes used to specify the length is determined by the first bit of the first byte of the length position. If the first bit of the length position is zero (0), the length is carried in the next seven bits of the first byte and the length position is only one byte long. The length of the data element is in the range of 1–127.

If the first bit of the length position is 1, the next seven bits contain the number of subsequent bytes used for the length. The length of the data element is in the range of 1–255.

Value: Chip card data in hexadecimal format.

The following table shows the tags that are recognized by VisaNet and can be mapped into third bitmap fields. See the equivalent third bitmap field about the information and construction of the value component carried in each of the data elements.

Table 4-49 Field 55 Tags and Mappings

Tag	Data Element	Attributes	Description
71	Issuer Script Template 1	Variable length 1 byte + 510 hexadecimal digits, maximum 256 bytes	These tags map to Field 142—Issuer Script NOTE: <i>The format of these tags varies slightly from the layout provided in the description of field 142. See Appendix H—VSDC Fields—Additional Information for the layout of field 55, tags 71 and 72.</i>
72	Issuer Script Template 2		
82	Application Interchange Profile	Fixed length 16 bit string; 2 bytes	This tag maps to Field 138—Application Interchange Profile
84	Dedicated File Name	Variable length 5 bytes + 16 bytes	This tag contains the Application ID (AID) that was selected for transaction routing. NOTE: <i>U.S. acquirers must submit the selected AID in 0100 authorization requests and in 0200 full financial requests for VSDC EMV contact chip and qVSDC contactless transactions. If Tag 84 is not present, the transaction is routed to the network that owns the BIN. If the Visa AID is selected, the transaction is routed to a Visa network.</i>

Table 4-49 Field 55 Tags and Mappings (continued)

Tag	Data Element	Attributes	Description
91	Issuer Authentication Data	Field 139: <ul style="list-style-type: none"> Fixed length 16 hexadecimal digits + 2 AN EBCDIC; 10 bytes total Field 140: <ul style="list-style-type: none"> Variable length 1 byte binary + 16 bytes, maximum 17 bytes 	This tag maps to various formats of Field 139—ARPC and ARPC Response Code or Field 140—Issuer Authentication Data, depending on client preference as follows: <ul style="list-style-type: none"> Acquirer option: - Third bitmap, expanded format: Field 140 <p>NOTE: For acquirers, the bytes following the ARPC cryptogram are defined as binary, coded as ASCII equivalent. Acquirers do not convert the content of these bytes to other formats.</p> <ul style="list-style-type: none"> Issuer option: - Third bitmap, standard format: Field 139 <p>NOTE: Field 55 is required for issuers using Proprietary Authentication Data with CCD cards or with CVN 18 VIS cards. The format of tag 91 for these issuers must be the equivalent of third bitmap, expanded format: field 140.</p>
95	Terminal Verification Results	Fixed length 40 bit string; 5 bytes; 5 bytes	This tag maps to Field 131—Terminal Verification Results
9A	Transaction Data	Fixed length 6N, 4 bit BCD; 3 bytes	This tag maps to Field 146—Terminal Transaction Date
9C	Transaction Type	Fixed length 2N, 4 bit BCD (unsigned packed); 1 byte	This tag maps to Field 144—Cryptogram Transaction Type
C0	Secondary PIN Block	8 bytes	This tag maps to Field 152—Secondary PIN Block
5F2A	Transaction Currency Code	Fixed length 3N, 4 bit BCD, 2 bytes	This tag maps to Field 148—Cryptogram Currency Code
9F02	Amount, Authorized	Fixed length 12 N, 4 bit BCD (unsigned packed) 6 bytes	This tag maps to Field 147—Cryptogram Amount
9F03	Amount, Other	Fixed length 12 N, 4 bit BCD (unsigned packed); 6 bytes	This tag maps to Field 149—Cryptogram Cashback Amount

Table 4-49 Field 55 Tags and Mappings (continued)

Tag	Data Element	Attributes	Description
9F10	Issuer Application Data	Variable length 1 byte binary + 32 bytes; maximum 33 bytes	This tag maps to various formats of Field 134—Visa Discretionary Data and Field 135—Issuer Discretionary Data, depending on the client preference of the recipient of the transactions as follows: <ul style="list-style-type: none"> • Acquirer Option: <ul style="list-style-type: none"> - Field 134, expanded format • Issuer Option: <ul style="list-style-type: none"> - Field 134, standard format + Field 135
9F1A	Terminal Country Code	Fixed length 3N, 4 bit BCD; 2 bytes	This tag maps to Field 145—Terminal Country Code
9F26	Application Cryptogram	Fixed length 16 hexadecimal digits; 8 bytes	This tag maps to Field 136—Cryptogram
9F33	Terminal Capability Profile	Fixed length 24 bit string; 3 bytes	This tag maps to Field 130—Terminal Capability Profile
9F36	Application Transaction Counter	Fixed length 4 hexadecimal digits, 2 byte binary value	This tag maps to Field 137—Application Transaction Counter
9F37	Unpredictable Number	Fixed length 8 hexadecimal digits; 4 bytes	This tag maps to Field 132—Unpredictable Number
9F5B	Issuer Script Results	Variable length 1 byte binary + 40 hexadecimal; 21 bytes	This tag maps to Field 143—Issuer Script Results
9F6E	Form Factor Indicator	Fixed length 4 bytes	Values for this tag are defined in the program documentation.
9F7C (U.S. only)	Customer Exclusive Data	Variable length 1 byte binary + 32 hexadecimal bytes, maximum 33 bytes	A description of this field is included in the program documentation.

Tags Without Third Bitmap Equivalents: This field may contain tags that are processed by V.I.P. for which there are no equivalent fields defined in the third bitmap. Details about these tags are documented in the respective VSDC and VCPS program documentation.

- **Tag 9F6E, Form Factor:** This tag is personalized on the card or device and carries additional information about the contactless device, its security features, and the technology used to acquire the transaction. This tag may be present in contactless transactions and is treated as supplemental data by V.I.P.
- **Tag 9F7C, Customer Exclusive Data (U.S. Only):** This tag is contained in U.S. contactless transactions and contains issuer proprietary information in TLV format. The tag is personalized on the card or device. If present in an interregional transaction, the tag is treated as supplemental data.

Exclusion of Sensitive Cardholder Information: Although Visa allows non-Visa, non-EMV tags to be sent in field 55, there are tags that must not be sent in this field

because they include sensitive cardholder information that may be inadvertently logged by systems that do not expect field 55 to contain sensitive cardholder information.

Acquirers and issuers must *not* include the following tags in field 55:

Tag	Chip Data	Equivalent Data Sent in:
56 ¹	Track 1 Equivalent Data	Not sent in chip transactions
57	Track 2 Equivalent Data	Field 35
5A	Application PAN	Field 2
5F20	Cardholder Name	Not sent in chip transactions
5F24	Application Expiration Date	Field 14
99	Transaction PIN	Field 52
9F0B	Cardholder Name—Extended	Not sent in chip transactions
9F1F	Track 1 Discretionary Data	Not sent in chip transactions
9F20 ²	Track 2 Discretionary Data	Field 35

1. This is an ISO tag (not an EMV tag) and is not personalized on Visa card applications. It is included in the above list for completeness.

2. This is an EMV tag and is not personalized on Visa card applications. It is included in the above list for completeness.

4.65.3 Usage

IMPORTANT

Endpoints that support this field must be able to receive dataset IDs and tags defined for this field in any order, including those they do not recognize or expect. Endpoints can receive multiple datasets in this field. Endpoints must ignore dataset IDs or tags they do not recognize and continue to process the field.

VSDC Full Transactions: For acquirers and issuers that use field 55 to carry full chip data, this field should be included in the following messages:

- 0100 authorization and account verification requests.
- 0100 cash disbursement and ATM balance inquiries.
- 0120 STIP advices.
- If Issuer Authentication failed, 0400 reversal requests and 0420 reversal advices.

See the latest version of the *VSDC System Technical Manual*.

Contactless Magnetic Stripe Transactions: This field should be included in the following messages:

- 0100/0110 requests and responses.
- 0120 completion advices.
- 0120 STIP advices.
- 0400/0410 reversal requests and responses.
- 0420 reversal advices.

Authorization Gateway Transactions—Diners Club: For acquirers that process Diners Club chip card transactions, the following Tag values should be included in field 55 of authorization request messages:

- 9F27 = Cryptogram information data.
- 9F35 = Terminal type.

Authorization Gateway Transactions—MasterCard: For acquirers that process MasterCard chip card transactions, the following Tag values should be included in field 55 of authorization request messages:

- 9F27 = Cryptogram information data.
- 9F34 = Cardholder Verification Method (CVM) results.

Cashback Service (Australia): This field is supported in all V.I.P. transactions initiated with VSDC chip cards at chip-enabled terminals that include a cashback amount. The following chip fields are also supported: 130, 131, 138, 143, 147, and 149.

Visa Fleet Card: Chip participants must be prepared to submit and receive data in this field.

Visa Token Service: Acquirers must submit this field when token data is present.

Early Data Issuers: V.I.P. removes this field before forwarding chip-based requests to Early Data issuers.

Visa iCVV Convert Service: V.I.P. removes this field before forwarding chip-based requests to issuers participating in the iCVV Convert Service.

Visa payWave Transactions: Acquirers must submit this field or the expanded third bitmap.

NOTE

Visa recommends that acquirers use this field to support chip data processing. However, acquirers that currently use the expanded third bitmap can continue to use their format to process Visa payWave ATM transactions.

4.65.4 Field Edits

Field edits vary depending on the usage and the tag. See the corresponding third bitmap field.

4.65.5 Reject Codes

The reject codes vary depending on the usage and the tag. See the corresponding third bitmap field.

4.66 Field 55, Usage 2—Chip Card Data

4.66.1 Attributes

variable length
1 byte, binary +
255 bytes (510 hex digits); variable by usage; maximum 256 bytes

4.66.2 Description

Field 55, Usage 2 supports chip card data in ISO-based TLV format. This field usage contains three subfields after the length subfield.

Positions:			
1	2–3	4–255	
Subfield 1:	Subfield 2:	Subfield 3:	Subfield 4:
length	dataset ID	dataset length	Chip Card TLV elements
			<div><div>TagLengthValue</div><div>TLV₁</div><div>TagLengthValue</div><div>TLV_N</div></div>
Byte 1	Byte 2	Byte 3–4	Byte 5–256

Length Subfield: This is a one-byte binary subfield that contains the number of bytes in this field after the length subfield.

Position 1, Dataset ID: This is a one-byte binary identifier given to each dataset. The identifier is **00** (hexadecimal).

Positions 2–3, Dataset Length: This is a two-byte binary subfield that contains the total length of the subsequent chip datasets.

Position 4–255, Chip Card TLV elements: This is a 252-maximum byte (504 hexadecimal digits) subfield that contains chip datasets. It is composed of the following three data elements:

- Tag:** This one-byte binary value should be **01**.
- Length:** This one-byte binary value indicates how many bytes of data constitute the value; for example, a TLV format length of **05** means that 5 bytes of data resides in the TLV format's value field.
- Value:** Chip card data in hexadecimal form.

4.66.3 Usage

IMPORTANT
Endpoints that support this field must be able to receive dataset IDs and tags defined for this field in any order, including those that they do not recognize or expect. Endpoints can receive multiple datasets in this field. Endpoints must ignore dataset IDs or tags they do not recognize and continue to process the field.

Acquirers and issuers must successfully complete testing to use this field in the following messages:

- 0100 authorization and account verification requests, 0100 cash disbursements, ATM balance inquiries, and account transfers, and in 0120 STIP advices.
- 0400 reversal requests and 0420 reversal advices if Issuer Authentication failed.

Authorization Gateway Transactions—American Express: For transactions initiated with American Express EMV chip cards, Visa recommends that full chip acquirers use field 55 to process chip card data.

Authorization Gateway Transactions—MasterCard: If this field is present with chip data in the VisaNet-format request, V.I.P. transfers it to DE 55 in the Banknet-format request. Field 55 is for MasterCard chip data. For acquirers using the third bitmap fields, V.I.P. transfers the data to field 55 before the VisaNet-format message being converted to Banknet format and DE 55 being built. See the *Authorization Gateway Service Cross-Reference Guide* for field-by-field data transfer descriptions between VisaNet-format, dual-message 0100 authorization requests and responses, and American Express- and MasterCard-format authorization requests and responses.

Visa Token Service: This field must be present in authorizations and full financial messages containing token data.

Visa Token Convert Service: V.I.P. removes this field before forwarding requests to participating issuers.

4.66.4 Field Edits

None. If the field length exceeds the maximum, V.I.P. drops the field from the message.

4.66.5 Reject Codes

None.

4.67 Field 56—Payment Account Reference Data

4.67.1 Attributes

variable length
1 byte, binary +
255 bytes, variable by usage; maximum: 256 bytes

4.67.2 Description

Field 56 is a Visa private-use field that involves multiple uses and field formats for different types of transactions and messages. The current usages are as follows:

- Usage 1—Payment Account Data.

NOTE

Regardless of the usage, the length subfield specifies the number of bytes that follow the length subfield.

4.67.3 Usage

See usage descriptions.

4.67.4 Field Edits

See usage descriptions.

4.67.5 Reject Codes

See usage descriptions.

4.68 Field 56—Usage 1: Payment Account Data

4.68.1 Attributes

variable length
1 byte, binary +

255 ANS, EBCDIC; maximum: 256 bytes

4.68.2 Description

This field description contains transaction-datasets presented in hex number order. The dataset IDs listed for position 1 can be used as a guide to the Usage section, which specifies the content for each dataset.

The datasets, which are in TLV format, can have multiple sub-elements. The TLV format is shown below.

Positions:			
1	2–3	4–255	
Subfield 1: length	Subfield 2: dataset ID	Subfield 3: dataset length	Subfield 4: TLV sub-elements
			<div><div>TagLengthValue</div><div>TLV₁</div><div>TagLengthValue</div><div>TLV_N</div></div>
Byte 1	Byte 2	Byte 3	Byte 5–256

Length Subfield: One-byte binary subfield that contains the number of bytes following the length subfield. The maximum is 255.

Positions 1, Dataset ID: This one-byte binary subfield contains a hexadecimal value that identifies the TLV data that follows. Following are the values:

- [Dataset Value Hex 01, Payment Account Data](#)

Positions 2–3, Dataset Length: This 2-byte binary subfield specifies the total length of the TLV fields present in the dataset. The length is variable, depending on the data that follows.

Positions 4–255, TLV Data: Each subfield of a data set has a defined tag, length, and value. The tag is used in conjunction with the dataset ID value. The dataset subfields can be present in any order with other TLV subfields.

4.68.3 Usage

The following subsections (in hex number order) describe the usages for this field.

IMPORTANT

Endpoints that support this field must be able to receive dataset IDs and tags defined for this field in any order, including those that they do not recognize or expect. Endpoints can receive multiple datasets in this field. Endpoints must ignore dataset IDs or tags they do not recognize and continue to process the field.

Table 4-50 Dataset Value Hex 01, Payment Account Data

Tag	Length	Value	Format	Content of Sub-Element
01	29	Payment account reference	AN	Contains the payment account reference.

4.68.4 Field Edits

TLV Format: The field must be correctly formatted; otherwise, V.I.P. rejects it.

4.68.5 Reject Codes

None.

4.69 Field 59—National Point-of-Service Geographic Data

4.69.1 Attributes

variable length
1 byte, binary +
14 ANS, EBCDIC; maximum 15 bytes

4.69.2 Description

Field 59 is a national-use field to identify an intra-country geographical location. Visa uses this field to describe the location of a customer transaction within the country of the card acceptor. The card acceptor country is identified in Field 19—Acquiring Institution Country Code or Field 43—Card Acceptor Name Location). Field 59 contains:

- U.S. card acceptors: the value must be a numeric state code (except for U.S. embassies and consulates) or numeric ZIP code or both.
- Canadian card acceptors: the value must be a numeric province code or alphanumeric postal code or both.
- Card acceptors outside the U.S. or Canada: when this field is sent, the value must be a 1–14 position alphanumeric postal code left-justified and truncated with no padding.

When the card acceptor is located in the U.S. or in Canada (field 19 is **840** or **124**, respectively, or the country in field 43 is **US** or **CA**², respectively), field 59 conforms to the ANSI X9A2 definition of U.S. and Canadian geographic data.

Field 59 has three subfields after the length subfield.

Positions:			
1–2		3–5	6–10, –11, or –14
length	card acceptor state or province code	card acceptor county code	card acceptor postal or ZIP code
Byte 1	Byte 2–3	Byte 4–6	Byte 7–15

Length Subfield: The value is the number of bytes following the length subfield.

Card Acceptor State or Province Code (Positions 1–2): This subfield contains zeros when not applicable. For a U.S. card acceptor, it contains a 2-digit numeric state code defined by ANSI X3.38 (1972, revised 1977). See [Table 4-51](#) of the Valid Values section. See [Table 4-52](#) for Canadian 2-digit numeric province codes.

U.S. Card Acceptor County Code (Positions 3–5): This subfield is omitted when not applicable and no ZIP code is present. The subfield is present when:

- It may contain a county code when applicable and a ZIP or postal code is present.
- It contains zeros when not applicable and a postal or ZIP code is present.
- For a U.S. card acceptor, it contains a 3-digit numeric county code as defined in FIPS PUB 6.3, 1979 (Federal Information Processing Standards Publication—Counties and County Equivalents of the States of the United States).

For the U.S. overseas military bases, embassies and consulates, and traveling merchants, the code in positions 1–2 is **99**. If **99** is used, field 19 must be **840**, and if present, field 43, positions 39–40, must be **US**.

2. CA is the V.I.P.-internal code for Canada. Elsewhere, the abbreviation used for Canada is CAN.

NOTE

The V.I.P. numeric state code **99** corresponds with its BASE II counterpart, **XX**.

This subfield does not apply to Canadian transactions. It must be zero-filled by Canadian card acceptors that are providing a postal code.

U.S. Card Acceptor Canadian Postal Code or ZIP (Positions 6–10, 6–11, or 6–14):

This subfield is omitted if not applicable.

When it is present in a U.S. transaction, this subfield contains the 5-digit or 9-digit ZIP code (5-digit ZIP code plus 4-digit extension) for the location of this customer transaction.

When it is present in a Canadian transaction, this subfield contains the 6- or 9-character alphanumeric postal code (the 9-character alphanumeric Canadian postal code is the 6-character alphanumeric postal code followed by three zeros). Typical field uses are as follows.

State/Province Code only:	Length = 2	State/Province Code = NN		
State Code and 5-digit ZIP Code:	Length = 10	State Code = NN	000	ZIP Code = NNNNN
State Code and 9-digit ZIP Code:	Length = 14	State Code = NN	000	ZIP Code = NNNNNNNNN
5-digit ZIP Code only:	Length = 10	00	000	ZIP Code = NNNNN
9-digit ZIP Code only:	Length = 14	00	000	ZIP Code = NNNNNNNNN
Province Code and 6-digit Postal Code:	Length = 11	Prov. Code = NN	000	ZIP Code = NNNNNN
Province Code and 9-digit Postal Code:	Length = 14	Prov. Code = NN	000	ZIP Code = NNNNNN000

4.69.3 Usage

Field 59 is required in 0100 authorization requests when field 43 is also present and contains a United States (**840**) or Canada country code.

IMPORTANT

Positions 3–5 are used for a **county** code, not a **country** code, that is, country code **840** is not allowed in these positions.

The ZIP code may be 5 or 9 digits, that is, the total field length must be 10 or 14. The first five ZIP code subfield positions must not be all **spaces** or all **zeros**, and cannot have embedded spaces. The ZIP code extension can be **0000**.

The Canadian postal code may be 6 or 9 alphanumeric characters, that is, the total field length must be 11 or 14. The 9-character alphanumeric version is the 6-character alphanumeric code followed by three **zeros**. The county code subfield (positions 3–5) should be zero-filled.

Plus: If field 59 is present in requests from Plus acquirers with 00 in the first two positions, and if field 43.3 (positions 39–40) is not **US** or **CA**, V.I.P. replaces the zeros with spaces.

CPS: This field requires a ZIP code in all U.S.-domestic POS authorization requests. For Canadian or U.S. domestic ATM authorization requests the province, postal or ZIP, and state codes are required. See the CPS ATM and CPS POS chapters in *V.I.P. System Services*, and the latest edition of the *U.S. Interchange Reimbursement Fee Rate Qualification Guide*.

For non-CPS 0100 authorization requests, state or province and county codes are not required. Their subfields can be furnished at the acquirer's option. If the state or province and county codes are not provided but the postal or ZIP code is, the state or province and county code subfields must be zero-filled.

Card acceptors outside of the U.S. and Canada:

This field must be:

- Left-justified
- Begin in position 1, up to 14 positions
- Truncated after last character
- Contain no padding of zeros or spaces

Authorization Gateway Transactions—MasterCard: This field is required in 0100 authorization requests.

Authorization Gateway Transactions—MasterCard AFD: In 0100 status check messages, this field must contain a U.S. state code or Canadian province code.

AFD Status Check and Acquirer Confirmation (U.S. Only): The 0100 status check request must contain a U.S. state.

4.69.4 Field Edits

Field 59 must be present when the message includes field 43 and the country value in that field is **US** or **CA**³, but only the state or province code subfield must be supplied. Whether or not field 43 is present, if field 59 is present, its content is edited.

The length subfield value must be **2, 5, 10, 11, or 14**.

The U.S. State code must be one of the codes in [Table 4-51](#). Canadian province code must be one of the codes listed in [Table 4-52](#).

If field 59 is **99**, indicating the U.S. military bases and embassies and travelling merchants (for example, nonstorefront merchants doing business inside a military base), field 19 must be **840** and field 43, positions 39–40, must be a country code.

4.69.5 Reject Codes

0028 = Invalid length

3. CA is the V.I.P.-internal code for Canada. Elsewhere, the abbreviation used for Canada is CAN.

0643 = Invalid national POS geographic code

0644 = Invalid national POS ZIP code

4.69.6 Valid Values

Table 4-51 contains the U.S. state codes. Table 4-52 contains the Canadian province codes. The ANSI codes for U.S. territories such as Puerto Rico, Guam, the Virgin Islands, and others, are not used in field 59. These entities are coded as countries in field 19 or in field 43 or in both.

Table 4-51 U.S. State Codes

State Name	Code
Alabama	01
Alaska	02
Arizona	04
Arkansas	05
California	06
Colorado	08
Connecticut	09
Delaware	10
District of Columbia	11
Florida	12
Georgia	13
Hawaii	15
Idaho	16
Illinois	17
Indiana	18
Iowa	19
Kansas	20
Kentucky	21
Louisiana	22
Maine	23
Maryland	24
Massachusetts	25
Michigan	26
Minnesota	27
Mississippi	28
Missouri	29
Montana	30
Nebraska	31

Table 4-51 U.S. State Codes (continued)

State Name	Code
Nevada	32
New Hampshire	33
New Jersey	34
New Mexico	35
New York	36
North Carolina	37
North Dakota	38
Ohio	39
Oklahoma	40
Oregon	41
Pennsylvania	42
Rhode Island	44
South Carolina	45
South Dakota	46
Tennessee	47
Texas	48
Utah	49
Vermont	50
Virginia	51
Washington	53
West Virginia	54
Wisconsin	55
Wyoming	56
U.S. military base, embassies, traveling merchants	99

Table 4-52 Canada Province Codes

Province Name	Code
Alberta	60
British Columbia	61

Table 4-52 Canada Province Codes (continued)

Province Name	Code
Manitoba	62
New Brunswick	63
Newfoundland and Labrador	64
Northwest Territories	65
Nova Scotia	66
Ontario	67
Prince Edward Island	68
Quebec	69
Saskatchewan	70
Yukon	71
Nunavut	72

4.70 Field 60—Additional POS Information

4.70.1 Attributes

variable length
1 byte, binary +
12 N, 4-bit BCD (unsigned packed), 7 bytes total

4.70.2 Description

Visa has defined this field for private use to contain additional point-of-sale or point-of-service information. See "Valid Values" for subfield codes. Ten "Field 60" fields follow the length subfield.

Positions:					
1	2	3	4	5–6	
length	F60.1 terminal type	F60.2 terminal entry capability	F60.3 chip condition code	F60.4 special condition indicator—existing debt	F60.5 not applicable
Byte 1	Byte 2		Byte 3		Byte 4
Positions:					
7	8	9–10	11	12	
F60.6 chip transaction indicator	F60.7 chip card authentication reliability indicator	F60.8 mail/ phone/electronic commerce and payment indicator	F60.9 cardholder ID method indicator	F60.10 additional authorization indicators	
Byte 5		Byte 6	Byte 7		

Length Subfield: The value in the length subfield indicates the number of bytes that are to follow the length subfield.

Position 1, Terminal Type (Field 60.1): This is a 1-digit code identifying the basic point-of-service electronic terminal. This field is also used for identifying ATM transactions.

Position 2, Terminal Entry Capability (Field 60.2): This is a 1-digit code identifying the terminal's capability to electronically read account numbers and expiration dates from cards.

Position 3, Chip Condition Code (Field 60.3): This field contains a 1-digit code that provides information about fallback transactions, which are initiated from the magnetic-stripe of VSDC cards at VSDC terminals. Although a value of **0** in the field indicates that the transaction is not a fallback transaction, it may be excluded from VSDC transactions where the chip is read.

Position 4, Special Condition Indicator—Existing Debt (Field 60.4): This field is currently used as an Existing Debt indicator so merchants can indicate whether a payment is being made on a debt.

Positions 5–6, Merchant Group Indicator (Field 60.5): Not applicable.

Position 7, Chip Transaction Indicator (Field 60.6): This 1-digit code field indicates a VSDC transaction sent from a full data acquirer.

Position 8, Chip Card Authentication Reliability Indicator (Field 60.7): This is a 1-digit code field sent in by the full data VSDC acquirer or set by V.I.P. when the acquirer or issuer is inactive for Card Authentication.

Position 9–10, Mail/Phone/Electronic Commerce and Payment Indicator (Field 60.8): This is a 2-digit code. For mail order or telephone order transactions (field 25 = **08**), it identifies the type of mail/telephone order. For e-commerce transactions (field 25 = **59**), it identifies the level of security used in an e-commerce transaction over an open network (for example, the Internet). Indicator values are supplied by acquirers and forwarded by V.I.P. in requests and advices to issuers that have successfully completed testing to receive them. The field is dropped if issuers have not successfully completed testing or choose not to receive it.

NOTE

In U.S. bill payment transactions, MOTO indicators are not limited to MOTO transactions; however, ECI indicators used in U.S. bill payments require the transaction to be electronic commerce.

Position 11, Cardholder ID Method Indicator (Field 60.9): This 1-digit code identifies the cardholder identification method used for a transaction. Issuers can optionally receive this field in all 0100 and 0120 authorizations and advices.

Position 12, Additional Authorization Indicators (Field 60.10): This 1-digit code identifies whether an acquirer supports partial authorization transactions.

4.70.3 Usage

Field 60 is used in POS and ATM 0100 and 0400 requests. Field 60 is present in 0120 and 0420 advices if it was in the request or was added to the request by V.I.P. Unused field 60 fields that precede ones that are used are zero-filled; otherwise, field 60 is truncated to the last field. Issuers should not edit these fields or use them for purposes not sanctioned by Visa.

POS: Field presence requirements in a request are described below.

ATM: Field 60 is required in 0100 ATM cash disbursements and balance inquiries and 0400 reversals. It is not required in voice authorization requests. If sent by an acquirer, V.I.P. drops the field before the message is forwarded to the issuer.

Visa Data Quality Improvement Program: This is a priority data field. When this field is submitted in V.I.P. and BASE II POS transactions, Visa monitors positions 1, 2, and 9–10 to ensure that the values are accurate, and consistent between authorization and clearing transactions.

Cashback Service (Australia): This field is supported in all V.I.P. transactions initiated with VSDC chip-cards at chip-enabled terminals that include a cashback amount. The VSDC subfields are 60.2, 60.3, 60.6, and 60.7.

Fields 60.1 and 60.2 (field 60, positions 1–2)

These fields are required in a POS 0100 authorization request *if* an electronic terminal was used—the fields are otherwise optional for requests involving other terminal types. If

fields 60.1 and 60.2 were present in the authorization request, they must be present in the 0400 reversal.

NOTE

*The \$150 requirement (that is, STIP approves or declines qualifying transactions rather than responding with a referral) applies only when field 60.1 and field 60.2 contain a value other than **zero**. This requirement is mandatory only for U.S. issuers. See field 39.*

CPS: Fields 60.1 and 60.2 are required in all card-present 0100 authorization requests. Field 60.2 must be 2 or 5. See the CPS ATM and CPS POS chapters in *V.I.P. System Services*, and the latest edition of the *U.S. Interchange Reimbursement Fee Rate Qualification Guide*.

VSDC: Field 60.2 is required in 0100 authorization and account verification requests, 0100 cash disbursements and balance inquiries, 0120 stand-in advices, 0400 reversal requests, and 0420 reversal advices.

The terminal should reflect the highest level of capability. For example, if the terminal is chip and magnetic stripe read capable, it should be identified as a chip-capable terminal.

Code **5** indicates that the terminal has been enabled to read a chip card. For all chip transactions processed by chip-capable devices, acquirers must send the value of **5**, along with other necessary chip data, in request messages. V.I.P. adds field 60.2, value **5**, if not present, or converts **0** to **5** in field 60.2 when field 22 contains **05** or **95**.

IMPORTANT

*Acquirers must use **5** only if the device is capable of reading, processing, and sending the chip data on a VSDC card.*

EIRF Non-CPS Submission: Field 60.2 in 0100 requests must be **0** through **5**, or **9**.

Check Acceptance (U.S. Only): Fields 60.1 and 60.2 are optional. The remaining subfields do not apply.

Authorization Gateway Transactions—MasterCard AFD: In 0100 status checks and 0120 confirmations, the value in field 60.1 must be **3** to indicate that the terminal is a cardholder-activated terminal. In 0100 status checks, the value in field 60.2 must be **2**, **5**, or **8** to indicate that the terminal is capable of reading magnetic stripe, chip, or contactless chip cards. See the *Authorization Gateway Service Cross-Reference Guide*.

Unattended Cardholder-Activated Transactions (UCATs): To identify UCATs, acquirers should submit a value of **3** in field 60.1. The value can be present in authorizations, reversals, and related advices.

AFD Status Check and Acquirer Confirmation (U.S. Only): The status check request must contain a terminal type of **3** in field 60.1, and a value of **2**, **5**, or **8** in field 60.2. The 0120 confirmation advice must contain a value of **3** in field 60.1.

Visa Token Service: **3**, **5** or **8** is required in field 60.2 for messages with token data.

mPOS: Field 60.1 must contain **9** if a mobile acceptance solution is supported.

Field 60.3 (field 60, position 3)

VSDC: Field 60.3 applies to magnetic stripe read transactions where the card and terminal are chip capable. It is provided by the acquirer, and is optional in 0100 authorization and

account verification requests, 0100 cash disbursements and balance inquiries, and 0120 stand-in advices. The field does not apply to VSDC transactions where the chip is read.

- When the transaction is initiated from the magnetic stripe of a VSDC card, the value is **1** or **2**, depending on whether it was preceded by a chip read failure.
- When the transaction is not initiated from the magnetic stripe of a VSDC card, the value in this field, if present, should be **0**. This is the case when the transaction contains chip data from a VSDC card or when the transaction was initiated from a magnetic-stripe-only card.

If this field is present and the value is invalid, or if the issuer does not participate in the VSDC Service, V.I.P. converts it to zero to fill the position if field 60.4 is present, or drops the field if no other subsequent field 60 fields are present.

NOTE

This field is included in a magnetic stripe-based request that originates from a VSDC card at a VSDC terminal. This field is not included in the Message Format tables in Chapter 5. See the Visa Smart Debit/Visa Smart Credit System Technical Manual.

Visa POS Magnetic Stripe Transactions: If not set by the acquirer, V.I.P. sets field 60.3 to **1** in 01xx original transactions when a card's magnetic stripe is used at a chip-capable terminal. This subfield is included in STIP advices when present in the original transaction.

Visa Token Convert Service: V.I.P. removes field 60.3 before forwarding requests to participating issuers.

Field 60.4 (field 60, position 4)

Special Condition Indicator—Existing Debt: Acquirers must use code **9** in 0100 authorization and 0400 in authorization reversal requests to indicate if the cardholder is making a payment on a debt. The default value is **0** (zero). If the issuer is unavailable, STIP processes an 0100 existing debt authorization request as a quasi-cash MCG under PCAS rules. If the issuer does not support field 60.4, V.I.P. drops it from the request before forwarding it.

Field 60.5 (field 60, positions 5–6)—Not applicable. This field is not used in BASE I.

Field 60.6 (field 60, position 7)

VSDC: Field 60.6 is required for full VSDC transactions in 0100 authorization and account verification requests, 0100 cash disbursements and balance inquiries, and 0120 stand-in advices.

The value that acquirers place in field 60.6 must be consistent with the format used for chip data. The value **1** indicates that the acquirer used the standard format of the third bitmap or field 55 to submit the chip data. The value **2** indicates that the acquirer submitted the chip data using the expanded third bitmap format. Acquirers must not populate the field with the value **3**.

When the chip card type is CCD or Generic EMV Transport and the acquirer is still using the standard third bitmap format to submit chip data, V.I.P. changes the value to **3** in transactions sent to issuers. V.I.P. rejects the transaction if the acquirer populated field 60.6 with the value **3**.

Visa Token Service: A value of **4** in field 60.6 is required in messages with token data..

Authorizations and full financial messages using iCVV convert service, early chip data or full chip data must include field 60.6 in requests containing token data.

This field is required for E-Commerce authorization and full financial messages containing token data.

Field 60.6 is required for application-based and NFC Visa payWave messages when using the Visa Token Convert Service.

MasterCard Digital Secure Remote Payment: Field 60.6 is required with a value of **4** in requests containing token data.

Field 60.7 (field 60, position 8)

VSDC: Field 60.7 is required for full VSDC transactions in 0100 authorization and account verification requests, 0100 cash disbursements and balance inquiries, and 0120 stand-in advices.

Visa Token Convert Service: V.I.P. removes field 60.7 before forwarding requests to participating issuers.

Field 60.8 (positions 9–10)

Mail/Phone/Electronic Commerce and Payment Indicator: This field is optional in MOTO 0100 authorization and related 0400 reversal requests. The allowable MOTO codes are **01** through **04**.

Bill Payment Transactions (U.S. Only): When an 0100 authorization or 0400 reversal has a processing code of **50**, acquirers must use subfield 60.8 to specify the type of bill payment transaction. Bill payment transactions can be conducted by mail, online, or in person. MOTO indicators **01**, **02**, and **03** can apply to MOTO transactions and also to card-present transactions, where field 25 contains **08** or **00**, respectively. For instance, a recurring bill payment can be a MOTO transaction (field 25 = **08**) or a card-present transaction (field 25 = **00**). However, ECI indicators **05** through **08** require the transaction to be electronic commerce. If the transaction is electronic commerce, field 25 must be **59**.

Bill payment transactions are categorized as follows:

- Manual—one-time, single payment initiated by the cardholder (code **01**).
- Recurring—multiple, ongoing payments for an indefinite term, until the cardholder or biller cancels the recurring payment arrangement (code **02**).
- Installment—multiple payments for a specified term, usually until payment has been satisfied (code **03**).
- Electronic commerce:
 - Secure electronic commerce transaction (code **05**).
 - Non-authenticated security transaction at a 3-D secure-capable merchant, and merchant attempted to authenticate the cardholder using 3-D secure (code **06**).
 - Non-authenticated security transaction (code **07**)
 - Non-secure transaction (code **08**)

Recurring Payment: Field 60.8 (positions 9–10) is conditional in 01xx authorization requests and related 04xx reversal requests. It is not returned in 0110 and 0410 responses.

A value of **02** in field 60.8 (positions 9 and 10) is mandatory for recurring payment transactions acquired in the U.S. region and optional for non-U.S.-acquired transactions. A value of **R** in field 126.13 is required for recurring payment transactions originating from non-U.S. acquirers and optional for U.S. acquirers.

Unless otherwise specified by a region, acquirers may send recurring transaction values in field 60.8 and field 126.13.

If field 60.8 is not present in an interregional transaction destined for a U.S. issuer, V.I.P. inserts field 60.8 with the value **02** if the transaction includes field 126.13 = **R**.

If field 126.13 is not present in a U.S.-originated recurring transaction destined for a non-U.S. issuer, V.I.P. inserts field 126.13 with a value of **R** if the transaction includes field 60.8 = **02**.

Installment Payment: For authorizations, U.S. acquirers must include field 60.8 with a value of **03** to identify an installment payment. Non-U.S. acquirers should use field 126.13 instead. Optionally, acquirers can include additional installment payment data with dataset ID hex 5D in field 104, usage 2.

E-Commerce Transactions: The code usage for this field are as follows:

- Code **05** is used for fully authenticated CAVV Verification submissions.
- Code **06** is used for non-authenticated security transactions at a 3-D Secure-capable merchant. The merchant attempted to authenticate the cardholder using 3-D Secure.
- Code **07** is used for non-authenticated security submissions.
- Code **08** is used for non-secure submissions.

For acquirers in AP, Canada, CEMEA, LAC, and U.S. regions, V.I.P. replaces **5** (Secure electronic commerce transaction) with **7** (Non-authenticated security transaction) in interregional application-based e-commerce authorization requests from SE (Secure element) payment token request messages.

NOTE

*Acquirers that receive MOTO/ECI **07** (Non-authenticated security transaction) in field 60.8 of the 0110 Authorization response must submit **7** (Non-authenticated security transaction) in the BASE II original transaction.*

If the issuer has not successfully tested to receive POS condition code **59** in field 25, the code is changed from **59** to **08** and field 60.8 is not sent to the issuer.

Authorization Gateway Transactions—American Express Safekey: Acquirers that choose to support American Express Safekey processing in electronic commerce transactions must send field 60.8 in authorization requests. The field must contain one of the following values: **05**, **06**, **07**, or **08**.

Authorization Gateway Transactions—MasterCard: Field 60.8 is a key field in MasterCard telephone orders. See the *Authorization Gateway Service Cross-Reference Guide*.

Visa Token Service: A value of **5** is required in field 60.8 for E-Commerce messages with token data.

Field 60.9 (field 60, position 11)

Cardholder ID Method Indicator: This field contains **2** when an Online PIN was used in the original transaction.

Field 60.10 (field 60, position 12)

Partial Authorization: Participating acquirers must submit an authorization request message with **1** in field 60.10 for terminals that have been programmed to accept partial responses.

Participating acquirers may submit a **2** or **3** in this field to advise issuers that an authorization request contains an estimated authorization amount. These values are supported in 0100 authorization, 0120 advice, 0400 reversal, and 0420 reversal advice messages.

NOTE

This field is optional for acquirers. Acquirers that participate in the service can submit this field. It is intended for original consumer-initiated transactions, not merchant-initiated transactions.

When the sale amount exceeds the available balance in the account, or the request is for a status check, issuers that support partial authorizations can respond with field 39 = **10** (partial approval) to indicate that partial amount approval was provided. When the issuer does not participate in multicurrency, the issuer provides the partial approved amount in field 4. When the issuer participates in multicurrency, the issuer provides the partial amount in field 6. The acquirer receives the partial approved amount in field 4. The original amount is in field 54.

If the acquirer submits an authorization request that does not contain **1** in field 60.10, and the issuer returns a partial authorization response (field 39 = **10**), V.I.P. rejects the message back to the issuer with reject code **0733**. STIP processes the transaction full amount using issuer unavailable parameters.

Participating acquirers must support partial approval amounts and response code **10** from issuers, and the submission of **1** in field 60.10.

NOTE

U.S. and Canada prepaid issuers are required to participate in the Partial Authorization Service. V.I.P. sends this field to all issuers even if they do not participate in the service.

Authorization Gateway Transactions—Discover: Acquirers that send 0100 partial authorization requests to Discover must include a value of **1** in field 60.10. See the descriptions of fields 4 and 54.

Authorization Gateway Transactions—MasterCard: Partial authorizations are supported and require a value of 1 in the authorization request. This field is converted to MasterCard DE 48.61. See the *Authorization Gateway Service Cross-Reference Guide*.

Authorization Gateway Transactions—MasterCard AFD: In 0100 status check messages, the value must be **1**. Acquirers must be able to support the Partial Authorization Service. See the *Authorization Gateway Service Cross-Reference Guide*.

CPS: See the CPS/ATM and CPS/POS chapters in *V.I.P. System Services*, and the *U.S. Interchange Reimbursement Fee Rate Qualification Guide*.

4 in field 60.6 is required in messages with token data.

Visa iCVV Convert: V.I.P. masks each of the following fields with zero to fill the position if the fields are present, or drops the fields if no subsequent field 60 fields are present.

- Field 60.3 (Chip Condition Code)
- Field 60.6 (Chip Transaction Indicator)
- Field 60.7 (Chip Authentication Reliability Indicator)

Visa payWave Transactions: Field 60.2 must contain a value of **5** or **8**. If contact chip is supported, a **5** should be used regardless of whether Visa payWave is also supported. An **8** should be used only if Visa payWave is supported and contact chip is not.

4.70.4 Field Edits

The value in the length subfield may not exceed **6**.

VSDC: If an acquirer uses a value of **3** in field 60.6, V.I.P. will reject the transaction with reject code **0105**.

E-Commerce: If field 25 contains **59** and subfield 60.8 is missing or invalid in an 01xx or 04xx request, the message is rejected with reject code **0360** or **0185** respectively. The value in subfield 60.8 must be **05**, **06**, **07**, or **08** for e-commerce authorization transactions.

Partial Authorization: If the acquirer does not participate in partial authorization, responses from issuers that contain a partial authorization value (field 39 = **10**) are rejected back to the issuer with reject code **0733**.

Bill Payment Transactions (U.S. Only): Authorization request messages submitted with a field 3 processing code of **50** and subfield 60.8 values other than **01**, **02**, **03**, **05**, **06**, **07**, or **08** will be rejected with reject code **0614**.

If field 60.8 is missing on a bill payment authorization request, it will be rejected with reject code 0614.

4.70.5 Reject Codes

0072 = Invalid length

0105 = Invalid value

0185 = Invalid values in positions 9–10 for e-commerce transactions

0360 = Field missing

0488 = ECI (positions 9–10) is missing

0518 = Field not allowed in message

0614 = Invalid or missing indicator with bill payment processing code

0733 = Acquirer does not support partial authorization

4.70.6 Valid Values

Table 4-53 Field 60 Additional POS Information Position Values

Code	Definition	Usage
Field 60.1—Position 1, Terminal Type		
0	Unspecified	Use to indicate that the type of point-of-transaction terminal is not specified.
1	Unattended cardholder-activated, no authorization, below-floor-limit transaction (not allowed in zero floor markets)	Should not be used for authorization.
2	Automated Teller Machine (ATM)	Use to indicate unattended cash disbursement.

Table 4-53 Field 60 Additional POS Information Position Values (continued)

Code	Definition	Usage
3	Unattended cardholder-activated, authorized transaction	Use to indicate that the transaction has all following characteristics: <ul style="list-style-type: none"> Occurs in an unattended cardholder-activated environment. Is authorized online or approved offline. Examples are: <ul style="list-style-type: none"> Movie and game rentals. Automated retail.
4	Electronic cash register	Use to indicate that a cash register is capable of reading the magnetic-stripe or chip on the card.
5	Home terminals, which include personal computers, personal digital assistants, interactive televisions, and telephones	Use to identify a device that is owned by the cardholder.
7	Telephone device (including Visa dial terminals)	Use to identify a stand-alone dial-up terminal used by a merchant to obtain the card data that is subsequently transmitted to the acquirer, issuer, or Visa via a telephone line. This value applies only to card-present environment transactions, and does not indicate a telephone operated by the cardholder.
8	Reserved	Do not use.
9	Mobile acceptance solution (mPOS)	Use to identify that an mPOS device is used to originate a transaction on an open network.
Field 60.2—Position 2, Terminal Entry Capability		
0	Unknown	Use to indicate that the terminal capability cannot be determined.
1	Terminal not used	Use to indicate that a terminal was not used to capture the card data.
2	Magnetic stripe read capability	Use to indicate that the terminal can read the magnetic stripe on the card.
3	Barcode read capability	Not used for Visa and Visa Electron cards.
4	OCR read capability	Not used for Visa and Visa Electron cards.
5	Chip-capable terminal	Contact chip, magnetic-stripe, or proximity-capable terminal, indicating that the terminal can read the chip and the magnetic stripe on the card. If contact chip is supported, a 5 should be used regardless of whether Visa payWave is also supported.
8	Proximity-read-capable terminal	Proximity-read-capable, indicating that the terminal can read a proximity chip using a Visa contactless specification but cannot read a contact chip on a card. For Visa payWave, an 8 should be used only if Visa payWave is supported and contact chip is not.

Table 4-53 Field 60 Additional POS Information Position Values (continued)

Code	Definition	Usage
9	Terminal does not have the capability to read card data	Use to indicate that the terminal does not have the capability to read the chip or magnetic stripe on the card.
Field 60.3—Position 3, Chip Condition Codes		
0	Not applicable; subsequent field 60 fields are present.	Not applicable to fallback transactions. For VSDC transactions, field 60.3 must contain a 0 or be excluded from the message.
1	Transaction was initiated from a magnetic stripe with a service code beginning with 2 or 6 and the last read at VSDC terminal was a successful chip read or was not a chip transaction.	This value applies to fallback transactions.
2	Transaction was initiated at a chip-capable terminal from a magnetic stripe that contains service code 2 or 6 , and the previous transaction initiated by that terminal was an unsuccessful chip read.	This value applies to fallback transactions.
Field 60.4—Position 4, Special Condition Indicator		
0	Default value	
9	Existing debt indicator	
Field 60.5—Positions 5–6, Merchant Group Indicator—Not Applicable.		
Field 60.6—Position 7, Chip Transaction Indicator		
0	Not applicable; subsequent field 60 fields are present.	When an Early Data option acquirer, or a Full Data option acquirer, submits Early Data, field 60.6 must contain zero (0) or be excluded from the message.
1	Standard third bitmap or field 55 used to submit chip data	This value is sent by acquirers using field 55 or the standard third bitmap for their chip data but are not supporting expanded third bitmap data.
2	Expanded third bitmap used to submit chip data	This value is sent by acquirers using the expanded third bitmap for their chip data. The value 2 applies only to acquirers; V.I.P. changes it to 1 before the request is forwarded to the issuer.
3	V.I.P. dropped chip data due to invalid format for chip card type	V.I.P. (not the acquirer) inserts this code and also downgrades the transaction by dropping chip data as explained in "Usage".
4	Token-based transaction	V.I.P. inserts this code based on the presence of a VisaNet-issued token.
Field 60.7—Position 8, Chip Card Authentication Reliability Indicator		
0	Fill for Field 60.7 present, or subsequent field 60 fields that are present	
1	Acquirer indicates that Card Authentication may not be reliable	
2	V.I.P. indicates acquirer inactive for Card Authentication	

Table 4-53 Field 60 Additional POS Information Position Values (continued)

Code	Definition	Usage
3	V.I.P. indicates issuer inactive for Card Authentication	
Field 60.8—Positions 9–10, Mail/Phone/Electronic Commerce and Payment Indicator		
00	Not applicable	Use to indicate that the mail order, telephone order, electronic commerce indicator is not relevant for the transaction.
01	Mail/Phone Order (MOTO)	Use to indicate that the transaction is a mail/phone order purchase, not a recurring transaction or installment payment. For domestic transactions in the U.S. region, this value may also indicate one bill payment transaction in the card-present or card-absent environments.
02	Recurring transaction	Use to indicate a recurring transaction that originates from an acquirer in the U.S. region. Transactions that originate from acquirers in all other regions must use Field 126.13—POS Environment, with a value of R (recurring payment indicator) to identify a recurring transaction.
03	Installment payment	Use to indicate one purchase of goods or services that is billed to the account in multiple charges over a period of time agreed upon by the cardholder and merchant.
04	Unknown classification/other mail order	Use to indicate that the type of mail/telephone order is unknown.
05	Secure electronic commerce transaction	Use to indicate that the electronic commerce transaction has been authenticated using a Visa-approved protocol, such as 3-D Secure.
06	Non-authenticated security transaction at a 3-D Secure-capable merchant, and merchant attempted to authenticate the cardholder using 3-D Secure	Use to identify an electronic commerce transaction where the merchant attempted to authenticate the cardholder using 3-D Secure, but was unable to complete the authentication because the issuer or cardholder does not participate in the 3-D Secure program.
07	Non-authenticated Security Transaction	Use to identify an electronic commerce transaction that uses data encryption for security; however, cardholder authentication is not performed using a Visa-approved protocol, such as 3-D Secure.
08	Non-secure transaction	Use to identify an electronic commerce transaction that has no data protection. (This value is not allowed in Visa Europe.)
09	Reserved	This value is not for authorization requests.
Field 60.9—Position 11, Cardholder ID Method Indicator		
0	Unspecified	
1	Signature	
2	Online PIN	Use to identify an original transaction with PIN.

Table 4-53 Field 60 Additional POS Information Position Values (continued)

Code	Definition	Usage
3	Unattended terminal, no PIN pad	
4	Mail/Telephone/Electronic Commerce	
Field 60.10/Position 12: Additional Authorization Indicators		
0	Not applicable	Indicators not set in current transaction or field is not applicable. NOTE: <i>Issuers that are not activated to receive field 60.10 may receive a 0 in this field if field 60.9 is present in request message.</i>
1	Terminal accepts partial authorization responses	Terminal supports partial authorization responses and the amount is not an estimate.
2	Estimated amount	Terminal does not support partial authorization responses and the amount is an estimate.
3	Estimated amount and terminal accepts partial authorization responses	Terminal supports partial authorization and the amount is an estimate.

4.71 Field 61—Other Amounts

4.71.1 Attributes

1 byte, binary +
 12 N, 4-bit BCD (unsigned packed), 7 bytes total
 or 24 N, 4-bit BCD (unsigned packed), 13 bytes total
 or 36 N, 4-bit BCD (unsigned packed), 19 bytes total

4.71.2 Description

Visa has defined this field for private use to contain one or more amounts related to a cardholder transaction. This field has one length subfield followed by three subfields.

Positions:			
	1–12	13–24	25–36
	Field 61.1	Field 61.2	Field 61.3
length	other amount, transaction payment request: amount due	other amount, cardholder billing	other amount, replacement billing
Byte 1	Byte 2–7	Byte 8–13	Byte 14–19

Length Subfield: This value is the number of bytes following the length subfield.

Position 1–12, Other Amount, Transaction (Field 61.1): In authorization requests, field 61.1 contains the cashback amount for Visa Cashback participants.

0120 File Update Advices for Visa Cashback and ATM Partial Dispense

Confirmations: In authorization requests, the currency is identified in Field 49—Currency Code, Transaction. The implied decimal point in this value depends on the currency. See the appendix titled “Country and Currency Codes.”

Positions 13–24, Other Amount, Cardholder Billing (Field 61.2): This field is for multicurrency only and is added at the VIC in 0100 messages for participating issuers only if currency conversion is required. Otherwise, the field is not used. If present, field 61.2 contains the field 61.1 amount expressed in the cardholder billing currency. The value includes the proportional amount of the optional issuer fee. The currency code is identified in Field 51—Currency Code, Cardholder Billing. The location of the implied decimal point in this value depends on the currency.

Positions 25–35, Other Amount, Replacement Billing (Field 61.3): This field is for multicurrency only and is added at the VIC in 0400 reversals for participating issuers only if currency conversion is required; otherwise the field is not used. If present, field 61.3 contains the field 95.1 amount in cardholder billing currency. The value includes the optional issuer fee. The currency code is identified in Field 51—Currency Code, Cardholder Billing. The location of the implied decimal point in this value depends on the currency.

4.71.3 Usage

This field is used in 0100 authorization requests and 0400 reversals including partial reversals. It is not returned in responses except unless otherwise noted. Each amount is right-justified with lead zero-fill within its own subfield.

Multicurrency Participating Issuers: Subfields 61.1, 61.2, and 61.3 are used.

All Acquirers and Non-Multicurrency Participating Users: Only subfield 61.1 is used.

Other Amount, Transaction (Field 61.1): For POS transactions, this field is used in 0100 authorization requests and 0120 advices only if cash back is involved, in which case it is required. It is present in POS 0400/0420 reversals if present in the original and the value must be from the original.

NOTE

Balances received with ATM withdrawal responses are in field 54.

Visa Cashback: For domestic POS transactions, Field 61.1 must be present and the amount must be less than the amount in field 4.

NSR (U.S. Only): Transactions with cashback amounts are not supported for this program.

Other Amount, Cardholder Billing (Field 61.2): The value is added at the VIC for participating issuers only when field 61.1 is present. This amount also applies to Visa Cashback transactions, including those in the domestic U.S.

Other Amount, Replacement Billing (Field 61.3): The value is added at the VIC for participating issuers only when field 95.1 is present in reversals and currency conversion is involved. If field 61.3 must be added, but fields 61.1 and 61.2 are absent, positions 1–12 and 13–24 are zero-filled.

For partial reversals, the field 61.3 cardholder billing currency value is derived from the amount in field 95.1, even if currencies are the same.

STIP and Switch Advices: Field 61 is present in 0120 or 0420 advices if it was present in the request.

Cashback Service (Australia): Field 61.1 contains the cashback amount in domestic 0100 authorization requests. Cashback amounts cannot exceed US\$998.00. If this amount is exceeded, Visa will decline the transaction with response code **N4** (cashback request exceeds issuer limit). Also, the amount in this field must be equal to or less than the transaction amount in field 4.

NOTE

Issuers may decline cashback transactions with reason code N4 when the transaction has exceeded the issuer's cashback limit.

The acquirer, issuer, and merchant must all be in Australia. If they are not, Visa will decline the transaction with response code **N3** (cashback not allowed).

All acquirers must participate in the cashback service and ensure that all transactions with a cashback amount are made with VSDC chip cards at chip-enabled terminals. Acquirers and their merchants may optionally choose to support cashback transactions that do not include a purchase.

Similarly, all issuers must participate in the cashback service and support the service for debit VSDC chip cards only. Issuers must be aware that they can receive cashback transactions that do not include a purchase amount.

NOTE

The cashback amount in a clearing transaction must contain the same cashback amount that was present in the authorization request.

Additional requirements are specified in the descriptions for fields 22, 35, 52, 53, 55, and 60. This service also uses chip fields 130, 131, 138, 143, 147, and 149.

Cashback Service (New Zealand): Field 61.1 contains the cashback amount in domestic 0100 authorization requests. Cashback requests must also contain a PIN in field 52. Non-PIN cashback requests will be declined with response code **N3** in field 39.

Cashback for PIN-Authenticated Visa Debit Transactions (U.S. Only): The following points apply.

- Field 61.1—In purchase transactions, this field contains the cashback amount for Visa Cashback Service participants. The amount in this field can be less than or equal to the amount in field 4. For partial approvals(cashback not included) this field does not need to be present in reversal request messages.
- Field 4—In purchase transactions, this field includes the purchase amount and the cashback amount from field 61.1.

Issuers are not permitted to partially approve cashback amounts requested by the cardholder as part of a purchase transaction. If, during authorization processing, the issuer determines that a cardholder has sufficient available funds to approve the purchase amount, but not sufficient available funds to fully approve a requested cashback amount, issuers must approve only the amount of merchandise purchased with a partial authorization response and not include portions of the cashback amount.

Cashback Service (South Africa): Field 61.1 contains the cashback amount in domestic POS authorization requests. The cashback amount must be equal to or less than the amount in field 4.

4.71.4 Field Edits

If field 61 is present in the message, the length and amounts must be numeric.

When the acquirer includes field 61.1, the value in the length subfield must be **6**. (If field 61.2 is added by itself, the length is **12**. If field 61.3 is added, the length is **18**.)

Cashback Service (Australia): If the amount in field 61.1 is greater than the amount in field 4, the transaction will be rejected with reject code **0106**.

Cashback Service (South Africa): If the amount in field 61.1 is greater than the amount in field 4, the transaction will be rejected with reject code **0106**.

4.71.5 Reject Codes

0026 = Invalid length.

0106 = Invalid amount (non-numeric).

4.72 Field 62—Custom Payment Service Fields (Bitmap Format)

4.72.1 Attributes

1 byte, binary +
variable by subfield
maximum: 255 bytes

4.72.2 Description

Visa has defined field 62 for private use with CPS transactions—and some non-CPS transactions as well. CPS participants must have successfully completed testing to receive field 62. All field 62 subfields, listed below, are in bitmap format.

NOTE

Field 62 in fixed-format is no longer supported.

Description	Bytes	Number Position	Field Attribute
Length Subfield	1		Binary
62.0 Field 62 Bitmap	8	64	Bit String
62.1 Authorization Characteristics Indicator	1	1	AN
62.2 Transaction Identifier	8	15	N, BCD
62.3 Validation Code	4	4	AN
62.4 Market-Specific Data Identifier	1	1	AN
62.5 Duration	1	2	N, BCD
62.6 Prestigious Property Indicator	1	1	AN
62.7 through 62.16	Not Applicable		
62.17 MasterCard Interchange Compliance	15	15	EBCDIC
62.18 and 62.19	Not Applicable		
62.20 Merchant Verification Value	5	10	AN, BCD
62.21 Online Risk Assessment Risk Score and Reason Codes	4	4	AN, EBCDIC
62.22 Online Risk Assessment Condition Codes	6	6	AN, EBCDIC
62.23 Product ID	2	2	AN, EBCDIC
62.24 Program Identifier	6	6	AN, EBCDIC
62.25 Spend Qualified Indicator	1	1	AN, EBCDIC

4.72.3 Usage

Although the field 62 subfields are used extensively in CPS processing, a number of subfields are used in non-CPS processing, as noted in the descriptions of individual subfields.

CPS POS authorization requests and reversals use subfields 62.0 through 62.6.

CPS ATM authorization requests use subfields 62.0 through 62.3.

Advanced Authorization: V.I.P. inserts field 62.21 in authorization requests destined for participating issuers. V.I.P. also inserts field 62.22 in authorization and financial requests destined for participating issuers only if they elect to receive it. Neither field is returned in responses, nor are they used in reversals.

Authorization Gateway Transactions—All Programs: Visa acquirers that process non-Visa transactions must be prepared to receive one or more of the Visa “Field 62” fields or subfields in responses unrelated to Visa programs such as CPS.

Authorization Gateway Transactions—MasterCard: Subfield 62.17 is used for MasterCard responses coming from Banknet through Visa to acquirers that have successfully completed testing for this processing.

4.72.4 Field Edits

The value in the length subfield must correlate with the subfields present in the message.

4.72.5 Reject Codes

0151 = Invalid length

4.73 Field 62.0—Field 62 Bitmap

4.73.1 Attributes

64 N, bit string, 8 bytes

4.73.2 Description

Field 62.0 is a bitmap specifying which field 62 subfields are present. Byte 1 and byte 3 are applicable to BASE I. Byte 3, bit 1, is used for MasterCard Interchange Compliance Information. The rest of byte 3 and bytes 4 through 8 are reserved for future use and are set to **zero (0)**.

Field 62.0 Bitmap		Byte 1								Byte 2	Byte 3								Byte 4								Byte 5–8	
		1	2	3	4	5	6	7	8		1	2-3		4	5	6	7	8	1	2	3	4	5	6	7	8		
62.1	Authorization Characteristics Indicator	✓								Not applicable		Reserved															Reserved	
62.2	Transaction Identifier		✓																									
62.3	Validation Code			✓																								
62.4	Market-specific Data Identifier				✓																							
62.5	Duration					✓																						
62.6	Prestigious Property Indicator						✓																					
62.7–62.16		Not applicable																										
62.17	MasterCard Interchange Compliance Information									Not applicable	✓	Reserved															Reserved	
62.18–62.19		Reserved																										
62.20	Merchant Verification Value									Not applicable		Reserved	✓													Reserved		
62.21	Online Risk Assessment Risk Score and Reason Code														✓													
62.22	Online Risk Assessment Condition Codes															✓												
62.23	Product ID																✓											
62.24	Program Identifier																	✓										
62.25	Spend Qualified Indicator																		✓									
62.26–62.64		Reserved																										

4.73.3 Usage

NOTE

Not all "Field 62" fields apply only to Custom Payment Services. Some apply to non-CPS applications as well.

Field 62.0 must be present if any of its subsequent subfields are present.

To include bitmapped field 62 in requests or advices or receive 62.xx subfields in related responses, originators must use **2** or x'**1A**' in header field 3 of the request or advice.

For an endpoint that is receiving a request or advice, V.I.P. determines which format to send by the option the endpoint has specified in its PCR setup.

CPS: See the CPS chapters in *V.I.P. System Services* and the latest edition of the *U.S. Interchange Reimbursement Fee Rate Qualification Guide*. See the "Field 62.3" description for a list of possible downgrade reason codes.

Advanced Authorization: V.I.P. inserts field 62.21 in authorization requests destined for participating issuers. V.I.P. also inserts field 62.22 in authorization requests destined for participating issuers only if they elect to receive it. Neither field is returned in responses, nor are they used in reversals.

4.73.4 Field Edits

None.

4.73.5 Reject Codes

None.

4.74 Field 62.1—Authorization Characteristics Indicator (Bitmap Format)

4.74.1 Attributes

fixed length
1 AN, EBCDIC; 1 byte

4.74.2 Description

The Authorization Characteristics Indicator (ACI) in subfield 62.1 is a code used by the acquirer to request CPS qualification. If applicable, V.I.P. changes the code to reflect the results of its CPS evaluation. [Table 4-54](#) shows CPS authorization characteristics indicators.

Table 4-54 CPS Authorization Characteristics Indicator (Bitmap Format)

Acquirer Sends ACI	Acquirer Receives:		Because...
	Qualified	Not Qualified	
Y (Transaction requests participation)	A	N or T ¹	Card present; magnetic stripe read and sent or, 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 or T	Meets requirements for tokenized e-commerce with mobile device. NOTE: <i>Transactions that do not meet token processing requirements but qualify for CPS processing receive the ACI value.</i>
	C	N or T	Meets requirements for A, plus merchant name, location present, and UCAT indicator set, but no signature required: AFD.
	E	N or T	Meets requirements for A, plus merchant/ATM owner name and location (enriched name and location data) present; also for Retail 2 (key-entered), Commercial Card and Visa Cashback submissions.
	F	N or T	Meets CPS/Account Funding requirements.
	J	N or T	Meets requirements for CPS/Recurring Bill Payment Program: U.S. Only.
	K	N or T	Card present with key entry.
	M	N or T	Meets national payment service requirements with no address verification: Direct Marketing. NOTE: <i>The Authorization Characteristics Indicator M can also be used for non-U.S. MOTO/VSEC transactions that do not include address verification data.</i>
	S	N or T	Meets requirements for a 3-D Secure CAVV attempt transaction.
	U	N or T	Meets basic CPS/E-Commerce requirements and 3-D Secure CAVV data is present.
	V	N or T	Meets address verification requirements; verification requested for card-not-present transactions (Direct Marketing, Transport market segments). NOTE: <i>For the CPS/card-not-present program, AVS data is not required for bill payment transactions to receive ACI of V.</i>
	W	N or T	Meets basic CPS/E-Commerce requirements but transmission was nonverified 3-D Secure CAVV transmission.
R (Recurring payment)	R	N or T	Meets Direct Marketing recurring payment qualification without address verification request. U.S. only. NOTE: <i>Healthcare and select developing market MCCs may submit the ACI of R to bypass AVS requirements.</i>

Table 4-54 CPS Authorization Characteristics Indicator (Bitmap Format) (continued)

Acquirer Sends ACI	Acquirer Receives:		Because...
	Qualified	Not Qualified	
I ² (Increment to previously approved transaction)	I	N or T	Incremental authorization qualified for CPS, card may or may not be present: Hotel/Auto Rental.
P ¹ (Preferred Customer) ³	P	N or T	Meets requirements for Preferred Customer, Card Not Present: Hotel/Auto Rental and Transport.

1. T applies to U.S. transactions only, including those from non-U.S. acquirers to U.S. issuers.
2. I and P are passed to participating issuers and returned to acquirers if not downgraded.
3. 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. See the *Authorization Gateway Service Cross-Reference Guide* for field-by-field data transfer descriptions between VisaNet-format dual-message 0100 authorization requests and responses, and American Express- and MasterCard-format authorization requests and responses.

4.74.3 Usage

For international 0100 CPS authorization requests, the ACI sent by the acquirer must be for the transaction being considered.

Hotel/Auto Rental incremental authorization requests can only be submitted in bitmap format.

If the request qualifies and is approved, the ACI value is present in the 0110 response to the acquirer. For international transactions, if the request does not qualify, the response contains **N**.

U.S. Region Only: U.S. issuers receive an ACI in 0100 *non*-CPS requests and CPS requests. If the original request does not qualify for CPS, V.I.P. returns **N** or **T**. V.I.P. sends **N** to acquirers in responses if the original request is declined by the issuer or fails the edits for a CPS program but is not declined.

T indicates that no CPS program is available. V.I.P. assigns this when V.I.P. determines that an authorization message meets one or more conditions:

- The MCC is not qualified for CPS.
- The transaction was for manual cash or account funding, or it was a CPS-ineligible quasi-cash transaction. (Some quasi-cash transactions are eligible for certain CPS programs. See "Quasi-Cash.")
- The ACI was not submitted or invalid in the transaction

Transactions assigned a value of **T** are not eligible for CPS life-cycle chargeback protection.

Table 4-55 U.S. Processing Rules for TID, ACI, and Validation Code

Condition	Processing Rule
<p>An 0100 authorization message is submitted with the following characteristics:</p> <ul style="list-style-type: none"> • ACI = Valid value • Processing code = 00, 10, 01, or 50 • MCC = Eligible for CPS <p>NOTE: See the U.S. Interchange Reimbursement Fee Rate Qualification Guide <i>about CPS qualification</i>.</p>	<p>If the CPS qualifications are met, V.I.P. will:</p> <ul style="list-style-type: none"> • Send issuer the ACI and TID • Send the acquirer one of the following: <ul style="list-style-type: none"> - If approved, send the assigned ACI, the TID, and validation code - If declined, send ACI code N, the TID, and downgrade reason code NA (transaction not approved) <p>If the CPS qualifications are not met, V.I.P. will:</p> <ul style="list-style-type: none"> • Send the issuer ACI = N and the TID • Send the acquirer one of the following: <ul style="list-style-type: none"> - If approved, send ACI = N, the TID and validation code <p>NOTE: <i>Downgrade reason codes are not provided on approved transactions.</i></p> <ul style="list-style-type: none"> - If declined, send ACI code N, the TID, and downgrade reason code NA (transaction not approved)
<p>An 0100 authorization message is submitted with the following characteristics:</p> <ul style="list-style-type: none"> • ACI = Valid value • Processing code = 00, 10, 01, or 50 • MCC = Not eligible for CPS 	<p>CPS programs do not apply to transactions with high risk or ineligible MCCs, or to ineligible quasi-cash programs.</p> <p>For transactions with these characteristics, V.I.P. will:</p> <ul style="list-style-type: none"> • Send the issuer the ACI = T and the TID • Send the acquirer one of the following: <ul style="list-style-type: none"> - If approved, send the ACI = T, the TID and validation code - If declined, the ACI code N, the TID, and downgrade reason code NA (transaction not approved)
<p>An 0100 authorization message is submitted with the following characteristics:</p> <ul style="list-style-type: none"> • ACI = Valid value • Processing code = 11 (quasi-cash), but the transaction does not involve a consumer debit, consumer prepaid, or business debit card. 	
<p>An 0100 authorization message is submitted with the following characteristics:</p> <ul style="list-style-type: none"> • ACI = Not present or not valid • Processing code = 00, 10, 01, or 50 	<p>CPS programs do not apply to authorization transactions without an ACI in the request. For transactions with these characteristics, V.I.P. will:</p> <ul style="list-style-type: none"> • Send the issuer the ACI = T and the TID • Send the acquirer the TID. If approval or decline, only the TID is assigned.

U.S. and International: The subfield 62.1 value in a CPS-qualified response must be used in 0400 reversals. The reversal must not include subfield 62.1 if the 0100 request was reversed before receiving the 0110 response.

Issuers are not required to include the subfield in 0110 and 0410 responses, but if it is included, the value must match that from the request. If issuers do not include the subfield in a response, V.I.P. inserts it for participating acquirers.

Quasi-Cash (U.S. Only): In the U.S. region, quasi-cash transactions that involve consumer debit, consumer prepaid, commercial prepaid, and Business debit cards are eligible to request and qualify for CPS participation and CPS rates in certain programs.

NOTE

Quasi-cash transactions that involve consumer credit and commercial credit cards continue to be ineligible for CPS qualification and interchange fee assessment.

To qualify for CPS, the transaction must have code **11** in Field 3—Processing Code, **Y** in field 62.1, and meet CPS requirements for a card-present authorization. Approved transactions receive ACI code **A** or **E** in the response.

NOTE

*Quasi-cash transactions are not eligible to receive the field 62.16 CRI value of **14**.*

Quasi-cash transactions that do not meet CPS requirements for a card-present authorization will receive an ACI of T in the response.

AFD Status Check and Acquirer Confirmation (U.S. Only): The 0100 status check request must contain a value of **Y**.

CPS/Retail 2 (Key-Entered) Submissions: The value in 0100 authorization requests must be **Y**. Key-entered commercial card submissions must have a merchant category code in field 18.

CPS/E-Commerce: Authorization requests must be submitted with ACI = **Y** or **P**. Otherwise, the request is reclassified as a non-CPS transaction. The ACI in the response for qualified e-commerce T&E submissions can be **P** (hotel/auto rental) or **V** (passenger transport).

CPS/Account Funding: The ACI in Account Funding authorization requests must be **Y**. The acquirer receives an **F** in the response if the transaction qualifies. CPS program requirements for e-commerce transactions using stored-value cards include a CVV2 value. For stored-value cards that are to be refilled more than once, the CVV2 is required only in the initial funding request for the authorization or full financial request to qualify; subsequent transactions can also qualify for the CPS program without the CVV2 being present.

CPS/Bill Payment Transactions (U.S. Only): Requests must contain an ACI of **Y**. Requests submitted with anything other than **Y** will be downgraded with reason code **RV**.

CPS References: See the CPS ATM and CPS POS chapters in *V.I.P. System Services* and the latest edition of the *U.S. Interchange Reimbursement Fee Rate Qualification Guide*.

Healthcare Submissions: Except for U.S.-only bill payment messages, healthcare transactions must contain **R** when AVS is not being requested. Qualified transaction responses without address verification contain an **R** in this subfield. Qualified transaction responses with address verification contain a **V** in this subfield.

NOTE

*U.S.-only bill payment messages must not include the ACI of **R**.*

Non-U.S.-Acquired Direct Marketing Submissions: Acquirers must include a Y in this subfield. The acquirer country must not be 840, field 25 must be **08** or **59**, and AVS

cannot be requested (field 123 must not be present). The acquirer receives an **M** in the response if the transaction qualifies.

Visa Cashback: U.S. cashback submissions must contain a **Y** in this subfield to qualify for CPS/Retail Check. Qualified transactions contain an **E** in the 0110 response to indicate enhanced merchant data.

STIP and Switch Advices: Subfield 62.1 is present in 0120 or 0420 advices for successfully tested issuers if it was in the request.

Payment Transactions (U.S. Only): These transactions are not CPS-qualified. Acquirers should supply a **T** (no CPS program available) in this field but are not required to. If the field is not present or is not **T**, V.I.P. automatically downgrades it to **T**.

Additional requirements and related information can be found in the descriptions for fields 3, 54, and field 104, usage 2.

Credit Voucher and Merchandise Return Authorizations (U.S. Only): Although these transactions do not qualify for CPS programs, acquirers should send a value of **Y** in this field. V.I.P. overlays the **Y** with **T** before forwarding the message to issuers.

Acquirer Authorization Advices: V.I.P. assigns an ACI default value of **T** in 0120 acquirer authorization advices.

Visa Token Service: Authorization and full financial requests must be submitted with a value of **Y** or **P**. If a request meets token and CPS processing requirements V.I.P. will insert a value of **B** in the response.

NOTE

*Transactions that do not meet token processing requirements but qualify for CPS processing receive the ACI value corresponding to the qualifying CPS program. Transactions that do not qualify for CPS processing receive ACI values **N** or **T**.*

4.74.4 Field Edits

Subfield 62.1 must be present as described in "Usage."

4.74.5 Reject Codes

0152 = Invalid value

0483 = Field missing

4.74.6 Valid Values

See "Description" and "Usage" in this subfield description.

4.75 Field 62.2—Transaction Identifier (Bitmap Format)

4.75.1 Attributes

fixed length
15 N, 4-bit BCD (unsigned packed); 8 bytes

4.75.2 Description

Subfield 62.2 is a right-justified, Visa-generated identifier that is unique for each original transaction. The transaction identifier (TID) is a key element that links original authorization requests to subsequent messages, such as reversals.

4.75.3 Usage

Visa generates the TID and optionally sends it to clients in request and response messages.

NOTE

The acquirer does not include subfield 62.2 in 0100 authorization requests unless the request is for an incremental authorization.

The field is optional in 0110 and 0410 responses from the issuer. If issuers do not include this subfield in a response, V.I.P. inserts it for participating acquirers. Acquirers must save the TID and include it in reversals.

Participating acquirers and issuers must have successfully completed testing to receive field 62.2 in request and response messages. V.I.P. will drop the field from messages sent to acquirers and issuers that have not successfully completed testing to receive it.

This field is optional in 0110 and 0410 response messages. If an issuer does not include this field in a response, V.I.P. inserts it in the response message sent to the acquirer.

For the TID to be present, the bitmap in field 62.0 must be present as well, with byte 1, bit 2, set to **1**.

CPS: The TID is required for CPS qualification. See the CPS ATM and CPS POS chapters in *V.I.P. System Services* and the latest edition of the *U.S. Interchange Reimbursement Fee Rate Qualification Guide*.

For a list of related CPS processing rules that apply to fields 62.1, 62.2, and 62.3, see the "Usage" of the "Field 62.1" description.

Incremental Authorizations: Acquirers must include the TID from the initial authorization in subsequent incremental authorization requests and reversals; otherwise, it is downgraded with CPS downgrade reason code **TI**.

Reversals: This field must be copied into the 0400 reversal request from the 0110 response, if it was present in the 0110 response. A participating issuer receives this subfield in the 0400 request. It is optional in the 0410 issuer response.

Merchant Verification Value Processing: V.I.P. assigns a TID to POS and ATM 0100 authorization requests in field 62.2 if field 62.20 containing an MVV is present in the request from a participating acquirer. Participating issuers that have successfully completed testing to receive the bitmap version of field 62 receive the TID and MVV. Participating acquirers receive the TID along with the MVV in the response. See field 62.20.

NOTE

This MVV use of field 62.2 is not necessarily related to the CPS use of field 62.

Preauthorized Payment Cancellation Service (PPCS): V.I.P. adds this field to 0302 deletions and replacements, where it is required, and returns the field in responses. See "Field 127.PF."

STIP and Switch Advices: This field is present in 0120 or 0420 advices.

Authorization Gateway Transactions—MasterCard AFD: In an 0120 confirmation advice, the TID must be the same as that provided by V.I.P. in the 0110 response to the original request. If an incorrect value is provided, or V.I.P. cannot locate the original based on the submitted TID, V.I.P. will insert a new value. See the *Authorization Gateway Service Cross-Reference Guide*.

AFD Status Check and Acquirer Confirmation (U.S. Only): The 0120 acquirer confirmation advice must contain the same value provided by V.I.P. in the associated status check response message.

NOTE

Visa will generate new values in field 62.2 and field 38 when the acquirer does not send these fields in the 0120 acquirer confirmation advice, and V.I.P. cannot find the original status check in the transaction history. If this happens, these fields in the advice may not match the values in the 0100 status check message.

4.75.4 Field Edits

The Transaction Identifier must be allowed for reversals; otherwise, the transaction is rejected with reason code **0153**.

4.75.5 Reject Codes

0153 = Invalid value

0483 = Field missing

4.75.6 File Edits

If this field is missing in a PPCS deletion or replacement, V.I.P. returns the transaction with error code **0590**.

4.75.7 File Maintenance Error Codes

0590 = Field 62.2 is missing.

4.76 Field 62.3—Validation Code (Bitmap Format)

4.76.1 Attributes

fixed length

4 AN, EBCDIC; 4 bytes

4.76.2 Description

Subfield 62.3 is a V.I.P.-calculated code to ensure that key fields in the 0100 authorization requests match their respective fields in BASE II deferred clearing messages. See [Table 4-56](#).

Table 4-56 Field 62.3: Fields Protected by CPS Validation Code

Fields Protected by the Validation Code		
Field	Name	Default
2	Primary Account Number	None
4	Amount, Transaction	None
18	Merchant's Type	None
22	POS Entry Mode Code (position 1–2) NOTE: <i>This code is not added to the ATM validation code algorithm.</i>	None
38	Authorization ID Response	None
39	Response Code	None
49	Currency Code, Transaction	None
61.1	Other Amount, Transaction, ¹ Cashback	Zeros
62.1	Authorization Characteristics Indicator	None
62.2	Transaction Identifier	None
62.4	Market-Specific Data Identifier ¹	Blank
62.23	Product ID	None
The validation code algorithm also uses the following fields for International CPS/ATM transactions.		
3	Processing Code, positions 3–4, Account Type “from”	None
28	Transaction Fee Amount	None
32	Acquiring Institution Identification Code	None
43	Card Acceptor Name/Location; positions 39–40, Country Code	None

1. If the specified subfield is not present, V.I.P. substitutes the default value, which must be provided in the clearing transaction sent to BASE II.

In bitmap format, this subfield also can contain a downgrade reason code for authorization requests that fail CPS qualification. This field is not present in the response if the authorization is declined.

4.76.3 Usage

4.76.3.1 Validation Code Usage

Subfield 62.3 is generated for all CPS-validated 0100 authorization requests approved by the issuer, except incremental authorizations.

The acquirer receives this subfield in 0110 authorization responses. The validation code must be saved for the transaction's BASE II deferred clearing message. This subfield is not used in incremental authorization requests and advices.

CPS/ATM: If field 18 = **6011** (ATM), the validation code is based on a subset of the other protected CPS fields, which are listed in [Table 4-56](#).

NOTE

Field 22—Point-of-Service Entry Mode Code is not added to the ATM validation code algorithm.

See the CPS ATM and CPS POS chapters in *V.I.P. System Services* and the latest edition of the *U.S. Interchange Reimbursement Fee Rate Qualification Guide*.

All Non-Visa Programs Except Plus: Not applicable to subfield 62.3.

Check Acceptance: Not applicable to subfield 62.3.

4.76.3.2 Downgrade Reason Code Usage

CPS downgrade reason codes are located in [Table 4-57](#).

For downgraded authorization requests outside the U.S. region (see below for U.S.-only processing), the downgrade reason code is substituted for the validation code in this subfield. The downgrade reason code is left-justified, blank-filled. For downgraded 0100 authorization requests, the acquirer must set this subfield to spaces in the BASE II deferred clearing transaction.

U.S. Only: For authorization transactions that are downgraded but not declined, field 62.3 contains a validation code rather than a downgrade reason code.

NOTE

Although V.I.P. uses the downgrade reason code to set the value of the ACI in field 62.1, the downgrade reason code itself is not sent to the acquirer. Nevertheless, the code is logged. For a list of related processing rules that apply to fields 62.1, 62.2, and 62.3, see "Usage" in "Field 62.1."

Gateway—MasterCard CVC1 and CVC3: Field 62.3 contains negative MasterCard verification result codes for CVC1- and CVC3-based MasterCard transactions and magnetic stripe compliance indicators. Field 62.3 positions are as follows:

Position 1: **Blank**, or **E**, **Y** or **P**. The code is transferred from DE 48.87:

The negative CVC1 result code is **Y** (magnetic stripe present, CVC1 invalid).

The negative CVC3 result code is **E** (length of unpredictable number was not a valid length), **Y** (invalid CVC3), or **P** (CVC3 not validated).

Position 2: **Blank** or **Y** (invalid). The Magnetic Stripe Compliance Status Indicator is transferred from DE 48.88. Code **Y** means that MasterCard had to replace the DE 22.1 value **90** or **91** with **02**.

Position 3: **Blank** or **A–J**. The Magnetic Stripe Compliance Error Indicator is transferred from DE 48.89. Code **A–J** indicates the magnetic stripe error.

Position 4: Blank.

Please direct questions to your Visa or MasterCard representative. See the *Authorization Gateway Service Cross-Reference Guide* for field-by-field data transfer descriptions between VisaNet-format dual-message 0100 authorization requests and responses, and American Express- and MasterCard-format authorization requests and responses.

STIP and Switch Advices: Subfield 62.5 is not used in 0120 or 0420 advices.

4.76.4 Field Edits

None.

4.76.5 Reject Codes

None.

4.76.6 Valid Values

4.76.6.1 Downgrade Reason Codes

Table 4-57 defines the CPS downgrade reason codes for transactions intended for CPS qualification but failing to make the applicable validation criteria. These codes appear in the CPS downgrade reports; they are returned in field 62.3 in responses only if acquirers use the field 62 bitmap.

Table 4-57 CPS Downgrade Reason Codes

Code	Reason	ACI	National Market	Applicable CPS	Affected Fields
AN	Account number is missing in track data.	Y	All	All card present	2, 35, 45
AV	Address verification is not requested.	Y	U.S.	Direct Marketing	44.2, 123
CD	Transaction must be key-entered and track data cannot be present.	Y, P	U.S.	Retail Key Entry, Direct Marketing	22, 35, 45
CK	Key-entered field requirements invalid for the field in question.	Y	All	Key-entered, card present, non-commercial	18, 19, 43, 44.2, 60.1, 60.2, 60.8, 62.1, 123
CN	Cash is not qualified for CPS/Retail.	Y, P	All	All except ATM	3
CV	Acquirer is not in CVV or iCVV full participation mode.	Y	All	All	22
CX	Not monitored by or participating in CVV (in the temporary exception list).	Y	All	All	22
ED	Expiration date is missing in track data.	Y	All	All card present	14, 35, 45
EM	Enriched Merchant Name and Location are not present.	Y	U.S.	All	43
I2	CVV2 result code not U , M , or P .	Y	All	Account Funding	44.10
IC	Invalid Country Code.	Y	All	All	43
IM	Invalid MCC.	Y	All	All	18

Table 4-57 CPS Downgrade Reason Codes (continued)

Code	Reason	ACI	National Market	Applicable CPS	Affected Fields
IP	Invalid Purchase Identifier.	Y	U.S.	Direct Marketing (Financial request only)	62.7
IS	Invalid State Code.	Y	U.S.	AFD, ATM	59, pos.1 and 2
MC	Not participating in multicurrency.	Y	non-U.S.	All non-U.S.	5, 9, 16, 19, 43, 50
NA	Transaction is not approved.	Y, P	All	All	39
NE	E-commerce transaction did not qualify	Y, P	U.S.	Card Not Present	field 60.8 or 63.6
NP	Acquirer is not participating in CPS.	Y, P	All	All	62
NS	Non-secure e-commerce transaction.	Y	U.S.	Card Not Present	60, pos. 9 and 10 (field 60.8); 63.6 pos.4
NT	Not participating in CPS/ATM.	Y	U.S.	ATM	41, 62
NV	The transaction is not a Visa card transaction.	Y, P	All	All	2
PI	CVV2 Authorization Request Data is not 1, 2, or 9 .	Y	All	Account Funding	126.10
RV	Invalid ACI for this service.	Y	All	E-commerce; Account Funding; U.S. Bill Payment	62.1
TA	Account number does not match track data.	Y	All	All Card Present	2, 35, 45
TD	Expiration date does not match track data.	Y	All	All Card Present	14, 35, 45
TI	Transaction identifier invalid.	I	U.S.	Hotel/Car Rental Card Not Present and Card Present Incrementals	62.2
			All	All reversals	
02	Primary Account Number missing.	Y, P	All	All	2
18	Merchant Category Code (MCC) is missing (field 18).	Y, P	All	All	18
22	POS Entry Mode is not 90, 01, 02, 05 or 95 .	Y	All	All card present	22, pos. 1 and 2
42	Field 42—Card Acceptor ID Code is not present.	Y, P	All	All except ATM	42
59	Merchant ZIP code is missing or zero for the U.S. acquirer (field 59).	Y, P	U.S.	All except ATM	59

4.77 Field 62.4—Market-Specific Data Identifier

4.77.1 Attributes

1 AN, EBCDIC, 1 byte

4.77.2 Description

Field 62.4 identifies the industry for which market-specific data has been provided in other field 62 subfields; however, the use of this subfield is not confined to CPS. Except where noted, the subfield is used only in authorization requests and responses.

4.77.3 Usage

Subfield 62.4 is required in all initial CPS/Hotel or Auto Rental 0100 authorization requests and their responses. It is also required in U.S. bill payment transactions and auto-substantiation requests destined for U.S. issuers, as described in the "Bill Payment" and "Auto-Substantiation" subsections below.

For CPS/Hotel or Auto Rental requests, the acquirer inserts:

- **A** (Auto Rental) or **H** (Hotel) if Subfield 62.5—Duration, is present.
- **H** (Hotel) if Subfield 62.6—Prestigious Property Indicator, is present.

If field 62.5 or field 62.6 is invalid, V.I.P. substitutes an **N** (Failed Market-Specific Data edit) for the acquirer-supplied codes. If this subfield is invalid, this subfield and field 62.6 are not forwarded to the issuer in the authorization.

NOTE

*V.I.P. does not forward field 62.4 and field 62.5 to non-US issuers for POS transactions unless field 62.4 contains the value **J** (B2B Invoice Payments).*

This subfield's value is used in the BASE II clearing record. BASE II recognizes its presence in the authorization by the authorization's validation code (subfield 62.3). This subfield's value in the authorization must match that in the clearing record. If the subfield is omitted in the authorization, it must be spaces in the BASE II clearing message.

Subfield 62.4 is optional on incremental authorizations. It is not used in reversals or responses. It is present in 0120 advices if it was present in the 0100 request.

Bill Payment Transactions (U.S. Only): Acquirers must use a value of **B** in this field for all 0100 authorizations and 0400 reversals containing a processing code of **50** in field 3. The field is optional in responses. If the field is missing from the issuer response, V.I.P. adds it in the response to the acquirer. Requests containing an invalid value in this field are declined with response code **12** in field 39.

Auto-Substantiation Transactions: This field contains an **M** or a **T** in 0100 requests, 0400 reversals, and related advices. The **M** is used in healthcare *medical* transactions; the **T** is used in healthcare *transit* transactions. In original requests, the value must be consistent with a corresponding value of **4S** (healthcare) or **4T** (transit) in field **54**. Issuers should include the field in responses, but if it is missing, V.I.P. will reinstate it.

V.I.P. replaces **M** or **T** in field 62.4 with **N** in the request message to issuers when:

- Field 54 with **4S** or **4T** is not included in the original request.
- The issuer does not accept field 54 in request messages.
- The value is **M** and field 62.20 is not included in the original request.
- The value is **M** and field 62.20 is not a valid MVV for a SIGIS-certified merchant.

When the destination is not U.S. or CPS, V.I.P. drops field 62 from the request message.

When the merchant is not SIGIS-certified, V.I.P. will include the changed value of **N** in the response to the acquirer.

The acquirer can include this field in reversals, but V.I.P. restores the value saved from the original transaction and includes it in the reversal request to the issuer and the response to the acquirer.

Also see the descriptions for fields 54 and 62.20.

Electronic Commerce Transaction Aggregation: This field contains an **E** in 0100 authorization requests, 0110 responses, and 0120 advices.

If the market-specific data identifier is **E**, the POS condition code in field 25 must be **59** (E-commerce request through public network); otherwise, V.I.P. changes the **E** to **N**.

B2B Straight Through Processing: A value of **J** uniquely identifies Straight Through Processing in 0100 requests and 0120 STIP advices for business-to-business invoice payments.

4.77.4 Field Edits

Auto-substantiation transactions that contain **4S** or **4T** in field 54 but do not contain field 62.4 are rejected with **0492**.

4.77.5 Reject Codes

0492 = Field missing for auto-substantiation transaction

4.77.6 Valid Values

Table 4-58 Field 62.4 Market-Specific Data Identifiers

Code	Definition
A	Auto Rental
B	Bill Payment
E	Electronic commerce transaction aggregation
H	Hotel
J	B2B invoice payments
M	Healthcare (medical)
N	Failed Market-Specific Data edit, or not applicable
T	Transit (in healthcare transactions only)

4.78 Field 62.5—Duration

4.78.1 Attributes

2 N, BCD, 1 byte

4.78.2 Description

Field 62.5 indicates the number of days (from 01 through 99) anticipated for the auto rental or hotel stay. For auto rental prepaids and hotel deposits, the value reflects the number of days covered by the advance payment. This subfield is used only in authorization requests.

4.78.3 Usage

Field 62.5 is a required field on all CPS Hotel or Auto Rental authorization requests if subfield 62.4 is **A** or **H**.

If the value in this subfield is invalid, V.I.P. substitutes an **N** in field 62.4 and does not forward fields 62.5 or 62.6 to the issuer. It is not used in responses.

NOTE

*V.I.P. does not forward field 62.5 and field 62.6 to non-US issuers for POS transactions unless field 62.4 contains the value **J** (B2B Invoice Payments).*

Subfield 62.5 is optional in incremental authorizations. If present, it reflects the number of additional days to be added to the auto rental or hotel stay.

STIP and Switch Advices: Subfield 62.5 is present in 0120 advices for successfully tested issuers if it was present in the 0100 request.

4.78.4 Field Edits

None.

4.78.5 Reject Codes

None.

4.78.6 Valid Values

Values for subfield 62.5 are **01–99**. Zeros are not allowed. For no-show authorizations, the value is **01**.

4.79 Field 62.6—Prestigious Property Indicator

4.79.1 Attributes

1 AN, EBCDIC, 1 byte

4.79.2 Description

Field 62.6 is an indicator used by CPS acquirers in the Visa U.S.A. Prestigious Lodging program to identify a property floor limit. This subfield is used only in authorization requests.

4.79.3 Usage

Field 62.6 is a bitmap-format field. It is required in 0100 authorization requests only when an approved Prestigious Property merchant uses the US\$1 status check to guarantee the transaction to its floor limit and the acquirer participates in CPS. Otherwise, the subfield is omitted.

If the value in subfield 62.6 is invalid, V.I.P. substitutes an **N** in subfield 62.4 and does not forward fields 62.5 or 62.6 to the issuer.

This is not used in incremental authorizations, reversals, responses, or exception item processing.

The U.S floor limit (position 1) for all domestic mail/telephone transactions is zero.

CPS: See the CPS POS chapter in *V.I.P. System Services* and the latest edition of the *U.S. Interchange Reimbursement Fee Rate Qualification Guide*.

STIP and Switch Advices: This subfield is present in 0120 advices for issuers that have successfully completed testing if it was present in the 0100 request.

4.79.4 Field Edits

None.

4.79.5 Reject Codes

None.

4.79.6 Valid Values

Table 4-59 Field 62.6 Prestigious Property Indicator Codes

Code	Definition
D	Prestigious Property with US\$500 limit
B	Prestigious Property with a US\$1,000 limit
S	Prestigious Property with a US\$1,500 limit

4.80 Field 62.17—Gateway Transaction Identifier (Bitmap Format)

4.80.1 Attributes

fixed length
15 AN EBCDIC, 15 bytes

4.80.2 Description

Field 62.17 is generated by the Visa Gateway. It is used for American Express and MasterCard transactions.

For American Express, this field is used in all response messages coming from its American Express Global Network (AEGN). Visa also supports field 62.17 in merchant-initiated reversal messages.

For MasterCard, this field contains qualification information for the MasterCard Interchange Compliance (MIC) program. This subfield is used in all MasterCard responses coming from Banknet through Visa to successfully tested acquirers. MIC program downgrade codes are in subfield 62.3. Contact MasterCard.

4.80.3 Usage

Authorization Gateway Transactions—American Express: Acquirers that authorize American Express transactions must support this field in responses and test to receive it. The field carries data from American Express field 31.

In an 0400 reversal or 0420 reversal advice, acquirers must send the field 62.17 value that was received in the 0110 response. The field is present in 0410 and 0430 responses.

Authorization Gateway Transactions—MasterCard: Subfield 62.17 is used in 0110 authorization responses if acquirers participate in MasterCard and have successfully completed testing to receive field 62 in its bitmapped format. Acquirers can receive field 62.17 in card-present and card-not-present POS-only transactions, regardless of whether a transaction is CPS or non-CPS.

U.S. acquirers that process MasterCard transactions through VisaNet must support the financial network codes received in this field. However, this field is optional for non-U.S. acquirers that support MasterCard transactions.

The value of this field in the confirmation message may be different from the value in the authorization or preauthorization request. The value from the confirmation message must be used for settlement. See the MasterCard specifications.

Acquirers should not send status check transactions to MasterCard for non-AFD transactions. For these, acquirers should send a zero-dollar transaction with a code of **51** in field 25.

Acquirers that process MasterCard transactions in Visa Europe must support fields 62.17 and 38 when these fields are used in connection with the MasterCard Account-Level Management (ALM) service.

The subfield format is as follows:

Positions 1–4: Banknet date in *mmdd* format.

Positions 5–7: Financial network code. These positions contain product codes for MasterCard. Values in this field correspond to those in MasterCard DE 63.1, Financial Network Code.

NOTE

MasterCard may introduce new values for this field without advance notice. Acquirers should not restrict the allowable codes. Visa does not perform validation of values in this field.

Positions 8–13: Banknet reference number (only the reference number's first 6 digits are used)

Positions 14–15: Space-filled.

References: See the *Authorization Gateway Service Cross-Reference Guide*.

4.80.4 Field Edits

None.

4.80.5 Reject Codes

None.

4.81 Field 62.20—Merchant Verification Value

4.81.1 Attributes

fixed length
10 N, 4-bit BCD, 5 bytes

4.81.2 Description

Field 62.20, which is available to all regions, contains the Merchant Verification Value (MVV) used to identify merchants that participate in a variety of programs. The MVV is unique to the merchant. Visa assigns the first six positions and assists the acquirer in assigning the last four. Acquirers and issuers must have successfully completed testing to receive this field. The MVV is not necessarily part of CPS.

NOTE

V.I.P. does not support Mastercard ID (MAID) in field 62.20. See field 104, usage 2, Dataset ID 65, Tag 07 for details.

4.81.3 Usage

Field 62.20 is used in POS and cash disbursement 0100 and 0400 requests and their responses, and in 0120 and 0420 advices. It is also used balance inquiries, quasi-cash, manual cash, and dual message preauthorization requests. Acquirers provide the MVV (except in PPCS 0302 transactions, when it can be provided by issuers and is returned in 0312 responses—see PPCS subsection below). If an acquirer submits this field in an invalid format, V.I.P. drops the field.

If the MVV is present in a request, V.I.P. assigns a transaction identification (**TI**) in field 62.2. Participating issuers that have successfully completed testing to receive the bitmap version of field 62.2 receive the **TI**; otherwise, it is dropped before the request is forwarded to them. Participating acquirers receive **TI** in field 62.2 in the response regardless of issuer participation.

U.S. Tax Payment Transactions: Acquirers with registered tax payment program merchants must submit a MVV with each transaction. See descriptions for fields 4, 18, 43, and 63.1.

Preauthorized Payment Cancellation Service (PPCS): Issuers may submit this field in certain PPCS transactions. If the field is present in the request, V.I.P. returns it in the response. For stop codes **R0** and **R1** in field 127.PF, at least one of the following fields must be present in a PPCS 0302 add or replace message: field 42 (card acceptor ID), field 43 (merchant name), or field 62.20 (MVV). For stop code **R3**, however, none of these can be present in the message.

This field can also be present in 0302 PPCS requests and their responses. See PPCS subsection later in this field description.

Healthcare Auto-Substantiation Transactions: Acquirers must include a MVV for a SIGIS-certified merchant in 0100 request messages sent to Visa. Otherwise, the healthcare data will be dropped from the message. Additional requirements are specified in the descriptions for fields 54 and 62.4.

4.81.4 Field Edits

Legal Gambling Transactions: Field 62.20 is required for transactions containing merchant category codes **7800**, **7801**, or **7802**. V.I.P. rejects transactions missing this field with reject code **0497**. If the MVV is not allowed, V.I.P. rejects the transaction with reject code **0720**. Additional requirements are specified in the field 3 description.

4.81.5 Reject Codes

Field 62.20 reject codes are:

0497 = Field missing

0720 = Invalid merchant verification value

4.81.6 File Edits

PPCS: If an **R0/R1** 0302 add/replace message is submitted without at least one of the fields in the optional field group of field 42, field 43, or field 62.20, V.I.P. returns the transaction with error code **0589**.

If an **R3** 0302 add/replace message is submitted with one or more of the fields in the optional field group of field 42, field 43, or field 62.20, V.I.P. returns the transaction with error code **0586**.

4.81.7 File Maintenance Error Codes

0586 = Fields 42, 43, and 62.20 are not allowed with field 127.PF stop code **R3**.

0589 = Field missing.

4.81.8 Valid Values

Values: **0–9** and **A–F**.

NOTE

These values are hexadecimal.

4.82 Field 62.21—Online Risk Assessment Risk Score and Reason Codes

4.82.1 Attributes

fixed length
4 AN, EBCDIC, 4 bytes

4.82.2 Description

Field 62.21 is a Visa private-use field that contains online risk assessment information from Advanced Authorization. This information assists issuers in the authorization decision-making process.

NOTE

Advanced Authorization is a global product. Contact your Visa representative. See also BASE I Processing Specifications.

This field is not part of Custom Payment Services.

The field format is shown below.

Positions: 1–2		3	4
risk score		reason code 1 (reserved)	reason code 2 (reserved)
Byte 1–2		Byte 3	Byte 4

Positions 1–2, Risk Score: This value indicates the degree of risk associated with a transaction. This two-byte transaction risk score is represented by a numeric value from **01–99**.

Position 3, Reason Code 1: This position is reserved for future use.

Position 4, Reason Code 2: This position is reserved for future use.

4.82.3 Usage

V.I.P. inserts this field in POS and ATM authorization requests sent to issuers if they elect to receive it. V.I.P. inserts the field after the risk assessment function has returned a score for the request.

NOTE

V.I.P. does not insert this field in OCT authorization requests.

The field is not used in responses; V.I.P. drops it if it is present. This field does not apply to reversals.

STIP and Switch Advices: This field is present in STIP and Switch advices if it was in the original request. STIP does not use this field in approval decision-making.

Visa Advanced Authorization—U.S.: V.I.P. inserts this field in original financial requests sent to issuers.

Visa Advanced Authorization—Canada: Issuer participation is optional and based on client setup in CORE. Canada issuers (processors) that participate in this option must support the use of this field in authorizations and related advices. Issuer (processor) support of field 62.22 is also required.

Visa Advanced Authorization—AP, CEMEA, and LAC: Issuer participation is optional and based on client setup in CORE.

NOTE

Visa Advanced Authorization is not available for Visa Europe.

4.82.4 Field Edits

None.

4.82.5 Reject Codes

None.

4.83 Field 62.22—Online Risk Assessment Condition Codes

4.83.1 Attributes

fixed length
6 AN, EBCDIC, 6 bytes

4.83.2 Description

Field 62.22 is a Visa private-use field that contains additional Advanced Authorization online risk assessment information to assist issuers in the authorization decision-making process. The condition codes provide descriptive information for high-risk assessments.

NOTE

Advanced Authorization is a global product. Contact your Visa representative. See also BASE I Processing Specifications.

This field is not part of Custom Payment Services.

The field format is shown below.

Positions: 1–2		3–4	5–6
condition code 1		condition code 2	condition code 3 (reserved)
Byte 1–2		Byte 3–4	Byte 5–6

Positions 1–2, Condition Code 1: These positions may contain a Compromised Account Risk Condition Code (CARCC) related to a high-risk event in the Compromised Account Management System (CAMS). Two bytes, alphanumeric.

Positions 3–4, Condition Code 2: These positions may contain a Compromised Event Reference (CER) ID related to a high-risk CAMS event. Two bytes, alphanumeric.

Positions 5–6, Condition Code 3: These positions are reserved for future use.

4.83.3 Usage

V.I.P. inserts this field in POS and ATM authorization requests sent to issuers if they elect to receive it. This field can be received only in conjunction with field 62.21; it cannot be sent separately.

NOTE

V.I.P. does not insert this field in OCT authorization requests.

The field is not returned in responses; if present, V.I.P. removes it. This field does not apply to reversals.

STIP and Switch Advices: This field is present in STIP and Switch advices if it was in the original request. STIP does not use this field in approval decision-making.

CAMS: When one or more high-risk events exist in CAMS for a given account, V.I.P. assigns a Compromised Account Risk Condition Code to the account and inserts it in positions 1–2 of this field. If an account is involved in multiple high-risk CAMS events, the riskiest

condition code is assigned to the account and inserted in positions 1–2. If no high-risk events exist in CAMS for the account, the condition code is not included.

For certain CAMS events, a Compromised Event Reference (CER) ID for the event will be included in positions 3–4 of this field. If a CAMS event does not exist, or if a CER ID for the event does not exist, a CER ID will not be included. The CER ID allows issuers to identify which accounts were involved in a CAMS event. Thus, issuers can use the CER ID to manage risk assessment at the CAMS event level.

Because the CER ID will be present for only some CAMS events, the Compromised Account Risk Condition Code may be present without a CER ID also being present. Issuers (processors) are not required to return field 62.21 or field 62.22 in 0110 response messages. V.I.P. will drop these fields if returned by issuers (processors).

Visa Advanced Authorization—U.S.: This field is optional for issuers. Issuers that wish to receive the CARCC in positions 1–2 or the CER ID in positions 3–4 must receive the field.

Visa Advanced Authorization—Canada: Issuer participation is optional and based on client setup in CORE. Canada issuers (processors) that participate in this option must support the use of this field in authorizations and related advices. Issuer (processor) support of field 62.21 is also required.

Visa Advanced Authorization—AP, CEMEA, and LAC: Issuer participation is optional and based on client setup in CORE.

NOTE

Visa Advanced Authorization is not available for Visa Europe.

4.83.4 Field Edits

None.

4.83.5 Reject Codes

None.

4.83.6 Valid Values

Table 4-60 Field 62.22 Valid Values

Valid Values	Description
Positions 1–2: Compromised Account Risk Condition Code	
1–9, A–N, P–Z	A 2-byte alphanumeric value relative to a high-risk CAMS event.
00	No Compromised Account Risk Condition Code assigned.
Positions 3–4: CER ID	
0–9, A–Z	A 2-byte alphanumeric CER ID assigned to a significant CAMS event.
00	No CER ID assigned.
Positions 5–6: Reserved for future use	

4.84 Field 62.23—Product ID

4.84.1 Attributes

fixed length

2 AN, EBCDIC, 2 bytes

4.84.2 Description

Using issuer-supplied data on file in the Cardholder Database or the product ID on the account range, V.I.P. populates this field with a product identification value. This value can be used to track card-level activity by individual account number. (See Field 62.24—Program Identifier.)

NOTE

*Receipt of field 62.23 requires that acquirers support the bitmap format of field 62 and send a value of **2** or 'x'1A' in Header Field 3—Text Format to indicate support of the field 62 bitmap format.*

4.84.3 Usage

Visa optionally includes this field in all cardholder requests and responses and populates the field with product ID values for cards issued in all countries.

Issuers that support account-level processing (ALP) programs must return the assigned product identification value in this field of authorization response messages. The product ID must not be sent in position 6 of field 38.

Acquirers that choose to receive product ID values in this field will receive them for all transactions and for cards issued in all countries. Participating acquirers must be able to receive this field in authorization responses. These acquirers must use this field, not position 6 of field 38, to identify the applicable product ID for a transaction.

In some countries, issuers that support account-level processing and acquirers that choose to receive product ID values may be required to include or receive field 62.23 in authorization and full-financial response messages.

NOTE

Contact your Visa representative.

Processing Details: In addition to including this field in the request, V.I.P. ensures that the same value is present in the response and passes it to the acquirer, provided the acquirer can receive it.

01xx or 04xx messages can include field 62.23. In reversal transactions, the field can be populated by acquirers or issuers.

This field can be received for programs not identified at the card level, in which case card-level processing rules do not apply.

Online File Maintenance: This field is used in messages that support the maintenance of information in the cardholder database (CDB).

For Asia-Pacific, Canada, and CEMEA only, issuers that support ALP programs use this field to provide account-level product information in the CDB. The field is used in ALP product CDB requests and responses as follows:

- The field is mandatory in 0302 update requests and their 0312 responses.
- The field is not used in 0302 inquiries, but V.I.P. sends the field in 0312 responses.
- V.I.P. sends the field in 0322 error advices.

Product Eligibility Inquiry: This field is used in 0100 product eligibility inquiries. Participants do not send this field in the request, but V.I.P. sends it in the 0110 response.

4.84.4 Field Edits

None.

4.84.5 Reject Codes

None.

4.84.6 File Edits

If the issuer fails to include this field in an 0302 ALP product cardholder database update request or if the data in this field is not alphanumeric, Visa will respond with a value of **06** (error) in field 39 and send an error code in field 48, usage 1b.

4.84.7 File Maintenance Error Codes

0745 = Field 62.23 is missing

0746 = Field 62.23 is not alphanumeric

4.84.8 Valid Values

IMPORTANT

The product IDs in the following table are subject to change. To ensure that you are using the latest product IDs, please check with your Visa representative.

Table 4-61 Global Product ID Values

Product ID	Description
A	Visa Traditional
AX ¹	American Express
B	Visa Traditional Rewards
C	Visa Signature
D	Visa Signature Preferred
DI ¹	Discover
DN ¹	Diners
E	Proprietary ATM
F	Visa Classic
G [^]	Visa Business
G1	Visa Signature Business
G3	Visa Business Enhanced Visa Platinum Business

Table 4-61 Global Product ID Values (continued)

Product ID	Description
G4	Visa Infinite Business
G5	Visa Business Rewards
I	Visa Infinite
I1	Visa Infinite Privilege
I2	Visa Ultra High Net Worth (UHNW)
J3	Visa Healthcare
JC ¹	JCB
K	Visa Corporate T&E
K1	Visa Government Corporate T&E
L	Visa Electron
M ¹	MasterCard
N	Visa Platinum
N1	Visa Rewards
N2	Visa Select
P	Visa Gold
Q	Private Label
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
	Visa Fleet (Canada only)
S2	Visa Government Purchasing
S3	Visa Government Purchasing With Fleet
S4	Visa Commercial Agriculture
S5	Visa Commercial Transport
S6	Visa Commercial Marketplace
U	Visa TravelMoney
V	V PAY
X	Visa B2B Virtual Payments

1. Authorization transactions only.

4.85 Field 62.24—Program Identifier

4.85.1 Attributes

fixed length

6 AN, EBCDIC, 6 bytes

4.85.2 Description

This field contains a program identification number used with Field 62.23—Product ID. The field identifies the programs associated with a card within a program registered by the issuer with Visa. At the issuer's option, V.I.P. or the issuer can populate field 62.24 with eligible program identification numbers. When V.I.P. populates this field, it uses values from the Cardholder Database.

4.85.3 Usage

Issuers that elect to support card-level identification have the option of having V.I.P. insert the RPIN in 01xx authorization requests and 04xx requests and also having V.I.P. return this value in responses. Alternatively, issuers may forego V.I.P. insertion of the field and populate the field in request responses themselves, in which case the RPIN must be one registered with Visa.

Participating issuers must test their ability to send or receive this field in request and advice messages.

Acquirers may optionally elect to receive this field in authorization responses, in which case testing to receive this field is required.

Online File Maintenance: This field may be present in CDB 0120 advices and 0130 responses.

For the Asia-Pacific region, Canada, and the CEMEA region only, issuers that support ALP programs use this field in ALP product CDB requests and responses as follows:

- The field is mandatory in 0302 update requests and their 0312 responses.
- The field is not used in 0302 inquiries, but V.I.P. sends the field in 0312 responses.
- V.I.P. sends the field in 0322 error advices.

4.85.4 Field Edits

None.

4.85.5 Reject Codes

None.

4.85.6 File Edits

If the issuer fails to include this field in an 0302 ALP product cardholder database update request or if the data in this field is not alphanumeric, Visa will respond with a value of **06** (error) in field 39 and send an error code in field 48, usage 1b.

4.85.7 File Maintenance Error Codes

0747 = Field 62.24 is missing

0748 = Field 62.24 is not alphanumeric

4.85.8 Valid Values

Field must be 6 bytes and contain a combination of letters (**A–Z**) and/or numbers (**0–9**).

4.86 Field 62.25—Spend Qualified Indicator

4.86.1 Attributes

fixed length

1 AN, EBCDIC, 1 byte

4.86.2 Description

Using the point-of-sale spend history and the defined product-level spend requirement for the country of issuance, V.I.P. populates this field with the spend-qualified indicator.

4.86.3 Usage

This field is used in authorization requests, full financial requests, and their response messages. Visa populates this field and optionally forwards it to issuers and acquirers that choose to receive it. If spend-processing does not apply, this field is space-filled.

For exception item transactions, including chargebacks, representments, and their reversals, submission of field 62.25 is optional.

4.86.4 Field Edits

None.

4.86.5 Reject Codes

None.

4.86.6 Valid Values

IMPORTANT

The spend-qualified indicators in the following table are subject to change. To ensure that you are using the latest spend-qualified indicators, please check with your Visa representative.

Table 4-62 Spend Qualified Indicator

Value	Description
Space	Spend-processing does not apply.
B	Base spend-assessment threshold defined by Visa has been met.
N	Spend-assessment threshold defined by Visa has not been met.
Q	Qualified spend-assessment threshold defined by Visa has been met.

NOTE

*The default value of **space** is not formatted and delivered in BASE I and V.I.P. online messages. If the spend-qualified requirement is not met, BASE I and V.I.P. online messages include **N** in field 62.25.*

4.87 Field 62.26—Account Status

4.87.1 Attributes

1 AN, EBCDIC
1 byte

4.87.2 Description

This field identifies the account range as regulated or non-regulated.

4.87.3 Usage

This field applies to U.S.-issued and U.S. territory-issued debit and prepaid cards.

Table 4-63 Field 62.26 Valid Values

Values	Description
R	Regulated
N	Non-regulated

This field is used in the following messages:

- 0110/0130 authorization and advice responses
- 0210/0230 full financial and acquirer advice responses
- 0230 adjustment response
- 0282 representment status advice
- 0410/0430 reversal, partial reversal, and reversal advice responses
- 0410/0430 financial reversal and acquirer advice responses
- 0422 chargeback and chargeback reversals

4.87.4 Field Edits

None.

4.87.5 Reject Codes

None.

4.88 Field 63—V.I.P. Private-Use Field

4.88.1 Attributes

variable length
1 byte, binary +
255 bytes, variable; maximum: 256 bytes

4.88.2 Description

Field 63 is a private-use field defined by Visa for various kinds of BASE I and SMS message information. Identifying the acquirer's network ID is a primary use of this field, which is also used for various reason codes. The length subfield specifies the number of bytes that follow it. Maximum field length is currently 79 bytes.

Table 4-64 shows the field 63 layout. Subfields not supported for BASE I are indicated by an "n/a" in the description column.

Table 4-64 Field 63 Layout

Subfield	Description	Length		Format
		Bytes	Positions	
n/a	Length Subfield	1		binary
63.0	Bitmap	3	24	bit string
63.1	Network ID	2	4	N, BCD
63.2	Time (Preauth Time Limit)	2	4	N, BCD
63.3	Message Reason Code	2	4	N, BCD
63.4	STIP/Switch Reason Code	2	4	N, BCD
63.5	n/a	3	6	N, BCD
63.6	n/a	7	7	ANS
63.7	n/a	8	64	bit string
63.8	n/a	4	8	N, BCD
63.9	n/a	14	3	ANS
63.10	n/a	13	2	ANS
63.11	n/a	1	1	ANS
63.12	n/a	30	14	ANS
63.13	n/a	3	6	N, BCD
63.14	n/a	36	36	ANS
63.15	n/a	9	9	ANS
63.16	n/a	3	6	N, BCD
63.17	n/a	n/a	n/a	n/a
63.18	n/a	1	1	2N, 4-bit BCD
63.19	Fee Program indicator	3	1–3	AN
63.20	n/a	1	1	2N, 4-bit BCD
63.21	n/a	1	1	ANS

4.88.3 Usage

See field 63.xx descriptions.

4.88.4 Field Edits

See field 63.xx descriptions.

4.88.5 Reject Codes

See field 63.xx descriptions.

4.89 Field 63.0—Field 63 Bitmap

4.89.1 Attributes

fixed length
24 N, bit string; 3 bytes

4.89.2 Description

Field 63.0 is a bitmap that specifies which subfields are present. There are a few bits defined in bytes 1 and 3 for miscellaneous information. Byte 2 is reserved for future use and is set to **zero**.

Table 4-65 Field 63 Bitmap

Subfields		Byte 1							
		1	2	3	4	5	6	7	8
Bit 1	Network ID is present	✓							
Bit 2	Preauth time limit is present		✓						
Bit 3	Message reason code is present			✓					
Bit 4	STIP and VisaNet reason code is present				✓				
Bit 5 – Bit 8	Not applicable								
Byte 2									
Bit 1 – Bit 8	Not applicable								
Byte 3									
Bit 1 – Bit 2	Not applicable								
Bit 3	Fee program indicator			✓					
Bit 4 – Bit 8	Not applicable								

4.89.3 Usage

This field is required in all messages that use its subfields, such as Field 63.1—Network Identification Code.

4.89.4 Field Edits

See individual subfields.

4.89.5 Reject Codes

See individual subfields.

4.90 Field 63.1—Network Identification Code

4.90.1 Attributes

fixed length
4 N, 4-bit BCD (unsigned packed); 2 bytes

4.90.2 Description

Field 63.1 contains a code that specifies the network to be used for transmission of the message and determines the program rules that apply to the transaction. All codes for this field are defined in the Valid Values section.

4.90.3 Usage

Acquirers must send a value of **0000** in 0100 and 0400 requests. VisaNet determines the network ID (**0002** or **0004**) and forwards this value to issuers. Issuers must return the value in responses.

In online file maintenance messages, this field is optional in 0302 requests and 0312 responses. The field is mandatory in 0120 CDB advices and optional in their 0130 responses.

The field is present in 0322 Auto-CDB and GCAS advices. Issuers must return the value from the request if they respond with an 0332 message.

U.S. Tax Payment Transactions: The value in this field must be **0002** (or resolve to **0002**).See descriptions for fields 4, 18, 43, and 62.20.

4.90.4 Field Edits

If the acquirer sends a network ID value other than **0000** in a request, V.I.P. will reject the message with reject code **0062**.

If an authorization or reversal message is received without this field, V.I.P. will reject the message with reject code **0319**.

4.90.5 Reject Codes

- 0062** = Invalid value
- 0319** = Field missing
- 0514** = Response value does not match request value

4.90.6 Valid Values

Table 4-66 Network ID Codes

Code	Network/Program
0000	Visa determines the network and program rules.
0002	Visa
0004	Plus

4.91 Field 63.2—Time (Preauth Time Limit)

4.91.1 Attributes

fixed length
4 N, 4-bit BCD (unsigned packed); 2 bytes

4.91.2 Description

This field applies to preauthorization requests and completion advices. The time limit notifies the issuer that the merchant or acquirer intends to follow a preauthorization request with a completion advice within a certain number of hours. Issuers can use this value to manage the cardholder's available funds more effectively.

Although preauthorization messages originate exclusively from full service acquirers and merchants connected to the SMS component of V.I.P., BASE I-connected issuers can opt to receive time limit information in 0100 POS authorization requests and 0120 completion advices.

4.91.3 Usage

IMPORTANT

Only full service acquirers can submit this field.

When Visa receives an 0100 preauthorization request from a full service acquirer, Visa forwards it to the BASE I issuer as an 0100 request containing field 63.2, provided the issuer supports this field. BASE I issuers that have not elected to receive field 63.2 will receive an 0100 authorization request with an estimated amount but without the presence of field 63.2.

The issuer may also receive this field in 0120 STIP advices and 0120 completion advices, if the issuer elects to receive 0120 completions.

For these messages, the value in this field should be **0002** (2 hours). Issuers that opt to receive field 63.2 must send the field in response messages.

The field is used in related 0400/0420 preauthorization reversals/advices.

4.91.4 Field Edits

None.

4.91.5 Reject Codes

None.

4.92 Field 63.3—Message Reason Code

4.92.1 Attributes

fixed length
4N, 4-bit BCD (unsigned packed); 2 bytes

4.92.2 Description

This field contains a code explaining the reason for an online acquirer advice, reversal, or partial reversal.

4.92.3 Usage

This field is used in:

- 0100 resubmissions (U.S. only)
- 0100 token activation request
- 0120 acquirer authorization advices
- 0600/0620 token notification advices
- The following reversals:
 - 0400/0420 reversals initiated by BASE I or V.I.P. Authorization Only acquirers
 - 0420 reversal advices initiated by SMS acquirers and intended for BASE I or V.I.P. Authorization Only issuers

NOTE

Visa no longer supports 0102 ATM confirmation messages.

When an ATM transaction does not complete (funds are not dispensed), acquirers can send an 0400 or 0420 ATM full reversal message, which must contain this field with a value of **2501**, **2502**, or **2503**.

When ATM transactions partially complete (mispense), acquirers can send an 0400 or 0420 ATM partial reversal, which must contain this field with **2504**.

Visa will process all 0400 and 0420 ATM reversal messages and send them as full or partial reversals. For BASE I-connected issuers, Visa will send these messages as full or partial 0400 reversals.

NOTE

Visa encourages all ATM acquirers to send 0420 messages and receive 0430 responses, rather than send 0400 messages and receive 0410 responses.

This field is not used in responses.

Acquirer Authorization Advices: BASE I acquirers must send a value of **2104** in this field.

Visa Token Service: This field is required for the codes listed in the following table.

Table 4-67 Field 63.3 Message Reason Codes for Visa Token Service

Reason Code	Description
3700	Token create
3701	Token deactivate

Table 4-67 Field 63.3 Message Reason Codes for Visa Token Service (continued)

Reason Code	Description
3702	Token suspend
3703	Token resume
3711	Device provisioning result
3712	OTP verification result
3713	Call Center activation
3714	Mobile banking app activation
3715	Replenishment confirmation of limited-use keys

Merchant-Initiated Transactions: Supported transactions include 0100 authorizations, 0120 advices, 0200 full financials, and 0220 advices.

Table 4-68 Field 63.3 Message Reason Codes for Merchant-Initiated Transactions

Reason Code	Description
3900	Incremental authorization
3901	Resubmission
3902	Delayed charges
3903	Reauthorization
3904	No show
3905	Account top up

4.92.4 Field Edits

If a transaction is submitted with a value that is not defined for BASE I, Visa will reject the message with reject code **0114**.

If a transaction is received without this field from an acquirer that has successfully tested to use it, Visa will reject the message with reject code **0346**.

Visa no longer supports 0102 ATM confirmations. If an 0102 message is submitted (when funds are correctly dispensed, not dispensed, or misdispensed), Visa will reject it with reject code **0599**.

Merchant-Initiated Transactions: V.I.P. rejects merchant-initiated transactions that do not contain a merchant-initiated reason code with Reject Code **0114**—Invalid Value.

NOTE

The following merchant-initiated transactions initiated with a payment token are allowed on tokens in an active, suspended, or deactivated state:

- 3901 (Resubmission)
- 3902 (Delayed charges)
- 3904 (No show)

Issuers must not decline these merchant-initiated transaction types because the payment token is in a suspended or deactivated state. Transactions initiated with a payment token are declined by BASE I and V.I.P. for tokens no longer in the Visa system.

Acquirer Authorization Advices: If an acquirer sends an authorization advice with this field set to values other than **2104**, V.I.P. rejects the message with reject code **0114**.

4.92.5 Reject Codes

0114 = Invalid value

0346 = Field missing

0599 = Consistency error

4.92.6 Valid Values

Table 4-69 Field 63.3 BASE I Message Reason Codes

Code	Definition	Requirements
Acquirer Authorization Advice (U.S. Only)		
2104	Acquirer authorization advice	<p>This code is used in acquirer-generated 0120 advices when an online authorization was not performed.</p> <p>NOTE: <i>This code is used in acquirer authorization advices only. It is not used in 0120 preauthorization completion advices.</i></p>
Reversals		
2501	Transaction voided by customer	<p>Code 2501, 2502, or 2503 can be sent in ATM full reversals if the amount dispensed by the ATM is zero and the Other Amounts value in field 61 is zero.</p>
2502	Transaction not completed	
2503	No confirmation from point of service	
2504	Partial dispense by ATM (misdispense) or POS partial reversal	<p>However, the acquirer processor must use 2504 when the amount in field 61 is not zero and not equal to the transaction amount in field 4.</p> <p>If the acquirer does not include this field in reversal messages, VisaNet sends the issuer 2501.</p>

4.93 Field 63.4—STIP/Switch Reason Code

4.93.1 Attributes

fixed length

4 N, 4-bit BCD (unsigned packed); 2 bytes

4.93.2 Description

Field 63.4 contains a code that identifies why STIP responded for the issuer or why the Switch generated an advice.

4.93.3 Usage

A STIP or Switch reason code is included in the following messages:

- 0120 authorization advices.
- 0420 authorization reversal advices.
- 0620 alerts.

Real-Time Decisioning—Canada: Issuers must support a field 63.4 value of **9047** (declined by RTD processing) in forward referrals of authorization requests, in responses, and in related advices to issuers. A field 39 value of **59** (suspected fraudulent transaction) must also be supported.

Visa Smart Debit/Visa Smart Credit (VSDC): This field may be present in 0120 authorization advices when BASE I validates Online CAM processing and responds on behalf of the issuer. If Online CAM validation fails, BASE I declines the request message and sends the issuer an advice with reason code **9054**.

4.93.4 Field Edits

None.

4.93.5 Reject Codes

None.

4.93.6 Valid Values

Table 4-70 Field 63.4 STIP/Switch Reason Codes

Message Type	Code	Definition
STIP Processing Advice		STIP processed this transaction because:
	9001	The issuer is signed off.
	9002	The issuer was signed off by the switch.
	9011	The line to issuer is down.
	9012	Forced STIP because of NO (Force STIP) original response from issuer.
	9020	The response from issuer timed out.
	9022	PACM-diverted.
	9023	PCAS-diverted.
	9024	Transaction declined due to Visa Payment Controls (VPC) rule.
	9025	Declined by Selective Acceptance Service.
	9026	Transaction reviewed by the Visa Transaction Advisor Service: additional authentication required.
	9027	Declined by token provisioning service.
	9030	This transaction is auto-CDB; there is a pickup response from the issuer.
	9031	Original processed in stand-in.
	9033	Declined due to active account management threshold exceeded.
	9034	Unable to deliver response to originator.
	9035	Process recurring payment in STIP.
	9037	Declined by Visa CTC (Consumer Transaction Controls) service.
	9041	There was a PIN verification error.
	9042	Offline PIN authentication was interrupted.
	9045	Switch was unable to translate the PIN.
	9047	Declined by Real-Time Decisioning (RTD) processing.
	9048	There is an invalid CVV with the All Respond Option.
	9054	There is an invalid CAM.
	9091	Dispute financial.
	9095	Issuer notification of token vault provisioned or status change.
STIP-Generated Advice	9050	Switch generated this 0620 alert message.
Switch-Detected Error	9061	There is an internal system error or other switch-detected error condition.
Switch-Generated Reversal Advice	9102	Switch generated this 0420 reversal advice because an approval response could not be delivered to the acquirer. VE only.
	9103	An approval response could not be delivered to the acquirer because the issuer timed out.

Table 4-70 Field 63.4 STIP/Switch Reason Codes (continued)

Message Type	Code	Definition
STIP-decline advice	9201	Decline due to PPCS (Stop recurring payment service).
	9202	Decline due to issuer country exclusion list.
	9203	Decline due to Office of Foreign Assets Control (OFAC) embargo.
	9204	Cashback processing error.
	9205	Invalid CAVV with Visa Verify and decline options (V and W).
	9206	Mod-10 check failure.
	9207	Issuer does not support gambling transactions.
	9302	Exceeds Settlement Risk Exposure Cap. This code appears in 0120 messages.

4.94 Field 63.19—Fee Program Indicator

4.94.1 Attributes

fixed length

3 AN, EBCDIC; 3 bytes

4.94.2 Description

This field contains an interchange reimbursement fee program indicator (FPI), which is used in assessing the fee amount applied to transactions.

NOTE

The FPI value can be regarded as informational only, when used to give endpoints an approximation of the assessed interchange reimbursement fee. The FPI value can also be used to request a fee, as specified by certain regions.

Clients must test to receive field 63.19. This applies to all regions.

4.94.3 Usage

This field can be used in ATM transactions or POS transactions as described in the following subsections. The field can be present in 0100 and 0400 requests and their advices, but not in responses.

ATM Transactions (AP and CEMEA Regions): Acquirers of ATM transactions that wish to receive a regional or domestic bilateral fee must submit the same FPI value in the BASE I ATM authorization request message and the BASE II ATM clearing transaction.

V.I.P. drops field 63.19 from further processing unless the request message meets *all* following conditions:

1. FPI data is present in the message.
2. The transaction is an ATM request.
3. The acquirer *and* the issuer are in the AP region or in the CEMEA region.
4. Issuers are SMS ATM participants that have successfully tested to receive field 63.19.
5. Issuers participate in the ATM Format Conversion service.

Upon submission of an authorization or reversal request, V.I.P. passes the field from BASE I to SMS, which in turn sends the FPI value to an eligible SMS issuer. BASE I issuers do not receive this field.

For details about SMS field 63.19 processing in ATM transactions, see *V.I.P. System ATM Technical Specifications*.

BASE-I to BASE-I POS Transactions: If a BASE I acquirer includes this field in a POS message destined to a BASE I issuer, V.I.P. will drop the field before forwarding the message.

4.94.4 Field Edits

None.

4.94.5 Reject Codes

None.

4.95 Field 68—Receiving Institution Country Code

4.95.1 Attributes

fixed length

3 N, 4-bit BCD (unsigned packed); 2 bytes

4.95.2 Description

Field 68 contains the code for the country of the receiving institution in field 100. Country codes are listed in the appendix titled "Country and Currency Codes." A leading zero is required to pad the first unused half-byte of this field. The zero is a filler and is not part of the code.

4.95.3 Usage

STIP and Switch Advices: This field is present in a STIP-generated 0120 or 0420 advice if it was in the request. It is not required in a response to the advice.

4.95.4 Field Edits

The code in field 68 must be one of the 3-digit numeric codes listed in the appendix titled "Country and Currency Codes."

4.95.5 Reject Codes

0119 = Invalid value

0453 = Field missing

4.96 Field 70—Network Management Information Code

4.96.1 Attributes

fixed length
3 N, 4-bit BCD (unsigned packed); 2 bytes

4.96.2 Description

Field 70 contains a code that defines the type of network management needed:

- Network sign-on and sign-off
- Start or stop transmitting advices
- Communication link test between a VIC and the user

4.96.3 Usage

Field 70 is used only in 08xx network management messages. See [Table 4-71](#) of the Valid Values section for values. A leading zero is required to pad the first unused half-byte of this field. The zero is a filler and is not part of the code.

Centers that use a BASE I Extended Access Server (EAS) Link to process BASE I messages in BASE I or V.I.P. message formats use BASE I station codes. (For a BASE I link, the VIC uses line test code **301**. Processors test the V.I.P. line by sending a normal **001** sign-on message; Visa also supports echo tests initiated by clients with **301**.)

Centers that use a Common Interface Extended Access Server (EAS) Link to process BASE I and SMS messages in V.I.P. message formats use Common Interface station codes. These centers can optionally send code **301** or **071** to confirm system availability. They also can use a BASE I or SMS message to sign on and sign off (with code **071** or **072**).

CVV: Field 70 must contain **0170** in GCAS requests for new CVVs for emergency replacement cards.

CVV2: Field 70 must contain **0171** in GCAS requests for new CVV2s for emergency replacement cards.

Visa Network Token Service: The code must be **890** in 0620/0630 messages.

Network Monitoring Option: Acquirers and issuers are required to accept an 0800 echo test message from V.I.P. at least once every 5 minutes, *regardless of traffic conditions*. They must respond with an 0810 response message. This provides clients with added monitoring facility to identify and correct problems encountered with response time or connectivity.

Clients can also initiate an echo test. When a client submits an 0800 message with this field set to **301** (echo test), V.I.P. sends an 0810 response to the client.

BASE I acquirers, issuers, and processors that process echo test messages must be able to support the 0810 response messages from V.I.P.

Contact your Visa representative.

4.96.4 Field Edits

Field 70 is required in all 08xx messages. The code must be one of those in [Table 4-71](#).

4.96.5 Reject Codes

0042 = Invalid value

0321 = Field missing

0599 = Invalid message type

4.96.6 Valid Values

Table 4-71 Field 70 Network Codes

Code	Station Type	Description
Message Types 0800 and 0810		
071	Common Interface	Sign-on to the Base I and V.I.P. Systems, start BASE I and V.I.P. processing
072	Common Interface	Sign-off from the Base I and V.I.P. Systems, terminate BASE I and V.I.P. processing
078	Common Interface	Start transmission of BASE I and V.I.P. advices
079	Common Interface	Stop transmission of BASE I and V.I.P. advices
170	BASE I or Common Interface	GCAS-initiated CVV generation request for emergency replacement card
171	BASE I or Common Interface	GCAS-initiated CVV2 generation request for emergency replacement card
301	BASE I or Common Interface	Echo test (may be initiated by the VIC or the client)
Message Types 0600, 0610, 0620, and 0630 (Text Messages)		
889	BASE I or Common Interface	Supplemental Commercial Card Data. This code is for use in the CEMEA region only.
890	BASE I or Common Interface	Issuer token advice

4.97 Field 73—Date, Action

4.97.1 Attributes

fixed length

6 N, 4-bit BCD (unsigned packed); 3 bytes

format: variable

4.97.2 Description

Visa defines field 73 for miscellaneous dates, including file maintenance, expiration, and purge dates. Dates can be six digits in the file maintenance *yymmdd* format. Purge dates beyond the current year are acceptable.

Dates can be in any format for U.S. check acceptance.

4.97.3 Usage

In adds and changes for records in the Exception File, Visa routinely changes the purge date entered by the issuer to coincide with the *YYMMDD* expiration date of the Card Recovery Bulletin in effect at that time.

NOTE

For file updates, the purge date is in this field.

In file update requests, the date specified in field 73 determines how long the cardholder or merchant record must stay on file at the VIC, that is, the record's purge date. It is returned in the response. It is not used in a delete update or an 0302 file inquiry request. If this field is present in an 0302 file inquiry request, VisaNet ignores it. It is present in the file inquiry response only if the response code is **00**.

The date format is *yymmdd*, where:

yy = **00–99**

mm = **01–12**

dd = **00–31** (when *dd* = **00**, the VIC calculates the purge date as the last day of the month), or the value **999900**.

For AVS, PVV, and risk record types, the value **999900** leaves the record on file indefinitely. For Exception and Portfolio file records, however, a purge date of **999900** is defined as 20 years from the update date; the value is no longer indefinite. V.I.P. rejects Exception File records submitted with an expiration date greater than 9/17/2042.

Field 73 may be used for dates related to private label and proprietary card transactions, when the account number is in fields 102 or 103. If this field is present in an 0302 file inquiry request, V.I.P. ignores it.

Auto-CDB: Auto-CDB lists the account for 60 days from the date of the update or until the original expiration date for the account listing, whichever date is later. For account listings set to expire in less than 60 days, Auto-CDB changes the expiration date to 60 days. If the account is listed in the Exception File with something other than pick-up status, Auto-CDB changes the listing to pick-up status.

Address Verification: Address verification data may be placed permanently on file (date = **999900**) and updated through A2 add, change, or replace requests.

0322 File Update Advices: Field 73 contains the purge date on file in the format *yyymmdd*. It is present in the message when field 91 = **1** (add) or **2** (change).

Deleted CDB Records: For deletes, the record remains in the file for 10 days (that is, the current date plus 10 days) but is not used; after the 10 days, it is deleted.

STIP and Switch Advices: Field 73 is present in 0120 or 0420 advices if it was in the request.

Check Acceptance (U.S. Only): Whenever a check acceptance vendor requires a date (for example, the expiration date of a driver's license or the expiration date on a card used for ID) in its requests, that date must be placed in this field. The date can be in the vendor's format, with lead-zero fill if needed. When no date is available at the point of sale, this field is omitted.

4.97.4 Field Edits

None.

Check Acceptance: If present, the value must be numeric.

4.97.5 Reject Codes

None.

4.97.6 File Edits

Field 73 is required in an 0300 or 0302 request if field 91 is **1**, **2**, or **4**. The *yyymmdd* value must be numeric. The date cannot be expired. The following requirements apply:

- The *yy* positions must be **00–99**.
- The *mm* positions must be **01–12** or **99**.
- The *dd* positions must be **00–31**.

If field 91 is **3** or **5**, field 73 must be omitted.

4.97.7 File Maintenance Error Codes

0575 = Field missing, expired date, day not valid, or date present in a delete.

4.98 Field 90—Original Data Elements

4.98.1 Attributes

fixed length

42 N, 4-bit BCD (unsigned packed); 21 bytes

4.98.2 Description

Field 90 contains information for tracking the current message back to prior messages for the same cardholder transaction, for instance, a reversal to an original request. This field is fixed-length with five subfields.

Positions:				
1–4	5–10	11–20	21–31	32–42
original message type	original trace number	original transmission date/time	original acquirer ID	original forwarding institution ID
Byte 1–2	Byte 3–5	Byte 6–10	See below	See below

Positions 1–4, Original Message Type (Field 90.1): This subfield contains the 4-digit message type identifier from the original message for the transaction being reversed.

Positions 5–10, Original Trace Number (Field 90.2): This subfield contains the 6-digit trace number from field 11 of the original message.

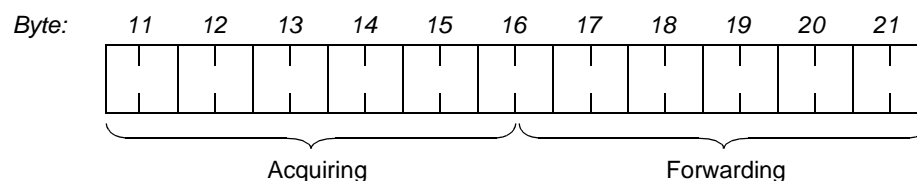
Positions 11–20, Original Transmission Date and Time (Field 90.3): This subfield contains the 10-digit transmission date and time from field 7 of the original message.

Positions 21–31, Original Acquirer ID (Field 90.4): This subfield contains 11 positions for the acquiring institution ID from field 32 of the original request, right-justified, with lead zero fill.

Positions 32–42, Original Forwarding Institution ID (Field 90.5): This subfield contains 11 positions for the forwarding institution ID from field 33 of the original request, which is right-justified, with lead zero fill. It contains all **zeros** if field 33 was not present in the original request.

NOTE

The institution ID subfields do not follow the usual rule regarding byte boundaries: each occupies 5.5 bytes as shown in the illustration.



4.98.3 Usage

Field 90 is used in reversal requests. It is optional in reversal responses. The first subfield, the original message type, must be provided whenever field 90 is used. The remaining subfields may be zero-filled or contain valid values.

The first subfield contains **0100** or **0101**.

The second subfield contains the field 11 trace number from the original authorization request, or zeros if no trace number is assigned or the number assigned is unavailable.

The remainder of this field may be zero-filled.

Check Acceptance: Not applicable to field 90.

STIP and Switch Advices: Field 90 is present in 0420 advices.

Authorization Gateway Transactions—American Express: V.I.P. uses this field's content to build American Express field 56 in reversals. See the *Authorization Gateway Service Cross-Reference Guide* for field-by-field data transfer descriptions between VisaNet-format dual-message 0100 authorization requests and responses, and American Express- and MasterCard-format authorization requests and responses.

4.98.4 Field Edits

Field 90 is required in all 0400 reversal requests and the value must be numeric. It is optional in 0410 responses, but if present, the value must match that in the request.

4.98.5 Reject Codes

0055 = Invalid value

0336 = Field missing

4.99 Field 91—File Update Code

4.99.1 Attributes

fixed length
1 AN, EBCDIC; 1 byte

4.99.2 Description

Field 91 contains a code that specifies the type of file processing required. See “Valid Values” for codes.

4.99.3 Usage

Field 91 is used in 03xx updates and inquiries for all Cardholder Database files and the Merchant Central File. If field 91 contains a **5** for inquiry requests, fields 73 and 127 are not used; if they are present, V.I.P. ignores them.

File Maintenance Advices: This field is present in 0120 and 0322 file update advices and contains the code for the action taken.

Preauthorized Payment Cancellation Service (PPCS): Issuers must supply this field in add, delete, replace, or inquire transactions. V.I.P. returns the field in responses. See the “Field 127.PF” description.

Visa Token Service: This field contains a **2** for 0302/0312 token maintenance file requests/responses.

This field contains a **2** for 0302/0312 primary account number maintenance file requests/responses.

This field contains a **5** for 0302/0312 token file inquiry request/responses.

4.99.4 Field Edits

Field 91 is required in all 03xx requests.

4.99.5 Reject Codes

0341 = Field missing

4.99.6 File Edits

If Field 101—File Name contains a 2-character name, the code must be one of those in the Valid Values section.

Attempts to delete an account number when the number does not exist results in a file maintenance error (error code 0565).

MCFS: The replace command (code **4**) is not allowed.

PPCS: The change command (code **2**) is not allowed. The replace command (code **4**) is allowed.

4.99.7 File Maintenance Error Codes

0565 = No record on file

0566 = Record on file; cannot add

0568 = Invalid value

4.99.8 Valid Values

Table 4-72 Field 91 File Update Codes

Code	Definition	Explanation
1	Add	Except as noted, add new record if one does not exist. NOTE: <i>For exception records, if record exists, CDB applies update as change.</i>
2	Change	Except as noted, change record. NOTE: <i>For exception records, if record does not exist, CDB applies update as add.</i> NOTE: <i>PPCS cannot use 2. Change not supported.</i>
3	Delete	Delete record.
4	Replace	Add new record if none exists or replace record. NOTE: <i>PPCS can use 4.</i>
5	Inquire	Send copy of record.

4.100 Field 92—File Security Code

4.100.1 Attributes

fixed length

2 AN, EBCDIC; 2 bytes

4.100.2 Description

Field 92 contains an operator identification number.

4.100.3 Usage

An issuer uses this field when it must include an operator ID in a file update or file inquiry.

Field 92 is optional in 0300 and 0302 requests. If this field is present in a request, it is returned in the 0310 and 0312 response.

4.100.4 Field Edits

If an authorization or reversal request with this field is routed from a BASE I acquirer to an SMS switch, field 92 is deleted before the request is passed to the SMS issuer.

4.100.5 Reject Codes

0342 = Field missing

4.100.6 File Edits

None.

4.100.7 File Maintenance Error Codes

None.

4.101 Field 95—Replacement Amounts

4.101.1 Attributes

fixed length
42 AN, EBCDIC; 42 bytes

4.101.2 Description

In a partial reversal, field 95 contains the corrected amount of an authorization transaction. This field is defined as fixed-length with four subfields, but only the first subfield is used.

Positions:

1–12	13–24	25–33	34–42
actual amount, transaction	unused	unused	unused
Byte 1–12	Byte 13–42		

Positions 1–12, Actual Amount, Transaction (Field 95.1): This 12-position field is used for the corrected, actual amount of the cardholder's transaction, in the transaction currency. The value is right justified, with lead zero-fill.

Positions 13–24, Actual Amount, Settlement (Field 95.2): These positions are not used and must be zero-filled.

Positions 25–33, Actual Amount, Transaction Fee (Field 95.3): These positions are not used and must be zero-filled.

Positions 34–42, Actual Amount, Settlement Fee (Field 95.4): These positions are not used and must be zero-filled.

The amount in field 95 is expressed in the currency identified by Field 49—Currency Code, Transaction. The number of decimal places assumed for this field depends on the currency. Currency codes and the locations of the implied decimal place for each currency are listed in the appendix titled “Country and Currency Codes.”

4.101.3 Usage

Field 95 is used in partial reversal messages only; it is not present in other reversal messages. If present in partial reversal requests, it must be present in responses and related advices.

ATM acquirers may submit 0400 or 0420 partial reversal transactions. This field contains the amount dispensed by the ATM. In addition, field 3 must be **01** (cash disbursement), and field 63.3 must be **2504** (partial dispense by ATM).

In ATM partial reversal transactions, the access fee from field 28 must be included as part of the amount in this field.

NOTE

Although this field is defined as a fixed-length field with four subfields, only the first subfield is used.

Subfield 95.1 contains the corrected, amount of the cardholder transaction, that is, the amount to be posted to the cardholder's account.

EXAMPLE

If the amount in an initial authorization is US\$200, but the cardholder only spends US\$100, the US\$200 goes in field 4 and the US\$100 goes in field 95.

If multicurrency conversion is required, participating issuers also receive this subfield 95.1 value in subfield 61.3 as cardholder billing currency. The subfield 61.3 amount will include the optional issuer fee.

NOTE

Subfield 61.3, which is inserted in a message by V.I.P., is used only when field 95.1 is present in a partial reversal and if currency conversion is necessary.

Multiple Reversals: The field 95 replacement amount must be less than the original amount in field 4; otherwise, the reversal message will be rejected. Because BASE I does not retain data from previous reversals, multiple partial reversals can be processed as long as field 95 is less than field 4.

CPS: Field 95 is required in CPS partial reversal transactions, except those for AFD transactions and 0200s, to partially reverse an authorized 0100 authorization amount. In a partial authorization reversal, this field contains the corrected total amount of the authorization for the transaction. In a partial reversal of a multiple authorization, this field reflects the corrected total amount authorized.

See the CPS POS chapter in *V.I.P. System Services* and the latest edition of the *U.S. Interchange Reimbursement Fee Rate Qualification Guide*.

STIP and Switch Advices: Field 95 is present in an 0420 advice if it was present in the 0400 request.

Authorization Gateway Transactions—MasterCard: This field is supported in partial reversal transactions. See the *Authorization Gateway Service Cross-Reference Guide*.

4.101.4 Field Edits

If field 95 is present, it must be numeric and right-justified in the first 12 positions, with leading zero fill. The remaining 30 positions must be filled with zeros.

Visa will reject an ATM or POS transaction with reject code **0115** (invalid value) if an acquire submits:

- A partial reversal with the amount in field 95 equal to the amount in field 4.
- A partial reversal with an amount of zeros in field 95.

In addition, Visa will reject a POS partial reversal if the amount in field 95 is greater than the amount in field 4.

4.101.5 Reject Codes

0115 = Invalid value, or value is greater than the transaction amount in field 4.

4.102 Field 100—Receiving Institution Identification Code

4.102.1 Attributes

variable length
1 byte, binary +
11 N, 4-bit BCD (unsigned packed); maximum: 7 bytes

4.102.2 Description

Field 100 is a message routing field. It contains a code that identifies the institution which should receive a request or advice. This ID is used when it is not possible to route a message using the account number field in the message. The routing information in this field supersedes routing information in all other account number fields. The field has one subfield following the length subfield and is defined as follows.

Positions: 1–11	
length	institution ID code
Byte 1	Byte 2–7

Length: This subfield specifies the number of digits in the identifier. If the ID is an odd number of digits, a leading zero is required to pad the first unused half-byte of data. Because the zero is a filler, not part of the ID code, it is not counted for the length subfield.

4.102.3 Usage

This field is not used in Visa card transactions including CPS POS or ATM transactions. It is used in 0100 check acceptance requests to identify the vendor. It is also used in non-Visa card transactions such as MasterCard requests being processed within VisaNet. Clients wanting to use this field in non-check acceptance processing must first coordinate field usage with Visa. The routing information in this field supersedes routing information in all other account number fields.

When applicable, field 100 is used in 0100 and 0400 POS or ATM authorization requests but not in responses or advices. It is not used in balance inquiries.

When this field is used to route customer transaction-related messages, it typically contains a **6–11** digit Visa-assigned BIN to identify the issuer responsible for the cardholder account. If this field's value in a request is invalid (not a **6–11** digit Visa BIN eligible for incoming requests), the field 39 response code will be **15** (no such issuer).

Check Acceptance: Field 100 is used to identify the vendor in check acceptance requests. It is not used in 0110 responses. [Table 4-73](#) shows check acceptance vendors.

Table 4-73 Check Acceptance Vendors

Vendor Code	Vendor	Routing ID
1	TeleCredit, LA (Equifax Card Services)	894300
2	TeleCheck	861400
3	JBS/NPC	810000
4	TeleCredit, Tampa (Equifax Card Services)	894400

Table 4-73 Check Acceptance Vendors (continued)

Vendor Code	Vendor	Routing ID
5	State Street Bank	862000
6	ETC/Scan (Delux Data System)	813500

L = Length of value

N = 6-position Visa BIN or ID code for the issuer

4.102.4 Field Edits

Field must be numeric and cannot exceed **11** digits including the length subfield.

Check Acceptance: Field 100 is required in all 0100 requests.

4.102.5 Reject Codes

0082 = Invalid value

0100 = Invalid length

0334 = Field missing

0335 = Field missing

4.103 Field 101—File Name

4.103.1 Attributes

variable length
1 byte, binary +
up to 17 ANS, EBCDIC; maximum: 18 bytes

4.103.2 Description

Field 101 contains a code identifying the VIC-resident cardholder or merchant file to be accessed by a file update or inquiry, and the update/inquiry request format. The length specifies the number of bytes following the length subfield.

Positions: 1–17	
length	file name
Byte 1	Byte 2–18

4.103.3 Usage

Field 101 is used in all 03xx messages. The file name determines the system file affected, the 03xx message content, and the field 127 layout.

File Maintenance Advices: In 0322 file update advices, this field contains the code for the updated file. The field is also sent in 0120 file maintenance advices.

4.103.4 Field Edits

No field edits.

4.103.5 Reject Codes

0060 = Invalid length. Length equals zero (0) or it exceeds 17.

0344 = Field missing.

4.103.6 File Edits

The length subfield must be **2**.

If a file update message is submitted with a **C2** or **E9**, V.I.P. returns the transaction with error code **0530**.

V.I.P. rejects Format 1 inquiry and update messages based on the file name value in field 101 with error code **0682**.

NOTE

When VisaNet processes E2 updates for BASE I, the Exception File is updated for BASE I and V.I.P.; exception records are no longer supported for these systems.

4.103.7 File Maintenance Error Codes

0530 = Invalid file name

0682 = Invalid length

4.103.8 Valid Values

Table 4-74 Field 101 File Names

Name	File
A2	Address Verification File NOTE: <i>A combined entry for address verification data and PIN verification data is no longer supported.</i>
E2	Exception File
L1	This code is used in 0302 messages for ALP updates to the CDB. There is no explicit CDB file name.
L3	This value will identify that the 0302 message is an account linking update. In an 0322 error advice, this value will identify that the error advice is for an account linking update.
M9	Merchant Central File (used by Merchant Central File Service participants only)
PAN	Card Data.
PF ¹	Portfolio File
P2	PIN Verification File
R2	Risk-Level File
TERMS-CONDITIONS	Token Terms and Conditions
TK	Token
TL	Maximum Transaction Amount Limit

1. If the issuer sends an 0302 maintenance transaction with code **PF** in field 101 and code **1** (add), **4** (replace), or **5** (inquiry) in field 91, V.I.P. checks CORE to see if the issuer is a PPCS participant. If not, V.I.P. declines the transaction with code **06** (error) in field 39 and inserts error code **0684** (BIN does not participate in service) in field 48, Usage 1b.

4.104 Field 102—Account Identification 1

4.104.1 Attributes

variable length
1 byte, binary +
5–28 ANS, EBCDIC; maximum: 29 bytes

4.104.2 Description

Field 102 contains a value that identifies an account or customer relationship in cardholder transactions. The length specifies the number of bytes following the length subfield.

Positions: 1–28	
length	account identification 1
Byte 1	Byte 2–29

4.104.3 Usage

Field 102 is used for proprietary or private label cardholder transactions when the account number contains alphabetic characters or is otherwise nonstandard. If the account number includes alphabetic characters, an issuer ID is required in field 121. Use of this field (and field 121) must be prearranged with Visa.

When field 102 is present in a POS or ATM authorization request, it must be returned in the response and must be used in all subsequent messages pertaining to the transaction.

Issuers can optionally place a posting account number in this field in response messages, but only if the posting account differs from that in fields 2 or 103. If this is done, acquirers have the option of returning this field and the account number field in subsequent reversals.

CPS: This field does not apply to CPS POS or ATM requests. Issuers may optionally include it in responses.

Check Acceptance (U.S. Only): Field 102 is required in all check acceptance requests and responses. The customer ID (for example, a driver's license number) must be present even when a card with a standard account number is used for ID.

STIP and Switch Advices: Field 102 is present in 0120 or 0420 advices if it was in the request.

Visa ReadyLink Load Transactions: In U.S.-only electronic fare load transactions, this field must contain the number of the access token chip card to be used for contactless entry to the transit system.

4.104.4 Field Edits

If field 102 is present in the message, the value in the length subfield must not exceed **28**.

If the account number is placed in field 102 in the original request, this field is required and the same account number must be used in all subsequent messages for the cardholder transaction. Special characters are allowed.

NOTE

*The number must be within one of the ranges of card numbers supported by V.I.P.; otherwise, the request is returned with a response code of **15**.*

For messages related to a customer transaction, the account number must be present in field 102 if it is not in fields 2 or 103.

Check Acceptance (U.S. Only): Field 102 is required in all 0100 and 0110 messages.

Preauthorized Payment Cancellation Service (PPCS): Field 102 is supported in 0302 PPCS file updates and inquires. It is optional for 0302 file updates and if present, returned in the 0312 response.

4.104.5 Reject Codes

0103 = Invalid value

0104 = Invalid length

0394 = Field missing

4.104.6 STIP Edits

The following edits apply to STIP transactions:

- At issuer option, the account number must pass a modulus-10 check.
- The length must be one used by the issuer (edit done only at issuer request).

4.104.7 Decline Responses

14 = invalid account number (check digit or length)

4.105 Field 103—Account Identification 2

4.105.1 Attributes

variable length
1 byte, binary +
5–28 ANS, EBCDIC; maximum: 29 bytes

4.105.2 Description

Field 103 contains a number that identifies an account or cardholder relationship. The length specifies the number of bytes following the length subfield.

Positions:

1–28

length	account identification 2
Byte 1	Byte 2–29

4.105.3 Usage

Field 103 is used for proprietary or private label card transactions when the account number contains alphabetic characters or is otherwise nonstandard. If alphabetic characters are used, an issuer ID is required in field 121. Use of this field (and field 121) must be prearranged with Visa.

When field 103 is present in a POS or ATM authorization request, it must be returned in the response and must be used in all subsequent messages for the transaction. It is not used in balance inquiries.

CPS: This field does not apply to CPS POS or ATM transactions.

STIP and Switch Advices: Field 103 is present in 0120 or 0420 advices if it was in the request.

4.105.4 Field Edits

If the account number is placed in this field in the original request, field 103 is required and the same account number must be used in all subsequent messages for the cardholder transaction.

NOTE

The number must be within one of the ranges of card numbers supported by V.I.P.; otherwise, the request will be returned with a response code of 15.

If field 103 is present in the message, the length must be a numeric value between 5 and 28.

For messages related to a customer transaction, the account number must be present in field 103 if it is not in fields 2 or 102.

Check Acceptance: Field 103 is not allowed.

4.105.5 Reject Codes

0111 = Invalid length

0112 = Invalid value

0397 = Field missing

4.105.6 STIP Edits

At issuer option, the account number must pass a modulus-10 check.

The length must be one used by the issuer. This edit is done only at issuer request.

Number must fall within issuer account range.

4.105.7 Decline Responses

14 = invalid account number (check digit or length)

4.106 Field 104—Transaction Description & Transaction-Specific Data

4.106.1 Attributes

variable length

1 byte, binary +

255 bytes (510 hex digits); variable by usage; maximum 256 bytes

4.106.2 Description

This ISO-defined field can contain client-to-client transaction description data, MasterCard client-defined data, or healthcare eligibility inquiry data. The field can be submitted in Fixed format or TLV format.

Each of these formats has its own field description, as follows:

- Usage 1—Transaction Description. This description contains Fixed format information.
- Usage 2—Transaction-Specific Data. This description contains TLV format information.

4.106.3 Usage

The Fixed format or TLV format can be employed to support most of the usages detailed in the field 104 descriptions that follow. However, acquirers wishing to submit healthcare eligibility inquiries should use the TLV format ("Usage 2").

Once an acquirer or issuer supports the TLV format for this field, the client must use this format for all uses of field 104.

4.106.4 Field Edits

Vary by usage.

4.106.5 Reject Codes

Vary by usage.

4.106.6 Valid Values

Vary by usage.

4.107 Field 104, Usage 1—Transaction Description

4.107.1 Attributes

variable length
1 byte, binary +
255 bytes; maximum 256 bytes

4.107.2 Description

Depending on usage, this ISO-defined field may contain:

- A 1-character billing descriptor for various types of phone service.
- Client-to-client transaction description data, to support a specific industry or program.

This field has two subfields, one for billing descriptors and one for transaction description data.

Positions:		
	1	2–100
length	billing descriptor	transaction description data
Byte 1	Byte 2	Byte 3–101

Length Subfield: This value is the number of bytes in the field after the length subfield.

Position 1, Billing Descriptor: This position may contain additional billing or reporting information about transaction or message processing. For phone Billing IDs, see “Field 104, Position 1, Phone Service Codes” under “Usage.” This position contains a **space** if positions 2–100 are used.

Positions 2–100, Transaction Description Data: These positions can be used by clients to send free-form (unformatted) text or character data to another client in a request or response. The acquirer and issuer involved in the data exchange may agree to a proprietary format for the free-form description data.

4.107.3 Usage

The following subsections describe the usages for this field.

Dial Terminal Authorization Requests: Position 1 of this field is used in 0100 and 0400 dial terminal authorization requests generated by the VAS processor at the VIC for the BASE I component of V.I.P. The use of this position must be coordinated with client services. For values, see “Field 104, Position 1, Phone Service Code.”

Client-to-Client Data: For acquirers that do not support Billing ID but send free-form data in positions 2–100, position 1 must be set to a **space** in requests and responses. Visa issuers must be prepared to receive values in position 1.

Clients can receive additional information in positions 2–100, provided the option has been turned on for this field in the Processing Center Record (PCR).

This field contains free-form description data in the following messages:

- 0100/0110 card authorization requests and responses
- 0400/0410 authorization reversal requests and responses

Check Acceptance (U.S. Only): A Billing ID in position 1 is the same as for card transactions. Positions 2–100 are not applicable.

STIP and Switch Advices: This field may be present in requests that STIP has processed on behalf of the issuer.

4.107.4 Field Edits

V.I.P. will drop this field when the acquirer or issuer does not support field 104. In addition, V.I.P. rejects the transaction with reject code **0518** if an invalid value is received in position 1.

4.107.5 Reject Codes

0518 = Incorrect usage of position 1. Field 104 was sent in an unsupported message type, or position 1 was set incorrectly.

4.107.6 Valid Values

Table 4-75 Field 104, Position 1, Phone Service Codes

Code	Definition
A	Leased-Line Service
B	WATS
C	Local Service
E	Digital Radio Network (DRN/LATA)

4.108 Field 104, Usage 2—Transaction-Specific Data

4.108.1 Attributes

variable length
1 byte, binary +
255 bytes (510 hex digits); variable by usage; maximum 256 bytes

4.108.2 Description

This field description contains datasets presented in hex number order. The dataset IDs listed for position 1 can be used as a guide to the Usage section, which specifies the content for each dataset.

The datasets, which are in TLV format, can have multiple sub-elements. The TLV format is shown below.

Positions:			
	1	2–3	4–255
Subfield 1:	Subfield 2:	Subfield 3:	Subfield 4:
length	dataset ID	dataset length	TLV sub-elements
			<div><div><div>Tag</div><div>Length</div><div>Value</div></div><div>TLV₁</div><div><div><div>Tag</div><div>Length</div><div>Value</div></div><div>TLV_N</div></div></div>
Byte 1	Byte 2	Byte 3–4	Byte 5–256

Length Subfield: One-byte binary subfield that contains the number of bytes following the length subfield. The maximum is **255**.

Position 1, Dataset ID: This one-byte binary subfield contains a hexadecimal value that identifies the TLV data that follows. Following are the values:

- [Dataset Value Hex 02, Purchase Line-Item Data](#)
- [Dataset Value Hex 56, Dial Terminal Data](#)
- [Dataset Value Hex 57, Business Application Identifier](#)
- [Dataset Value Hex 58, Healthcare Eligibility Inquiry](#)
- [Dataset Value Hex 59, Promotion Data](#)
- [Dataset Value Hex 5B, Visa Risk Assessment Data](#)
- [Dataset Value Hex 5C, Commercial Card Data \(Fuel Transactions\)](#)
- [Dataset Value Hex 5D, Installment Payment Data](#)
- [Dataset Value Hex 5F, Sender Data](#)
- [Dataset Value Hex 60, Airline Industry-Specific Data](#)
- [Dataset Value Hex 61, Car Rental Industry-Specific Data](#)
- [Dataset Value Hex 62, Lodging Industry-Specific Data](#)
- [Dataset Value Hex 63, Non-Industry-Specific Data](#)
- [Dataset Value Hex 65, MasterCard Client-Defined Data](#)
- [Dataset Value Hex 66, American Express Data](#)
- [Dataset Value Hex 69, Multiple Payment Forms](#)
- [Dataset Value Hex 6C, Travel Tag Data](#)

- Dataset Value Hex 6D, Issuer-Supplied Data
- Dataset Value Hex 6E, Loan Details
- Dataset Value Hex 71, Free-Form Description Data (Client-to-Client Data)
- Dataset Value Hex 71, Additional Sender Data
- Dataset Value Hex 71, Free Form Text (Original Credit Transactions)

Positions 2–3, Dataset Length: This 2-byte binary subfield specifies the total length of the TLV fields present in the dataset. The length is variable, depending on the data that follows.

Positions 4–255, TLV Data: Each subfield of a data set has a defined tag, length, and value. The tag is used in conjunction with the dataset ID value. The dataset subfields can be present with other TLV subfields.

4.108.3 Usage

The following subsections (in hex number order) describe the usages for this field.

IMPORTANT

Endpoints that support this field must be able to receive dataset IDs and tags defined for this field, including those that they do not recognize or expect. Endpoints can receive multiple datasets in this field. Endpoints must ignore dataset IDs or tags they do not recognize and continue to process the field.

Dataset ID 02, Purchase Line-Item Data: This dataset is used to send purchase line-item data in 0100 requests. This dataset relates to the Visa Integrated Redemption Platform (VIRP), and applies only to U.S. domestic purchase transactions.

V.I.P. uses the information in this dataset to apply promotion discounts to the pre-tax amount. This dataset can be included three times in a purchase transaction to allow for different discounts and tax rates for three tax groups.

V.I.P. does not send this dataset to issuers.

The following table describes the tags in this dataset.

Table 4-76 Dataset Value Hex 02, Purchase Line-Item Data

Tag	Length	Value	Format	Content of Sub-Elements
05	6	Pre-Tax Amount	N, 4-bit BCD	Contains the pre-tax amount (the purchase amount without the tax applied) of all items in a tax group. The currency for this tag is the currency identified in Field 49—Currency Code, Transaction. Merchants include this tag in authorization requests. V.I.P. returns this tag in responses.
07	3	Tax Rate	N, 4-bit BCD	Contains the tax rate (%) of all items in a tax group. Three decimal places are implied. Merchants include this tag in authorization requests. V.I.P. returns this tag in responses.

Table 4-76 Dataset Value Hex 02, Purchase Line-Item Data (continued)

Tag	Length	Value	Format	Content of Sub-Elements
08	6	Discount Amount	N, 4-bit BCD	<p>Contains the discount amount in a tax group. The currency for this tag is the currency identified in field 49.</p> <p>When there are multiple tax groups in a transaction, this tag contains the proportion of the total promotion discount that is the same as the proportion of the group's post-tax amount in the transaction.</p> <p>V.I.P. includes this tag in 0110 responses.</p>
09	1	Prohibited Item Indicator	UN	<p>Contains the prohibited item indicator.</p> <p>When this tag is present, the pre-tax amount in Tag 05 of this dataset group does not qualify for the promotion discount. V.I.P. applies the pre-tax amount to the final purchase amount and applies no discount.</p> <p>Value is: P = Prohibited item</p> <p>When this tag is not present, the pre-tax amount is subject to the promotion discount.</p> <p>Merchants include this tag in authorization requests . V.I.P. returns this tag in responses.</p>

Dataset ID 56, Dial Terminal Authorization Requests: This field is used in 0100 and 0400 dial terminal authorization requests generated by the VAS processor at the VIC for the BASE I component of V.I.P. The use of this position must be coordinated with client services.

Table 4-77 shows the field 104 TLV contents for the dial terminal dataset.

Table 4-77 Dataset Value Hex 56, Dial Terminal Data

Tag	Length	Value	Content of Sub-Elements
01	1	Phone Service Codes	<p>A = Leased-line service B = WATS C = Local service D = Digital Radio Network (DRN/LATA)</p>

Dataset ID 57, Business Application Identifier: Dataset hex 57, Tag 01 is required in enhanced OCTs. However, it is optional in other OCTs.

The tags for this dataset are listed in the following table.

Table 4-78 Dataset Value Hex 57, Business Application Identifier

Tag	Length	Value	Content of Sub-Element
01	2	Business Application Identifier	AA = Account to account ¹ BB = Business to business BI = Money transfer—bank-initiated BP = Non-card bill payment CC = Cash claim ² CI = Cash in ⁴ CO = Cash out ⁴ CP = Card bill payment FD = Funds disbursement (general) GD = Government disbursement GP = Gambling payout (other than online gambling) LO = Loyalty and offers ³ MA = Mobile air time payment ⁴ MD = Merchant disbursement MI = Money transfer—merchant-initiated MP = Face-to-face merchant payment ⁴ OG = Online gambling payout PD = Payroll/pension disbursement PG = Payment to government PP = Person to person ⁵ PS = Payment for goods and services (general) TU = Top-up for enhanced prepaid loads WT = Wallet transfer ⁶

1. **AA** applies to transactions where the sender and recipient are the same person.
2. **CC** applies to mVisa cash-out-at-agent manual cash disbursement transactions only, not to original credit transactions.
3. **LO** applies to original credit transactions only.
4. **CI**, **CO**, **MA**, and **MP** apply to mVISA transactions only.
5. **PP** applies to transactions where the sender and recipient are not the same person.
6. **WT** applies to all U.S. domestic staged wallet transactions, including account funding transactions.

V.I.P. supports Dataset hex 57, Tag 01 in authorizations, reversals, and advices.

AA or PP—Requirements and Restrictions: For enhanced money transfer original credit transactions with business application identifier **AA** or **PP** in Dataset ID 57, acquirers and originators must include anti-money-laundering (AML) compliance data in Dataset ID 5F and Dataset ID 71, which are described later in this field description. In addition, if the recipient's issuer does not support field 104 in TLV format, V.I.P. declines the transaction with response code **57** (transaction not permitted to cardholder).

CP—Requirements and Restrictions: V.I.P. declines full financial requests for OCTs with business application identifier **CP** (card bill payment) with response code **93** (transaction could not be completed—violation of law) if the acquirer or originator and the recipient's issuer are in different countries.

V.I.P. declines an 0100 authorization request for an account funding transfer with response code **57** (transaction not permitted to cardholder) if:

- Acquirer and issuer are in different countries.
- Business application identifier is **AA** (account to account) or **PP** (person to person).

NOTE

U.S. acquirers must include the business application identifier in account-funding transactions.

Account Funding Transactions: U.S. acquirers and originators must submit transactions with business application identifier **AA, BI, PP, TU** or **WT**; otherwise, V.I.P. declines the transaction with Response Code **57**—Transaction Not Permitted to Cardholder.

U.S. acquirers and originators that submit a financial institution initiated person-to-person money transfer must submit business application identifier **BI** (bank-initiated) with merchant category code **6012** in field 18 or V.I.P. rejects the transaction with Reject Code **0635**—Invalid Merchant Category Code.

NOTE
This applies to financial institution-initiated person-to-person money transfer U.S. domestic AFTs only. There are no impacts to other AFTs.

Staged Digital Wallet Transactions: U.S. acquirers and originators that submit a domestic staged digital wallet transaction, including account funding transaction, must also submit a business application identifier of **WT** (Wallet Transfer).

Dataset ID 57, Payment Transactions (U.S. Only): In Dataset hex 57, Tag 02 carries the Source of Funds field, which can be cash, check, or card, as shown in the following table.

Table 4-79 Dataset ID Hex 57, Related Transaction Data (Payment Transactions)

Tag	Value	Length	Format	Content of Sub-Elements
02	Source of Funds	1	AN	1 = Cash 2 = Check 3 = Card

The source of funds can be included in authorizations and reversals where the field 3 transaction type is **53**.

If the issuer has not successfully tested to receive TLV data in this field or the length of Tag 02 is greater than 1 byte, V.I.P. drops the source of funds from the message.

Additional requirements and related information can be found in the descriptions for fields 3, 54, and 62.1.

Dataset ID 58, Healthcare Eligibility Inquiry (U.S. Only): This field should be used in non-financial 0100 eligibility inquiry transactions and their responses. Table 4-80 shows the field 104 TLV contents for a healthcare dataset. Tags 01 and 02 are included in eligibility inquiry requests. Response messages may include all defined tags for dataset 58.

Table 4-80 Dataset Value Hex 58, Healthcare Eligibility Inquiry

Tag	Length	Value	Content of Sub-Elements
01	09	Healthcare Provider ID	This sub-element is 9 numeric positions containing the medical license number of the provider.
02	02	Service Type Code	This sub-element is 2 character positions containing the defined standard code for healthcare treatment.
03	06	Payer ID/ Carrier ID	This sub-element is 6 numeric positions containing the identification of the health insurance carrier/provider.
04	02	Approval or Reject Reason Code	This sub-element is 2 alphanumeric positions containing the defined codes for approval and declines of eligibility inquiries.

These messages also use a field 3 processing code of **39** and a field 4 amount of zero. Responses contain field 54 values, including an amount type of **35** (amount co-payment) and an account type of **00**. Issuers should use a field 39 response code of **00** in approvals and **05** in declines.

NOTE

*STIP does not approve healthcare eligibility inquiries. If the issuer is unavailable, STIP responds with response code **91**.*

Acquirers and issuers that choose to support healthcare eligibility verification requests for merchants must successfully complete testing to support the eligibility inquiry message, including use of the field 104 TLV format and the required values for field 3 and field 54. Clients that support the field 104 TLV format must use this format for all uses of field 104. If an issuer has not successfully completed testing to receive field 104 in an eligibility request, V.I.P. drops it from the 0100 request.

Dataset ID 59, Promotion Data: To support the data needs of acquirers, issuers, and merchants, clients can use this field to exchange promotional program information. [Table 4-81](#) shows the sub-element contents for promotion data. This field may contain one or more of the tags listed.

Table 4-81 Dataset Value Hex 59, Promotion Data

Tag	Length	Contents	Data Type	Contents of Sub-Elements
01	2	Promotion Type	AN	This fixed-length field contains a code that defines the type of promotion or offer associated with the transaction. Reserved for Visa use only: First position: V–Z Second position: 1–9 and A–Z
02	25	Promotion Code	AN	This variable-length field allows 25 bytes of data referring to a promotional or loyalty program, or offer.
03	25	Promotion Description	AN	This variable-length field allows 25 bytes of free-form text that can be used to provide additional information.
04	100	Receipt Data	ANS	This variable-length field contains 100 bytes of receipt details for the applied offer. It is used only in U.S. domestic Visa POS Offers Redemption Platform (VPORP) transactions.
05	1	Merchant Indicator	AN	This fixed-length tag indicates whether or not the fuel merchant applied the discount at the pump. Values are: Y = Discount was applied at the pump N = Discount was not applied at the pump This tag is used in 0120 confirmation messages for AFD transactions, where the MCC value is 5542 .

Table 4-81 Dataset Value Hex 59, Promotion Data (continued)

Tag	Length	Contents	Data Type	Contents of Sub-Elements
06	1	Discount Indicator	AN	This fixed-length tag contains the value X (Discount applied to the post-tax amount) to identify that the discount has been applied to the post-tax total purchase amount in Field 4—Amount, Transaction. V.I.P. returns this value in 0110 responses to the acquirer.
07	12, minimum of 1 byte	Unit Discount	N	This variable-length tag contains the unit discount or the cents-off-per-gallon amount. The minimum length of this field is three. Two decimal places are implied. V.I.P. sends this tag to the merchant in AFD status check responses.
08	6, minimum of 1 byte	Unit Quantity	N	This variable-length tag contains the threshold quantity of fuel that must be pumped for the unit discount to apply. Every iteration of this quantity qualifies for the unit discount. The minimum length of this field is three. Three decimal places are implied. V.I.P. sends this tag to the merchant in AFD preauthorization or status check responses.

Promotion data can be submitted in the following messages:

- 0100/0110/0120 authorization requests and responses.
- 0400/0410/0420/0430 authorization reversals, reversal responses, reversal advices, and advice responses.

When the issuer has not successfully completed testing to receive this field in TLV format, V.I.P. drops the promotion data before sending the message to the issuer

Clients and their processors that choose to send and receive promotion data must successfully complete testing to send and receive this field in TLV format.

Dataset ID 5B, Visa Risk Assessment Data: This dataset is present in approved 0110 authorization responses and 0210 full financial response messages. It is only sent to an acquirer BIN whose PCR and MVV value are set up to participate in the Visa Transaction Advisor E-Commerce Scoring Service.

The following table describes the tags in this dataset.

Table 4-82 Dataset Value Hex 5B, Visa Risk Assessment Data

Tag	Length	Value	Content of Sub-Elements
01	02	Risk Score	Contains the risk score for the Visa Transaction Advisor E-Commerce Scoring Service. It indicates the degree of risk associated with a transaction. Values are 00–99 .

Table 4-82 Dataset Value Hex 5B, Visa Risk Assessment Data (continued)

Tag	Length	Value	Content of Sub-Elements
02	02	Risk Condition Code	Contains the risk potential for fraud to occur on the card account over the next 30 days. Values are 00–10 .

NOTE

Tag 01—Risk Score is present in Field 104, Usage 2, Dataset ID 5B. However, Tag 02—Risk Condition Code may not be present in all transactions.

All Visa-branded cards, except non-reloadable prepaid and healthcare cards, are subject to scoring by the Visa Transaction Advisor E-Commerce Scoring Service.

Original credit transactions (OCTs) are not eligible for scoring by the Visa Transaction Advisor E-Commerce Scoring Service.

Dataset ID 5C, Commercial Card Data: Dataset 5C, which supports the transmission of commercial card data, is used in 0100 authorizations, reversals, and related advices. The tags for this dataset are listed in the following table.

Table 4-83 Dataset Value Hex 5C, Commercial Card Data (Fuel Transactions)

Tag	Value	Maximum Length	Format	Content
01	Type of Purchase	1	AN	1 = Fuel purchase 2 = Non-fuel purchase 3 = Fuel and non-fuel purchase
02	Service Type	1	AN	F = Full service S = Self service
03	Fuel Type	2	AN	NOTE: <i>Fuel type codes are listed in BASE II Clearing Data Codes.</i>
04	Unit of Measure	1	AN	L = Liter G = U.S. gallon I = Imperial gallon K = Kilo P = Pound
05	Quantity	12	UN	NOTE: <i>Four decimal places are implied.</i>
06	Unit Cost	12	UN	NOTE: <i>Four decimal places are implied.</i>
07	Gross Fuel Price	12	UN	NOTE: <i>Four decimal places are implied.</i>
08	Net Fuel Price	12	UN	NOTE: <i>Four decimal places are implied.</i>

Table 4-83 Dataset Value Hex 5C, Commercial Card Data (Fuel Transactions) (continued)

Tag	Value	Maximum Length	Format	Content
09	Gross Non-Fuel Price	12	UN	NOTE: <i>Two decimal places are implied.</i>
0A	Net Non-Fuel Price	12	UN	NOTE: <i>Two decimal places are implied.</i>
0B	Odometer Reading	7	AN	
0E	VAT/Tax Rate	4	UN	NOTE: <i>Two decimal places are implied.</i>
0F	Miscellaneous Fuel Tax Exemption Status	1	AN	0 = Non-exempt 1 = Exempt
10	Miscellaneous Fuel Tax	12	UN	NOTE: <i>Two decimal places are implied.</i>
11	Miscellaneous Non-Fuel Tax Exemption Status	1	AN	0 = Non-exempt 1 = Exempt
12	Miscellaneous Non-Fuel Tax	12	UN	NOTE: <i>Two decimal places are implied.</i>
13	Local Tax Included	1	AN	0 = Tax not included 1 = State or provincial tax included 2 = Transaction is not subject to tax
14	Local Tax	12	UN	NOTE: <i>Two decimal places are implied.</i>
15	National Tax Included	1	AN	0 = Not subject to tax 1 = Subject to tax
16	National Tax	12	UN	NOTE: <i>Two decimal places are implied.</i>
17	Other Tax	12	UN	NOTE: <i>Two decimal places are implied.</i>
18	Merchant VAT Registration/Single Business Reference Number	20	AN	
19	Customer VAT Registration Number	13	AN	

Table 4-83 Dataset Value Hex 5C, Commercial Card Data (Fuel Transactions) (continued)

Tag	Value	Maximum Length	Format	Content
1A	Customer Reference Number	17	AN	<p>The value may be a reference number, code, or generic number.</p> <p>NOTE: <i>Fuel transactions are identified by an MCC value of 5541 or 5542. In online transactions destined to an issuer, V.I.P. inserts Tag 1A and populates it with the customer code or reference identifier supplied by the acquirer in field 48, usage 36. Hence, fields 104 and 48 are present.</i></p>
1B	Message Identifier	15	AN	<p>When the acquirer populates Tag 1C, Additional Data Indicator, with a value of Y, Visa populates Tag 1B.</p> <p>Contains the message identifier that is used to link the line item detail messages.</p>
1C	Additional Data Indicator	1	AN	<p>Y = Additional data is provided in Draft Data TC 50 N = Additional data is not provided</p> <p>NOTE: <i>If no additional data is present, the tag, including the value of N, is optional and need not be sent.</i></p> <p>When acquirers populate this tag with a value of Y, V.I.P. populates Tag 1B.</p> <p>For issuers, Tag 1C should contain a value of Y when a value for Tag 1B is present.</p>
1E	Summary Commodity Code	4	UN	
1F01	Non-Fuel Product Code 1	2	AN	<p>NOTE: <i>Non-fuel product codes are listed in BASE II Clearing Data Codes.</i></p>
1F02	Non-Fuel Product Code 2	2	AN	
1F03	Non-Fuel Product Code 3	2	AN	
1F04	Non-Fuel Product Code 4	2	AN	
1F05	Non-Fuel Product Code 5	2	AN	
1F06	Non-Fuel Product Code 6	2	AN	
1F07	Non-Fuel Product Code 7	2	AN	
1F08	Non-Fuel Product Code 8	2	AN	
1F09	Fuel Brand	4	AN	CEMEA region only.

Table 4-83 Dataset Value Hex 5C, Commercial Card Data (Fuel Transactions) (continued)

Tag	Value	Maximum Length	Format	Content
1F0A	Fuel Transaction Validation Results	5	AN	CEMEA region only.
1F0B	Fuel Acceptance Mode	1	AN	CEMEA region only.
1F0C	Driver Identification	20	AN	CEMEA region only.
1F0D	Job Number	10	AN	CEMEA region only.
1F0E	Fleet Number	8	AN	CEMEA region only.
1F0F	Vehicle Registration Number	14	AN	CEMEA region only.
1F10	Product Qualifier	6	AN	CEMEA region only.
1F11	Expanded Fuel Type	4	AN	CEMEA region only.

Dataset ID 5D, Installment Payment: Dataset 5D, which supports the transmission of installment payment data, is used in the following messages:

- 0100/0120 authorization and STIP advice
- 0400/0420 POS reversal, partial reversal, and reversal advice

Acquirers that submit this field in the request message receive it in the response. V.I.P. includes the field in the response if the issuer does not provide it. If field 104 is present in a non-U.S. acquired transaction, an installment payment indicator must be present in field 126.13. U.S.-acquired authorizations, on the other hand, require a value of **03** in field 60.8.

The tags for this dataset are listed in the following table.

Table 4-84 Dataset Value Hex 5D, Installment Payment Data

Tag	Length	Format	Value	Content
01	12	N, 4-bit BCD	Total Installment Amount	The total amount cannot exceed USD\$500,000. Zero-filled, right-justified.
02	3	N, 4-bit BCD	Installment Payment Currency	Installment Payment Currency
03	2	N, 4-bit BCD	Number of Installments	Zero-filled, right-justified.
04	12	N, 4-bit BCD	Amount of Each Installment	Zero-filled, right-justified.
05	2	N, 4-bit BCD	Installment Payment Number	Zero-filled, right-justified.

Table 4-84 Dataset Value Hex 5D, Installment Payment Data (continued)

Tag	Length	Format	Value	Content
06	1	AN	Frequency of Installments	B = Bi-weekly M = Monthly W = Weekly Space = Not applicable NOTE: <i>For Credíario installment payments, this tag contains M.</i>
07	6	N, 4-bit BCD	Date of First Installment	<i>yyymmdd</i> (year, month, day). Zero-filled, right-justified.
08	12	N, 4-bit BCD	Total Amount Funded	Zero-filled, right-justified.
09	4	N, 4-bit BCD	Percent of Amount Requested	Contains the percent of the total amount requested divided by the total amount funded. Zero-filled, right-justified.
0A	12	N, 4-bit BCD	Total Expenses	Contains the total expenses charged by the institution to fund the total amount requested. Zero-filled, right-justified.
0B	4	N, 4-bit BCD	Percent of Total Expenses	Contains the percent of total expenses divided by the total amount funded. Zero-filled, right-justified.
0C	12	N, 4-bit BCD	Total Fees	Contains the total fees charged by the institution to fund the total amount requested. Zero-filled, right-justified.
0D	4	N, 4-bit BCD	Percent of Total Fees	Contains the percent of total fees divided by the total amount funded. Zero-filled, right-justified.
0E	12	N, 4-bit BCD	Total Taxes	Contains the total taxes charged by the institution to fund the total amount requested. Zero-filled, right-justified.
0F	4	N, 4-bit BCD	Percent of Total taxes	Contains the percent of total taxes divided by the total amount funded. Zero-filled, right-justified.
10	12	N, 4-bit BCD	Total Insurance	Contains the total of the insurance charged by the institution to fund the total amount requested. Zero-filled, right-justified.

Table 4-84 Dataset Value Hex 5D, Installment Payment Data (continued)

Tag	Length	Format	Value	Content
11	4	N, 4-bit BCD	Percent of Total Insurance	Contains the percent of the total insurance divided by the total amount funded. Zero-filled, right-justified.
12	12	N, 4-bit BCD	Total Other Costs	Contains the total other costs charged by the institution to fund the total amount requested. Zero-filled, right-justified.
13	4	N, 4-bit BCD	Percent of Total Other Costs	Contains the percent of the total other costs divided by the total amount funded. Zero-filled, right-justified.
14	7	N, 4-bit BCD	Monthly Interest Rates	Zero-filled, right-justified.
15	7	N, 4-bit BCD	Annual Interest Rate	Zero-filled, right-justified.
16	7	N, 4-bit BCD	Annual Total Cost of Financing	Zero-filled, right-justified.
17	2	N, 4-bit BCD	Installment Payment Type	Installment Payment Type

Acquirers can optionally submit installment payment data in this field, and issuers can optionally receive it.

If an acquirer submits an installment payment authorization and the issuer processor has not successfully completed testing to receive this field, V.I.P. drops the field before sending the message to the issuer. Issuers that currently receive other TLV data in this field also receive dataset 5D if an acquirer sends it.

Dataset ID 5F, Sender Data: This dataset contains sender data required in 0100 (initiated as 0200) enhanced original credit transactions. The dataset is also included in related issuer advices.

The tags for this dataset are listed in the following table.

NOTE

*When a tag is not applicable to the message, it should not be present and must not be filled with all **spaces** or all **zeros**.*

Table 4-85 Dataset Value Hex 5F, Sender Data

Tag	Length	Format	Value	Contents
01	16	AN	Sender Reference Number	Contains a transaction reference number that is provided by the originator or acquirer and can be used to uniquely identify the entity funding the transaction.

Table 4-85 Dataset Value Hex 5F, Sender Data (continued)

Tag	Length	Format	Value	Contents
02	34	AN	Sender Account Number	Contains the account number of the entity funding the transaction.
03	30	AN	Sender Name	Contains the name of the entity funding the transaction.
04	35	AN	Sender Address	Contains the address of the entity funding the transaction.
05	25	AN	Sender City	Contains the city of the entity funding the transaction.
06	2	AN	Sender State	Contains the geographical state or province of the entity funding the transaction.
07	3	AN	Sender Country	Contains the country of the entity funding the transaction. Format: 3-digit ISO country code.
08	2	AN	Source of Funds	Indicates the method used by the sender to fund an enhanced OCT. The tag is required in all domestic and cross-border enhanced money transfer OCTs destined to U.S. recipient issuers. Values are: 01 = Visa credit 02 = Visa debit 03 = Visa prepaid 04 = Cash 05 = Debit/deposit access accounts other than those linked to a Visa card (includes checking/savings accounts and proprietary debit/ATM cards) 06 = Credit accounts other than those linked to a Visa card (includes credit cards and proprietary credit lines)
0A	30	AN	Recipient Name	Contains the name of the entity receiving the funds.

In Dataset ID 5F, the recipient name in Tag 0A is required for cross-border money transfers. If the recipient name is missing or contains all **spaces** or all **zeros**, V.I.P. declines the transaction with response code **64**.

In Dataset ID 5F, the sender country in Tag 07 cannot be on the list of U.S. Office of Foreign Assets Control (OFAC) comprehensively sanctioned countries. If the sender country in Tag 07 is on the OFAC list, V.I.P. declines the transaction with response code **93** (transaction cannot be completed—violation of law).

V.I.P. rejects mVisa requests with Reject Code **0494**—Field or Data Missing or Invalid if:

- Sender Account Number in Dataset ID 5F, Tag 02 fails mod-10 check.
- Invalid account length.
- Invalid cardholder PAN.

Dataset ID 60, Airline Industry-Specific Data: This dataset is optional for acquirers. Issuers that send and receive field 104 in TLV format must support the use of this dataset in 0100 authorizations, reversals, and related advices.

Table 4-86 Dataset Value Hex 60, Airline Industry-Specific Data

Tag	Name	Length	Format	Description
01	Fare Basis Code—Leg 1	6	AN	Contains a code that indicates the fare basis for the first leg of the trip.
02	Fare Basis Code—Leg 2	6	AN	Contains a code that indicates the fare basis for the second leg of the trip.
03	Fare Basis Code—Leg 3	6	AN	Contains a code that indicates the fare basis for the third leg of the trip.
04	Fare Basis Code—Leg 4	6	AN	Contains a code that indicates the fare basis for the fourth leg of the trip.
05	Computerized Res System	4	AN	<p>Contains a code that indicates the computerized reservation system used to make the reservation and purchase the ticket.</p> <p>For tickets purchased in Germany, this tag should contain one of the following codes:</p> <p>BLAN = Dr. Blank DALA = Covia-Apollo DATS = Delta DERD = DER PARS = TWA SABR = Sabre STRT = Start TUID = TUI</p>
06	Flight Number—Leg 1	5	AN	Contains the number of the airline flight to be taken on the first leg of the trip.
07	Flight Number—Leg 2	5	AN	Contains the number of the airline flight to be taken on the second leg of the trip.
08	Flight Number—Leg 3	5	AN	Contains the number of the airline flight to be taken on the third leg of the trip.
09	Flight Number—Leg 4	5	AN	Contains the number of the airline flight to be taken on the fourth leg of the trip.

Table 4-86 Dataset Value Hex 60, Airline Industry-Specific Data (continued)

Tag	Name	Length	Format	Description
0A	Credit Reason Indicator	1	AN	<p>Contains a code that indicates the reason for a credit to the cardholder. Values are:</p> <p>A = Passenger transport ancillary purchase cancellation B = Airline ticket and passenger transport ancillary purchase cancellation C = Airline ticket cancellation O = Other P = Partial refund of airline ticket</p> <p>This tag is used in authorization requests, STIP advices, reversals, partial reversals, and reversal advices.</p>
0B	Ticket Change Indicator	1	AN	<p>Contains a code that indicates why a ticket was changed. Values are:</p> <p>C = Change to existing ticket N = New ticket</p> <p>This tag is used in authorization requests, STIP advices, reversals, partial reversals, and reversal advices.</p>

IMPORTANT

V.I.P. removes tags that are incorrectly formatted or contain invalid values.

Dataset ID 61, Car Rental Industry-Specific Data: This dataset is optional for acquirers. Issuers that send and receive field 104 in TLV format must support the use of this dataset in 0100 authorizations, reversals, and related advices.

Table 4-87 Dataset Value Hex 61, Car Rental Industry-Specific Data

Tag	Name	Length	Format	Description
01	Days Rented	2	UN	Contains the total number of days that the vehicle was rented.
02	Daily Rental Rate	12	UN	<p>Contains the daily rate being charged for the vehicle.</p> <p>No decimal points should be used. Two decimal places are implied.</p>
03	Weekly Rental Rate	12	UN	<p>Contains the weekly rate being charged for the vehicle.</p> <p>No decimal points should be used. Two decimal places are implied.</p>

Table 4-87 Dataset Value Hex 61, Car Rental Industry-Specific Data (continued)

Tag	Name	Length	Format	Description
04	Insurance Charges	12	UN	Contains insurance being charged for the vehicle. No decimal points should be used. Two decimal places are implied.
05	Fuel Charges	12	UN	Contains fuel being charged for the vehicle. No decimal points should be used. Two decimal places are implied.
06	Car Class Code	2	AN	Contains a code indicating the type of vehicle.
07	One-Way Drop-Off Charges	12	UN	Contains charges for one-way drop-off of the vehicle. No decimal points should be used. Two decimal places are implied.
08	Renter Name	40	AN	Contains the name of renter.

Dataset ID 62, Lodging Industry-Specific Data: This dataset is optional for acquirers. Issuers that send and receive field 104 in TLV format must support the use of this dataset in 0100 authorizations, reversals, and related advices.

Table 4-88 Dataset Value Hex 62, Lodging Industry-Specific Data

Tag	Name	Length	Format	Description
01	Daily Room Rate	12	UN	Contains the daily rate being charged for the room. No decimal points should be used. Two decimal places are implied.
02	Total Tax	12	UN	Contains the tax portion of the amount that is being billed for the room. No decimal points should be used. Two decimal places are implied.
03	Prepaid Expenses	12	UN	Contains prepaid expenses being billed. No decimal points should be used. Two decimal places are implied.
04	Food/Bev Charges	12	UN	Contains food or beverage charges being billed. No decimal points should be used. Two decimal places are implied.

Table 4-88 Dataset Value Hex 62, Lodging Industry-Specific Data (continued)

Tag	Name	Length	Format	Description
05	Folio Cash Advances	12	AN	Contains folio cash advances being billed. No decimal points should be used. Two decimal places are implied.
06	Room Nights	2	UN	Contains the total number of nights being billed.
07	Total Room Tax	12	UN	Contains the room tax that is being billed. No decimal points should be used. Two decimal places are implied.

Dataset ID 63, Non-Industry-Specific Data: This dataset is optional for acquirers. Issuers that send and receive field 104 in TLV format must support the use of this dataset in 0100 authorizations, reversals, and related advices.

Table 4-89 Dataset Value Hex 63, Non-Industry-Specific Data

Tag	Name	Length	Format	Description
01	Local Tax Indicator	1	AN	This tag indicates whether local tax is included. Values are: 0 = Tax not included 1 = State or provincial tax included 2 = Transaction is not subject to tax This tag should contain a value of 1 if a value for Tag 02, Local Tax, is present.
02	Local Tax	12	UN	This tag indicates the amount of state or provincial tax included in the transaction amount. This amount must be expressed in the same currency as the source amount. This tag must be numeric and can contain all zeros . No decimal points should be used. Two decimal places are implied. For transactions in the U.S. region, when submitted on taxable non-fuel commercial card transactions, the local tax amount value should be between 0.1% and 22% of the source amount.

Table 4-89 Dataset Value Hex 63, Non-Industry-Specific Data (continued)

Tag	Name	Length	Format	Description
03	National Tax Indicator	1	AN	<p>This tag indicates whether national tax is included.</p> <p>Values are:</p> <p>0 = Not subject to tax</p> <p>1 = Subject to tax</p> <p>This tag should contain a value of 1 if a value for Tag 03, National Tax, is present.</p>
04	National Tax	12	UN	<p>This tag indicates the amount of national tax included in the transaction amount. This amount must be expressed in the same currency as the source amount.</p> <p>If present, this tag should be all numeric.</p> <p>No decimal points should be used. Two decimal places are implied.</p>
05	Merchant VAT Registration/Single Business Reference Number	20	AN	Contains the merchant's value-added tax (VAT) registration number or single business reference number (SBRN).
06	Customer VAT Registration Number	13	AN	<p>Contains the customer's VAT registration number.</p> <p>This tag may contain 13 bytes.</p>
07	Summary Commodity Code	4	AN	Contains the national standard code for the description of goods.
08	Other Tax	12	UN	<p>Contains other taxes.</p> <p>If present, this tag should be all numeric.</p> <p>No decimal points should be used. Two decimal places are implied.</p>
09	Message Identifier	15	AN	<p>When the acquirer populates Tag 15, Additional Data Indicator, with a value of Y, Visa populates Tag 09.</p> <p>This Message Identifier value can be used to link data in the dataset ID to additional data in other transactions or fields.</p> <p>This tag may contain 15 bytes alphanumeric content..</p>

Table 4-89 Dataset Value Hex 63, Non-Industry-Specific Data (continued)

Tag	Name	Length	Format	Description
0A	Time of Purchase	4	UN	<p>Contains the time of day that the purchase was made.</p> <p>Format:</p> <p><i>hh</i> = Hour in the merchant's or acquirer's local time</p> <p><i>mm</i> = Minutes</p>
0B	Customer Reference Number	17	AN	<p>Contains a value that identifies the customer for non-fuel transactions. The value may be a reference number, code, or generic number.</p> <p>NOTE:</p> <p><i>Fuel transactions are identified by an MCC value of 5541 or 5542. The customer code or reference identifier value for fuel transactions is carried in field 48, usage 36.</i></p>
13	Merchant Postal Code	11	AN	<p>Contains the postal code that identifies the merchant's location for commercial card transactions.</p> <p>If present, this tag may contain alphanumeric values, including spaces and special characters.</p>
15	Additional Data Indicator	1	AN	<p>Contains the additional data indicator.</p> <p>Values are:</p> <p>Y = Additional data is present in the transaction.</p> <p>N = Additional data is not provided.</p> <p>NOTE:</p> <p><i>If no additional data is present, the tag, including the value of N, is optional and need not be sent.</i></p> <p>When acquirers populate this tag with a value of Y, V.I.P. populates Tag 09, Message Identifier.</p> <p>For issuers, Tag 15 should contain a value of Y when a value for Tag 09 is present.</p>

Dataset ID 65, MasterCard Client-Defined Data: This data is used in MasterCard authorization requests (including incremental authorization requests), reversals (including partial reversals), reversal advices, and related responses. Authorization responses and reversals must contain this field if it was present in the 0100 authorization. The dataset can also be present in 0120 completion advices.

NOTE

Acquirers must not submit MasterCard POS 02xx full financial messages. Acquirers can submit MasterCard Assigned ID (MAID) in Tag 07 of this field.

The tags for this dataset are listed in the following table.

Table 4-90 Dataset Value Hex 65, MasterCard Client-Defined Data

Tag	Length	Value	Format	Contents
01	1	n/a	AN	Reserved for future use.
02	98	Client-defined data	ANS	<p>This field contains MasterCard transaction data.</p> <p>Acquirers that choose to process domestic installment payment transactions in Colombia must support this tag in authorization requests and responses.</p> <p>References: See MasterCard documentation.</p>
03	6	MasterCard Data Element, 121— Authorizing Agent ID Code	N	<p>In AFD transactions, MasterCard returns a 6-digit number in this field in 0110 and 0410 response messages.</p> <p>Acquirers must include the number from the 0110 response in 0120 advice messages.</p>

Table 4-90 Dataset Value Hex 65, MasterCard Client-Defined Data (continued)

Tag	Length	Value	Format	Contents
04	2	MasterCard Data Element DE48, Subelement 23—Payment Initiation Channel	AN	<p>Contains a MasterCard-defined code that provides information about the type of device used to initiate a non-card transaction. Acquirers that choose to process contactless transactions must support this tag in authorization, advice, and reversal messages.</p> <p>Values for this tag are as follows:</p> <ul style="list-style-type: none"> 00 = Card (default) 01 = Mobile network operator (MNO) controlled removable secure element (SIM or UICC) personalized for use with a mobile phone or smartphone 02 = Key fob 03 = Watch 04 = Mobile tag 05 = Wristband 06 = Mobile phone case or sleeve 07 = Mobile phone or smartphone with fixed (non-removable) secure element controlled by the MNO (for example, code division multiple access (CDMA)) 08 = Removable secure element not controlled by the MNO (for example, memory card personalized for use with a mobile phone or smartphone) 09 = Mobile phone or smartphone with a fixed (non-removable) secure element not controlled by the MNO 10 = MNO-controlled removable secure element (SIM or UICC) personalized for use with a tablet or e-book 11 = Tablet or e-book with a fixed (non-removable) secure element controlled by the MNO 12 = Removable secure element not controlled by the MNO (for example, memory card personalized for use with a tablet or e-book) 13 = Tablet or e-book with fixed (non-removable) secure element not controlled by the MNO 14–99 = Reserved for future use

Table 4-90 Dataset Value Hex 65, MasterCard Client-Defined Data (continued)

Tag	Length	Value	Format	Contents
05	6	MasterCard Data Element DE48, Subelement 95—Promotion Code	AN	<p>Tags 05 and 06 contain MasterCard-defined data for installment payments. This data is used in authorization requests and responses, and in reversals, reversal advices, and related responses.</p> <p>Because the data required for installment payments varies by country, acquirers must populate Tag 05 with a country-specific program code required by MasterCard.</p> <p>Brazil acquirers must support this tag. In authorizations initiated with a MasterCard Agro card, this tag must contain the value AGROF1.</p> <p>For domestic installment payment transactions in Colombia, this tag must contain the promotion code value of COLCTA (Installment payment transaction in Colombia) in authorization requests and responses.</p> <p>Acquirers in Croatia, Czech Republic, Georgia, Hungary, Romania, Serbia, Slovakia, Slovenia, and Ukraine must support this tag. For installment payment transactions in these countries, this tag must contain the promotion code value of HGMINS.</p> <p>In Brazil domestic authorizations initiated with a MasterCard BNDES card, this tag must contain the promotion code value of BNDES1.</p> <p>Reference: For Tag 05 codes, see MasterCard documentation.</p>

Table 4-90 Dataset Value Hex 65, MasterCard Client-Defined Data (continued)

Tag	Length	Value	Format	Contents
06	170	MasterCard Data Element DE112—Additional Data, National Use	ANS	<p>Acquirers must populate Tag 06 with the data required for the code specified in Tag 05.</p> <p>Tag 06 data must be in the format required by MasterCard.</p> <p>Visa maps the data received in the response from MasterCard to this same tag in the response message.</p> <p>Acquirers that choose to process domestic installment payment transactions in Colombia must support this tag in authorization requests and responses.</p> <p>In MasterCard Agro authorizations, this tag contains the following data:</p> <ul style="list-style-type: none"> • Positions 1–20, Financing Type, with text that represents the type of loan operation agreed between the merchant and the issuer • Position 21, Buyer ID Type, with the value F (person to consumer) or J (company to commercial) • Positions 22–35, Buyer ID, with the cardholder's CPF, company's CNPJ number, or the company's CNPJ number in the response message • Positions 36–46, Buyer Phone number, with the buyer's phone number from the merchant • Positions 47–66, Purchase Identification, with the invoice number or purchase request number, depending on the agreement between the merchant and the issuer • Positions 67–68, Installments Cycle, reserved for future use • Positions 69–86, Interest Rate, reserved for future use • Positions 87–89, Grace Period, reserved for future use • Positions 90–92, Grace Period Cycle, reserved for future use • Positions 93–110, Grace Period Interest Rate, reserved for future use • Positions 111–130, Reference Field 1, with the merchant's CNPJ number, populated by the acquirer • Positions 131–150, Reference Field 2, with data exchanged between the merchant and issuer to identify the transaction • Positions 151–170, Reference Field 3, with data exchanged between the merchant and issuer to identify the transaction <p>Reference: For the detailed Tag 06 format and requirements defined by MasterCard, see MasterCard documentation.</p>

Table 4-90 Dataset Value Hex 65, MasterCard Client-Defined Data (continued)

Tag	Length	Value	Format	Contents
	99	MasterCard Data Element DE112, Subelement 009—Installment Payment Data	AN	<p>Contains installment payment data for Croatia, Czech Republic, Georgia, Hungary, Romania, Serbia, Slovakia, Slovenia, and Ukraine.</p> <p>Values for this tag are as follows:</p> <p>20 = Issuer-financed 21 = Merchant-financed 22 = Acquirer-financed</p>
		MasterCard Data Element DE112, Subelement 020—Domestic Card Acceptor Tax ID	AN	<p>Contains the domestic card acceptor tax ID for Croatia domestic installment payment transactions.</p>
227		MasterCard Data Element DE112, Subelement 12	ANS	<ul style="list-style-type: none"> • Positions 1–20, Financing Type, with the value of CBN • Position 21, Buyer ID Type, with the value of J (Company to commercial) • Positions 22–35, Buyer ID, with the CNPJ number (Buyer company tax ID) • Positions 36–110 space-filled • Positions 111–130, Reference Field 1, with the CNPJ number (Merchant Brazilian tax ID) • Positions 131–227, space-filled <p>NOTE: <i>The CNPJ number is the registration number provided by the Brazil government to all merchants.</i></p>

Table 4-90 Dataset Value Hex 65, MasterCard Client-Defined Data (continued)

Tag	Length	Value	Format	Contents
07	153	MasterCard Data Element DE112, Subelement 30—Japan Domestic POS Data Subelement 31—Japan Domestic Response Data	ANS	<p>This tag contains Japan domestic POS data 0100 authorization requests and 0400/0420 reversal requests as follows:</p> <ul style="list-style-type: none"> • Positions 1–3, contains a value of 030 denoting subelement 30 usage, 3 bytes • Position 4–6, contains a value of 138 denoting the length of Japan domestic data to follow, 3 bytes • Position 7–96, contains Japan domestic POS data, 90 bytes • Positions 97–103, contains the acquirer company code, 7 bytes • Positions 104–110, contains the issuer company code, 7 bytes • Position 111, contains 0 (Online) or 1 (Memory) to denote the authorization transmission mode, 1 byte. This value is not required and zero-filled in 0400/0420 reversal requests and responses. • Position 112, contains the entry indicator, 1 byte, values are: <ul style="list-style-type: none"> 1 = Back stripe ISO 2 = Front stripe JIS II 3 = Manual 4 = N/A Domestic private label 5 = IC chip data ISO 6 = IC chip data JIS II • Positions 114–119, contains the approval number for post-approval authorizations, 6 bytes • Positions 120–124, contains the sales slip number, 5 bytes • Positions 125–129, contains the sales slip number for reversal/refund, 5 bytes • Positions 130–136, contains the tax amount in nnnnnnnn format, 7 bytes • Positions 125–129, contains the local transaction date in yymmdd format, 5 bytes
	6	MasterCard Data Element DE48, Subelement 32—MasterCard Assigned ID	AN	<p>Contains the merchant ID assigned by MasterCard.</p> <p>This tag is used in 0100 authorization requests, 0400/0420 reversals, partial reversals, and reversal advices.</p>

Table 4-90 Dataset Value Hex 65, MasterCard Client-Defined Data (continued)

Tag	Length	Value	Format	Contents
08	15	MasterCard Data Element DE48, Subelement 63—Trace ID	ANS	<p>Contains the following data in response messages:</p> <ul style="list-style-type: none"> • Positions 1–4, Banknet date (Date, Settlement) • Positions 5–7, Financial Network Code • Positions 8–13, Banknet reference number • Positions 14–15, space-filled <p>This field is sent in original responses to the acquirer and should be used in incremental authorization requests for the same T&E transactions.</p> <p>This tag is used in 0100 authorization requests (incremental requests for MasterCard), in 0110 authorization responses (from original requests), and in 0400/0420 reversals, partial reversals, and reversal advices.</p> <p>NOTE: <i>In addition to receiving this field, acquirers may also receive field 62.17 in responses. The order of the data in this tag is the same as that sent in field 62.17.</i></p>

Table 4-90 Dataset Value Hex 65, MasterCard Client-Defined Data (continued)

Tag	Length	Value	Format	Contents
09	4	MasterCard Data Element DE48, Subelement 64—Transit Program	N	<p>Contains the following MasterCard-defined subfields:</p> <ul style="list-style-type: none"> • Transit Transaction Type Indicator • Transportation Mode Indicator <p>The Transit Transaction Type Indicator subfield, used in 0100 transactions only, must contain one of the values shown in the following list:</p> <p> 01 = Prefunded 02 = Real-time authorized 03 = Post-authorized aggregated 04 = Authorized-aggregated split clearing 05 = Other 06–99 = Reserved for future use </p> <p>The Transportation Mode Indicator subfield, used in 0100 transactions only, must contain one of the values shown in the following list:</p> <p> 00 = Unknown 01 = Urban bus 02 = Interurban bus 03 = Light train mass transit (Underground Metro LTR) 04 = Train 05 = Commuter train 06 = Water-borne vehicle 07 = Toll 08 = Parking 09 = Taxi 10 = High-speed train 11 = Rural bus 12 = Express commuter train 13 = Para transit 14 = Self drive vehicle 15 = Coach 16 = Locomotive 17 = Powered motor coach 18 = Trailer 19 = Regional train 20 = Inter-city 21 = Funicular train 22 = Cable car 23–29 = Reserved for future use </p>

Table 4-90 Dataset Value Hex 65, MasterCard Client-Defined Data (continued)

Tag	Length	Value	Format	Contents
11	20	MasterCard Data Element DE54	AN	<p>Acquirers that choose to process domestic transactions for Colombia must support this tag. This tag is used to submit a gratuity amount.</p> <p>This tag must contain the following information:</p> <ul style="list-style-type: none"> • Positions 1–2, Account Type, with the value of 00 (Not applicable or not specified) • Positions 3–4, Amount Type, with the value of 44 (Amount, Gratuity) • Positions 5–7, Currency Code • Position 8, Amount, Sign, with a C (Credit) or D (Debit) • Positions 9–20, Amount, with only the gratuity amount <p>This tag is used in authorization requests, 0120 acquirer advices, and reversals.</p> <p>NOTE: If this tag is present in a message, field 54 must not be present.</p>
12	1	MasterCard Data Element DE48, Subelement 61, Subfield 5	AN	<p>Contains information necessary to process authorizations by MasterCard. Values are:</p> <ul style="list-style-type: none"> 0 = Normal authorization/undefined (default setting) 1 = Final authorization (MasterCard acquirers in Visa Europe must support only this value.) <p>This tag is used in authorization requests, authorization advices, and authorization completion advices.</p>
13	1	MasterCard Data Element DE61, Subelement 11	AN	<p>In authorization requests, this tag contains the value of 3 (Contact and contactless chip terminals) to support contactless M/Chip (proximity chip) terminals.</p> <p>NOTE: Visa sends the value from this tag to MasterCard's DE 61.11. If there is a value in field 60.2, the value in this tag takes priority.</p>

Table 4-90 Dataset Value Hex 65, MasterCard Client-Defined Data (continued)

Tag	Length	Value	Format	Contents
14	3	MasterCard Data Element DE48, Subelement 74, Subfield 1, Subfield 2	AN, EBCDIC	<p>Contains values to indicate that the chip pre-validation was unsuccessful.</p> <p>Positions 1–2 contain one of the following values:</p> <p>02 = MasterCard On-behalf Service—M/Chip cryptogram pre-validation</p> <p>03 = MasterCard On-behalf Service—M/Chip cryptogram validation in stand-in processing</p> <p>50 = Issuer chip validation</p> <p>90 = Chip fallback transaction downgrade process</p> <p>Position 3 contains one of the following values:</p> <p>A = Application cryptogram (AC); ATC outside allowed range</p> <p>C = Completed successfully</p> <p>E = AC; ATC replay</p> <p>F = Format error Field 55—Integrated Circuit Card (ICC)-Related Data</p> <p>G = Application cryptogram is valid but is not ARQC</p> <p>I = Application cryptogram invalid</p> <p>T = Application cryptogram is valid but TVR/CVR invalid</p> <p>U = Application cryptogram could not be validated due to technical error</p>
15	1	MasterCard Data Element DE48, Subelement 42—Electronic Commerce Indicators, Subfield 1 (Electronic Commerce Security Level Indicator and UCAF Collection Indicator)	AN	<p>Contains the value 4 (Digital secure remote payment with UCAF data).</p> <p>This tag is used in 0100 authorization request messages.</p>
16	1	MasterCard Data Element DE61, Subfield 3	N	<p>Contains the value 4 (on premises of card acceptor facility cardholder terminal including home PC, mobile phone, PDA) for digital secure remote payment transactions.</p>

Table 4-90 Dataset Value Hex 65, MasterCard Client-Defined Data (continued)

Tag	Length	Value	Format	Contents
18	96	MasterCard Data Element DE48, Subelement 57—Security Services Additional Data for Acquirers, Subfield 1 (Security Services Indicator), Subfield 2 (Security Services Data)	AN	<p>Contains real-time scoring information.</p> <ul style="list-style-type: none"> Positions 1–3 contain a three-digit code that identifies the real-time monitoring service used to score the transaction for the acquirer. Positions 4–6 contain additional data for the merchant fraud score. The values can be 001–999. <p>NOTE: The information in positions 1–6 can be repeated 16 times, allowing 96 bytes of data in Tag 18.</p>
19	2	MasterCard Data Element DE48, Subelement 65—Terminal Compliant Indicator, Subfield 1 (Terminal Line Encryption), Subfield 2 (UKPT/DUKPT Compliant)	AN	<p>Contains information for compliance verification.</p> <ul style="list-style-type: none"> Position 1 contains terminal line encryption (TLE) compliance: <ul style="list-style-type: none"> 1 = Not Certified 2 = Certified Position 2 contains UKPT/DKPT compliance: <ul style="list-style-type: none"> 1 = Not Certified 2 = Certified
20	1	MasterCard Data Element DE48, Subelement 48—Mobile Program Indicators, Subfield 2 (MasterCard Mobile Remote Payment Transaction Types)	AN	<p>Contains the following values:</p> <ul style="list-style-type: none"> 1 = Remote purchase (consumer-initiated)—face-to-face 2 = Remote purchase (consumer-initiated)—ecommerce 3 = Remote purchase (consumer-initiated)—MOTO 4 = Bill pay (consumer-initiated) 5 = Top-up (consumer-initiated) 6 = Cash-out (consumer-initiated) 7 = Cash-out (ATM/agent-triggered) 8 = Remote purchase (merchant-triggered)—face-to-face 9 = Remote purchase (merchant-triggered)—ecommerce

Table 4-90 Dataset Value Hex 65, MasterCard Client-Defined Data (continued)

Tag	Length	Value	Format	Contents
21	49	MasterCard Data Element DE48, Subelement 37—MasterCard Mobile Remote Payment Transaction Types, Subfield 1 (Payment Facilitator ID), Subfield 2 (Independent Sales Organization ID), Subfield 3 (Sub-Merchant ID)	AN	<p>Contains the following values:</p> <ul style="list-style-type: none"> Subfield 1—0111XXXXXXXXXXXX, where 01 = subfield 1 indicator 11 = length of payment facilitator ID XXXXXXXXXXXX = payment facilitator ID Subfield 2—0211XXXXXXXXXXXX, where 02 = subfield 2 indicator 11 = length of independent sales organization ID XXXXXXXXXXXX = independent sales organization ID Subfield 3—0315XXXXXXXXXXXXXXXXXXXX, where 03 = subfield 3 indicator 15 = length of the merchant ID XXXXXXXXXXXXXXXXXXXX = merchant ID <p>Allowed combinations:</p> <ul style="list-style-type: none"> Combination 1 — Payment facilitator ID — Merchant ID value = 0111XXXXXXXXXXXX0315XXXXXXXXXXXXXXXXXXXX Combination 2 — Independent sales organization value = 0211XXXXXXXXXXXX Combination 3 — Payment facilitator ID — Independent sales organization ID — Merchant ID value = 0111XXXXXXXXXXXX0211XXXXXXXXXXXX0315XXXXXXXXXXXXXXXXXXXX
22	1	MasterCard Data Element DE48, Subelement 17	AN	<p>Contains government qualification indicator.</p> <p>1 = Transaction qualified for Authentication Service Type 1</p> <p>2 = Transaction qualified for Authentication Service Type 2</p>

Table 4-90 Dataset Value Hex 65, MasterCard Client-Defined Data (continued)

Tag	Length	Value	Format	Contents
23	3	MasterCard Data Element DE48, Subelement 51, Subfield 1, Subfield 2	AN	<p>Contains the following values:</p> <p>Positions 1–2 contain 53 (MasterCard Digital Enablement Service card-on-file PAN mapping)</p> <p>Position 3 contains one of the following values:</p> <p>C = Service completed successfully</p> <p>F = Incorrect POS entry mode code (not equal to 81) for an authorization or reversal message</p> <p>F = Incorrect POS entry mode (not equal to 01) for authorization request of token request and token requestor card on file transactions</p> <p>F = Token requestor ID required based on the token requestor ID validation bypass parameter, not present or formatted incorrectly</p> <p>I = Token requestor ID invalid</p> <p>I = Token suspended or deactivated</p> <p>I = Token invalid, not found on mapping table</p> <p>T = Token requestor ID/Token combination invalid</p> <p>U = Unable to process—token expired</p> <p>U = Unable to process—mapping table unreachable/unavailable</p> <p>W = PAN listed in the electronic warning bulletin</p> <p>Present in 0110 authorization responses and 0410 reversal response messages.</p>
24	1	MasterCard Data Element DE22, Subelement 1	Hex	<p>Contains 82 (PAN auto entry via server—issuer, acquirer, or third-party).</p> <p>Present in 0100 authorization requests.</p>
25	2	MasterCard Data Element DE48, Subelement 33, Subfield 5	N	<p>Contains token assurance level.</p> <p>Present in 0100/0110 authorization request/response and 0400/0410 reversal request/response messages.</p>

Table 4-90 Dataset Value Hex 65, MasterCard Client-Defined Data (continued)

Tag	Length	Value	Format	Contents
26	11	MasterCard Data Element DE48, Subelement 33, Subfield 6	N	Contains token requestor ID. Present in 0100/0110 authorization request/response and 0400/0410 reversal request/response messages.
28	2	MasterCard Data Element (DE) 48, Subelement 52	AN	Contains a value to denote the transaction integrity. Contains following values for card and cardholder present transactions: A1 = EMV/Token in a secure, trusted environment B1 = EMV/Chip equivalent C1 = Mag stripe E1 = Key entered U0 = Unclassified Contains following values for card and/or cardholder not present transactions: A2 = Digital transactions B2 = Authenticated checkout C2 = Transaction validation D2 = Enhanced data E2 = Generic messaging U0 = Unclassified
29	2	MasterCard Data Element (DE) 61, Subelement 7	AN	This tag contains a value of 4 to indicate a preauthorized request.
30	1	MasterCard Data Element (DE) 48, Subelement 61, Subfield 4	AN	This tag contains a value to indicate that the MasterCard Expert Monitoring Service (EMS) will store the transaction per acquirer request. Valid values are: 0 = No action requested 1 = Transaction to be scored
31	32	MasterCard Data Element (DE) 48, Subelement 55, Subfield 1, Subfield 2	AN	This tag contains the fraud score on a fraud scoring service transaction, if the transaction is stored per the acquirer request. The format is as follows: <ul style="list-style-type: none"> • Positions 1–3, contains a value from 001 to 998, indicating EMS real-time fraud score, where 001 denotes least likely a fraudulent transaction and 998 denotes most likely a fraudulent transaction. • Positions 4–5, contains a score reason code to identify the data used in determining the fraud score: • Positions 6–32, reserved for future use <p>NOTE: <i>See the Authorization Gateway Service Cross-Reference Guide for score reason codes.</i></p>

Table 4-90 Dataset Value Hex 65, MasterCard Client-Defined Data (continued)

Tag	Length	Value	Format	Contents
0A	2	MasterCard Data Element DE39, Value 34 (Suspect fraud)	AN	<p>Contains the value of 34 (Suspect fraud) for reversals of suspicious card-not-present transactions.</p> <p>This tag is used in 0400/0420 reversals and reversal advices.</p>
0B	1	MasterCard Data Element DE48, Subelement 18—Service Parameters, Subfield 1 (Canada Domestic Indicator)	AN	<p>Must contain a value of Y (Canada domestic indicator) in Canada domestic debit MasterCard transactions.</p> <p>Used in POS authorization requests and their responses.</p>
0C	3	MasterCard Data Element DE48, Subelement 26—Wallet Program Data, Subfield 1 (Wallet Identifier)	AN	<p>Contains one of the following data values that are generated by the PayPass Online platform and passed to the merchant along with the consumer's checkout information (for example, card credentials, shipping address, and email address):</p> <p>101 = Wallet remote 102 = Wallet remote NFC payment</p> <p>Contains one of the following data values for MasterCard wallet transactions from the MasterPass platform:</p> <p>103 = Apple Pay 216 = Android Pay 217 = Samsung Pay</p> <p>This tag is used in POS authorization requests and in 0120 authorization advices.</p>
0D	250	MasterCard Data Element DE123—Receipt Free Text	AN	<p>Contains a text message that must be printed on POS sales receipts. This tag is required in 0110 response messages in Peru. V.I.P. does not edit the data received in response messages.</p> <p>V.I.P. truncates the data in this tag to a maximum of 250 characters. V.I.P. also truncates the data if the cumulative data in this tag and all other tags of this field exceeds 255 bytes.</p>
0E	10	MasterCard Data Element DE48, Subelement 25—Prepaid Activation/Load, Subfield 1 (Message Identifier)	AN	<p>Contains a value to indicate the type of cash transaction for prepaid activation and load processing.</p> <p>Values for this tag are as follows:</p> <p>LR = Unlinked load request, or linked load request with no purchase.</p> <p>NOTE: <i>The first two positions contain the value of LR. Visa space-fills the remaining bytes.</i></p>

Table 4-90 Dataset Value Hex 65, MasterCard Client-Defined Data (continued)

Tag	Length	Value	Format	Contents
0F	56	MasterCard Data element DE48, Subelement 33, Subfield 1, Subfield 2, Subfield 3, and Subfield 4	AN	<p>Contains the following necessary information to process authorization responses with the Digital Enablement Service:</p> <ul style="list-style-type: none"> • Subfield 1—Account Number Indicator, which contains the value M (MasterCard Digital Enablement Service account number). • Subfield 2—Account Number, which contains the funding account number. • Subfield 3—Expiration Date, which contains the expiration date of the funding account number. • Subfield 4—Product Code <p>This tag is used in authorization responses, authorization advice responses and reversal responses. Acquirers that process contactless transactions must support this tag.</p>

Dataset ID 66, American Express Data: This dataset contains data related to American Express transactions.

Acquirers that choose to support American Express installment payments must send installment payment information in this dataset.

Acquirers that process American Express card-present transactions may optionally submit national goods sold code information in card-present authorization requests.

Table 4-91 Dataset Value Hex 66, American Express Data

Tag	Length	Format	Value	Contents
01	Variable, maximum 43 bytes	AN	American Express Data Field (DF) 48, Additional Data – Private	<p>Contains American Express installment payment information in 0100 requests and 0110 responses.</p> <p>The acquirer must include the data in the correct format, including the plan type and number of installments.</p> <p>Reference: For the detailed Tag 01 format required by American Express, see American Express documentation.</p>
05	1	AN	American Express Data Field (DF) 22, POS Data Code, position 4	<p>Contains a value of Z (expresspay transactions conducted at transit access terminals) that is mapped to American Express Data Field 22.</p> <p>This tag is used in POS authorization requests.</p>

Table 4-91 Dataset Value Hex 66, American Express Data (continued)

Tag	Length	Format	Value	Contents
06	20 bytes	ANS	American Express Data Field 60.4, Card Acceptor Name/Location, Seller Phone Number	<p>This tag optionally contains the seller's phone number.</p> <p>V.I.P. only edits the length of the content in this tag.</p> <p>This tag is left-justified with blank padding.</p> <p>This tag is used in POS authorization requests.</p>
07	40 bytes	ANS	American Express Data Field 60.3, Card Acceptor Name/Location, Seller Email Address	<p>This tag optionally contains the seller's email address.</p> <p>V.I.P. only edits the length of the content in this tag.</p> <p>This tag is used in POS authorization requests.</p>
08	4	N, EBCDIC	American Express Data Field 47, Card Present—Goods Sold	Contains the national goods sold code value of 1000 (Gift card).
09	1	AN	American Express Data Field 22, Subfield 6	<p>Contains the digital wallet indicator of Z (digital wallet-application initiated payment token).</p> <p>This tag is used in 0100 requests.</p> <p>NOTE: The value of Z must not be used for American Express ExpressPay transactions.</p>
10	3	N	American Express Data Field 24	<p>Contains the value of 196 (Expresspay Translation, PAN & Expiration Date Request). This tag is used to request American Express to return the PAN and Expiration Date in 0100 authorization requests.</p> <p>This tag is only applicable to American Express Expresspay transit transactions with following MCC values in field 18:</p> <ul style="list-style-type: none"> • 4111 (Local and suburban commuter passenger transportation, including ferries) • 4112 (Passenger railways) • 4131 (Bus lines) • 4784 (Tolls and bridge fees) • 7523 (Parking lots, parking meters, and garages)

Table 4-91 Dataset Value Hex 66, American Express Data (continued)

Tag	Length	Format	Value	Contents
11	23	N	American Express Data Field 34	Contains the expiration date and PAN in the 0110 authorization response message as follows: <ul style="list-style-type: none">• Positions 1–2, contains the month in mm format• Positions 3–4, contains the year in yy format• Positions 5–23, contains the original PAN

Table 4-91 Dataset Value Hex 66, American Express Data (continued)

Tag	Length	Format	Value	Contents
12	99 bytes	ANSv	American Express Data Field 43, Subfield 1	<p>Contains the card acceptor name and location data as follows:</p> <p>Payment service providers include the payment service provider name, the seller DBA, street address, postal code, region code, and country code. The payment service provider name and the seller DBA is separated by an = delimiter, example:</p> <p>ANY~AGGREGATOR=KATIS~BEACH~UMBRELLAS\1234~ABC~STREET\ANYTOWN\XXXXX~~~~~~YYY~ZZZ</p> <p>Length of each item is as follows:</p> <ul style="list-style-type: none"> • Seller name = 38 bytes • Street name = 30 bytes • City name = 15 bytes • Postal code = 10 bytes • Region code = 3 bytes • Country code = 3 bytes <p>OptBlue participants include the seller DBA preceded by an = delimiter. The OptBlue participant also include the seller's street and seller's city, example:</p> <p>=KATIS~BEACH~UMBRELLAS\1234~ABC~STREET\ANYTOWN\</p> <p>Length of each item is as follows:</p> <ul style="list-style-type: none"> • Seller DBA = 38 bytes • Street name = 30 bytes • City name = 15 bytes <p>NOTE: <i>Providing payment service provider name is not mandatory for OptBlue participants.</i></p> <p>Other merchants send card acceptor name and location data in following format:</p> <p>58KATIS~BEACH~UMBRELLAS\1234~ABC~STREET\ANYTOWN\XXXXX~~~~~~\</p> <p>Length of each item is as follows:</p> <ul style="list-style-type: none"> • Seller DBA = 38 bytes • Street name = 30 bytes • City name = 15 bytes

Table 4-91 Dataset Value Hex 66, American Express Data (continued)

Tag	Length	Format	Value	Contents
				<p>NOTE: Payment service providers supported within an OptBlue Participant must follow the payment service provider format.</p> <ul style="list-style-type: none"> • XXXXXX is the postal code. • YYY is the region code • ZZZ is the country code • tilde (~) characters represent character spaces. • equal sign (=) and slash (/) represent a delimiter. Maximum number of bytes allowed include the delimiters.
0A	1	AN	American Express Data Field 22, Subfield 5	<p>Contains the value of 4 (cardholder not present, standing authorization) for American Express standing authorizations.</p> <p>This tag is used when the cardholder billing information is on record (card on file). However, the billing frequency and amount may vary. Transaction examples include travel, car rental, lodging, preferred clubs, frequent customer, delayed shipment, and split bill.</p> <p>This tag is used in 0100 requests.</p>
0B	2	AN	Not applicable	Contains the value of 20 (payment token data indicator) in 0100 requests.
0C	20 bytes	ANS	Seller ID	<p>This tag optionally contains the seller's ID.</p> <p>This tag is left-justified with blank padding.</p>
0D	1	AN	American Express Data Field 60, Subfield 6	Contains the value of Y (Include the last four digits of the PAN in the response message) to indicate a request for the last four digits of the PAN to be included in Field 44.15 of the 0110 authorization response message.
0E	1	AN	Not applicable	Contains the token purchase indicator T (Token purchase) in 0100 authorization request message.
0F	11	N	American Express Data Field 60, Subfield 5	Contains the token requestor ID.

Dataset ID 69, Multiple Payment Forms: This data is used to identify two or more forms of payment in a split tender transaction.

Table 4-92 Dataset Value Hex 69, Multiple Payment Forms

Tag	Length	Format	Value	Contents
01	1	AN	Number of Payment Forms	Values are: <ul style="list-style-type: none"> • 1–9 • + (plus, > 9)

NOTE

Dataset hex 69 is optional for exception items.

Dataset ID 6C, Travel Tag: This dataset indicates the travel status of a cardholder. It is used in the following messages:

- 0100 authorizations and 0120 STIP advices
- 0200 full financial requests and 0220 STIP advices

The tags for this dataset are listed in the following table.

Table 4-93 Dataset Value Hex 6C, Travel Tag Data

Tag	Name	Length	Format	Description
01	Travel Tag Codes	1	AN	Contains a code that describes the cardholder travel status. Values are: A = Cardholder may be traveling, destination matches B = Cardholder may be traveling, destination unknown

Table 4-93 Dataset Value Hex 6C, Travel Tag Data (continued)

Tag	Name	Length	Format	Description
02	Mobile Location Confirmation	8	AN	<p>Contains a value that indicates whether the location of a mobile phone matches the location of the merchant or ATM.</p> <p>It consists of four two-byte values.</p> <p>The first byte in each of the two-bytes contains one of the following values:</p> <p>P = Postal code</p> <p>T = City</p> <p>S = State</p> <p>C = Country</p> <p>The second byte in each of the two-bytes contains one of the following values:</p> <p>Space = Unable to match due to insufficient location information for the mobile phone</p> <p>U = Unable to match due to insufficient merchant or ATM location information in the authorization message</p> <p>M = Matched the location of the mobile phone with the merchant or ATM location in the authorization message</p> <p>N = Did not match the location of the mobile phone with the merchant or ATM location in the authorization message</p> <p>See Dataset ID 6C Travel Tag Data, Tag 02 Valid Values below for possible values.</p>

NOTE

Mobile location confirmation processing is not performed on adjustments, chargebacks, completions, confirmations, deferred clearing transactions, representments, or reversals.

Table 4-94 Dataset ID 6C Travel Tag Data, Tag 02 Valid Values

Byte	Location Type	Valid Values	Comments
1–2	Postal code	<p>P^{^1} = Postal code unable to match - no mobile location data</p> <p>PU = Postal code unable to match - not enough data in the authorization</p> <p>PM = Postal code matched</p> <p>PN = Postal code did not match</p>	<p>These values apply to locations in the U.S. and Canada.</p> <p>Locations outside the U.S. and Canada have the value of PU.</p>
3–4	City	<p>T^{^1} = City unable to match - no mobile location data</p> <p>TU = City unable to match - not enough data in the authorization</p> <p>TM = City matched</p> <p>TN = City did not match</p>	<p>These values apply to all locations except in the U.S. and Canada.</p> <p>Locations in the U.S. and Canada have the value of T[^].</p>
5–6	State	<p>S^{^1} = State unable to match - no mobile location data</p> <p>SU = State unable to match - not enough data in the authorization</p> <p>SM = State matched</p> <p>SN = State did not match</p>	<p>These values apply to locations in the U.S. and Canada.</p> <p>Locations outside the U.S. and Canada have the value of SU.</p>
7–8	Country	<p>C^{^1} = Country unable to match - no mobile location data</p> <p>CU = Country unable to match - not enough data in the authorization</p> <p>CM = Country matched</p> <p>CN = Country did not match</p>	These values apply to all locations.

1. [^] = space.

The following examples show possible values of location matching that are passed in Tag 02—Mobile Location Confirmation:

- U.S. or Canada Example: **PNT^SMCM** Postal code did not match, city unable to match - no mobile location data, state matched, country matched.
- Non-U.S. and Non-Canada Example: **PUTMSUCM** Postal code unable to match - not enough data in the authorization, city matched, state unable to match - not enough data in the authorization, country matched.

Dataset ID 6D, Issuer-Supplied Data: Issuers use this dataset to instruct VisaNet to send a text alert to cardholders when a suspect authorization occurs.

The tags for this dataset are listed in the following table.

Table 4-95 Dataset Value Hex 6D, Issuer-Supplied Data

Tag	Name	Length	Format	Description
01	Authentication Alert	1	AN	Contains a code that requests Visa to send a text alert to the cardholder. Value: A = Issuer requests Visa to send a text alert to cardholder

Dataset ID 6E, Loan Details: This dataset contains data for Brazil domestic BNDES transactions. It is used in authorizations, STIP advices, reversals (including partial reversals), reversal advices, and responses.

Table 4-96 Dataset Value Hex 6E, Loan Details

Tag	Name	Length	Format	Description
01	Cardholder Tax ID Type	4	AN	Values are: CNPJ = Company Tax ID CPF = Consumer Tax ID This tag is left-justified and space-filled.
02	Cardholder Tax ID	15	AN	Contains the cardholder tax ID. It is left-justified and space-filled.
03	Asset Indicator	1	AN	Values are Y or N .
04	Loan Type	20	AN	Contains the loan type for Brazil domestic transactions with the product ID S6 (Visa BNDES). It is left-justified and space-filled.
05	Merchant Program Identifier	6	AN	This tag must contain the value BNDES for Brazil domestic transactions with product ID S6 . This tag is left-justified and space-filled.

Dataset ID 71, Client-to-Client Data: Acquirers that do not support the Billing ID may use this field to send free-form data by using TLV content specified in [Table 4-97](#).

Table 4-97 Dataset Value Hex 71, Free-Form Description Data (Client-to-Client Data)

Tag	Length	Value	Content of Sub-Elements
01	99	Free-form data	This subfield contains client-to-client data. It is equivalent to positions 2–100 of field 104, usage 1.

Clients can receive additional information in this field, provided the option has been turned on for this field in the Processing Center Record (PCR).

This field contains free-form description data in the following messages, except for original credit money transfer messages:

- 0100/0110 card authorization requests and responses
- 0400/0410 authorization reversal requests and responses

Dataset ID 71, Additional Sender Data: Dataset hex 71, Tag 01 is optional in basic and enhanced original credit transactions.

Table 4-98 Dataset Value Hex 71, Additional Sender Data

Tag	Length	Value	Content of Sub-Elements
01	45	Free-form data	This field allows 45 bytes of variable-length sender data, in EBCDIC. The sender’s account number or transaction reference number and primary residential address must be provided in the following format: <ul style="list-style-type: none">• Sender’s account number used to fund the transaction. If the sender’s account number is not available, a transaction reference number can be used to uniquely identify the sender.• A space as a delimiter.• Sender’s primary residential address. This is required for international money transfer transactions.

NOTE
Dataset hex 71, Tag 01 is optional in reversals of basic money transfer original credit transactions, and V.I.P. retains the data if it receives it in these messages. V.I.P. does not support Dataset hex 71, Tag 01 in responses or other messages and drops data it receives in them.

NOTE
Acquirers and originators that implement OCTs for the first time must not submit Field 104, Usage 2, Dataset ID 71—Additional Sender Data. Sender data must only be submitted in Field 104, Usage 2, Dataset ID 5F—Sender Data.

NOTE
V.I.P. populates Field 104, Usage 2, Dataset ID 71 Additional Sender Data with sender data from Field 104, Usage 2, Dataset ID 5F—Sender Data for 0100 or 0200 OCTs that do not contain Field 104, Usage 2, Dataset ID 71—Additional Sender Data. This does not apply to acquirers and originators implementing OCTs for the first time.

If an issuer’s PCR has not successfully completed testing to receive field 104 in TLV format, V.I.P. declines the enhanced OCT request with a field 39 response code of **57** (transaction not permitted to cardholder).

Additional enhanced OCT requirements are specified in the descriptions for field 18 and field 43, positions 1–25.

STIP and Switch Advices: This field may be present in requests that STIP has processed on behalf of the issuer.

4.108.4 Field Edits

V.I.P. rejects 0100 or 0200 Original Credit Transactions received with Field 104, Usage 2, Dataset ID 57—Business Application Identifier (BAI) with reject code **0494** if:

- BAI is missing
- BAI is invalid
- BAI is spaces

NOTE

Except where permitted, OCTs must be submitted as 0200 messages.

For installment payment transactions, V.I.P. rejects the message with reject code **0494** if Dataset ID 5D has invalid data or an invalid length. Tag 01 of this dataset cannot have a value greater than USD\$500,000.

For acquirers and originators that do not have an approved Visa Direct Program Information Form (PIF) in place, the following edits apply:

V.I.P. declines 0200 Original Credit Transactions from an acquirer or originator with response code **12** (Invalid transaction) if:

- Field 3—Processing Code is **26** (Original credit)
- Field 104 usage 2, Dataset ID 57, Tag 01—Business Application Identifier contains **AA** (Account to account), **BI** (Bank-initiated), or **PP** (Person to person) to indicate a money transfer OCT.
- The merchant, acquirer, and issuer are in the same country.
- The acquirer or originator cannot originate domestic enhanced money transfer OCTs based on client CORE setup.

V.I.P. declines 0200 Original Credit Transactions from an acquirer or originator with response code **12** (Invalid transaction) if:

- Field 3—Processing Code is **26** (Original credit)
- Field 104 usage 2, Dataset ID 57, Tag 01—Business Application Identifier contains **AA** (Account to account) or **PP** (Person to person) to indicate a money transfer OCT.
- The merchant, acquirer, and issuer are not in the same country.
- The acquirer or originator cannot originate cross-border enhanced money transfer OCTs based on client CORE setup.

V.I.P. declines 0200 Original Credit Transactions from an acquirer or originator with response code **12** (Invalid transaction) if:

- Field 3—Processing Code is **26** (Original credit)
- Field 104 usage 2, Dataset ID 57, Tag 01—Business Application Identifier does not contain **AA** (Account to account), **BI** (Bank-initiated), or **PP** (Person to person) to indicate a money transfer OCT.
- The merchant, acquirer, and issuer are in the same country.
- The acquirer or originator cannot originate domestic non-enhanced money transfer OCTs based on client CORE setup.

V.I.P. declines 0200 Original Credit Transactions from an acquirer or originator with response code **12** (Invalid transaction) if:

- Field 3—Processing Code is **26** (Original credit)
- Field 104 usage 2, Dataset ID 57, Tag 01—Business Application Identifier does not contain **AA** (Account to account) or **PP** (Person to person) to indicate a money transfer OCT.
- The merchant, acquirer, and issuer are not in the same country.
- The acquirer or originator cannot originate cross-border non-enhanced money transfer OCTs based on client CORE setup.

NOTE

The Business Application Identifier (BAI) value of BI is only for U.S. domestic enhanced money transfer OCTs.

4.108.5 Reject Codes

0494 = Field or data missing or invalid

4.108.6 Valid Values

See "Usage."

4.109 Field 115—Additional Trace Data

4.109.1 Attributes

variable length
1 byte, binary +
up to 24 ANS, EBCDIC; maximum: 25 bytes

4.109.2 Description

Field 115 contains additional tracing information for proprietary use. This field is defined as a national-use field by ANSI and adopted by Visa. The length specifies the number of bytes that follow the length subfield.

4.109.3 Usage

This additional tracing information is provided in outgoing requests and advices at the acquirer's option or by the switch of an acquiring network. The information must be returned unchanged in the related response or advice response, regardless of the number of times its content may change because of the message passing through different networks.

This field is not used by issuers. If it is present in a request from an acquirer, V.I.P. removes it before forwarding the message to the issuer. V.I.P. replaces the field and its unchanged content in responses before they are returned to the acquirer.

If this field is present in an 0302 file request, it is returned in the 0312 response.

Auto-CDB: This field does not appear in 0322 or 0332 messages.

4.109.4 Field Edits

None.

4.109.5 Reject Codes

None.

4.110 Field 116—Card Issuer Reference Data

4.110.1 Attributes

variable length
1 byte, binary +
255 bytes (510 hex digits); variable by usage; maximum: 256 bytes

4.110.2 Description

This field allows for multiple datasets in TLV format. These datasets can have multiple TLV subfields. The TLV format is shown below.

Positions:			
	1	2–3	4–255
Subfield 1: length	Subfield 2: dataset ID	Subfield 3: dataset length	Subfield 4: TLV elements
			<div><div>TagLengthValue</div><div>TLV₁</div><div>TagLengthValue</div><div>TLV_N</div></div>
Byte 1	Byte 2	Byte 3–4	Byte 5–256

Length Subfield: This value is the total length of field 116.

Position 1, Dataset ID: This one-byte binary subfield contains a hexadecimal value that identifies the TLV data that follows.

- [Dataset Value Hex 66, American Express Clearing Data](#)
- [Dataset Value Hex 67, MasterCard Clearing Data](#)
- [Dataset Value Hex 68, Diners Club Clearing Data](#)
- [Dataset Value Hex 68, Discover Clearing Data](#)

Positions 2–3, Dataset Length: The length of the TLV subfields that follow.

Positions 4–255, TLV Elements: Each subfield in a dataset will have a defined tag, length, and value. The tag is used in conjunction with the dataset ID value. Each subfield can be present in random order with other TLV subfields.

4.110.3 Usage

IMPORTANT

Endpoints that support this field must be able to receive dataset IDs and tags defined for this field in random order, including those they do not recognize or expect. Endpoints can receive multiple datasets in this field. Endpoints must ignore dataset IDs or tags they do not recognize and continue to process the field.

V.I.P. adds this field to 0110 responses generated by American Express and MasterCard. V.I.P. forwards this field for 0110 responses generated by Diners Club and Discover. The field is not added to reversals or other messages.

Acquirers who subscribe to field 116 will receive data from the respective networks (as specified in the tag descriptions below). This data may be required in downstream processing, such as clearing and settlement messages sent to American Express, MasterCard, Diners Club, or Discover.

NOTE

Dataset IDs available in authorization response messages are unique by brand and mutually exclusive. For the Authorization Gateway Service (AGS), four dataset IDs are available: American Express, MasterCard, Diners Club, and Discover. Each unique dataset ID may contain one or more data elements, but will only contain data for that brand.

Table 4-99 Dataset Value Hex 66, American Express Clearing Data

Tag	Value	Length	Format	Comment
Tag 01	American Express Point-of-Service Data Code	12	AN	<p>V.I.P. creates this subfield as part of the mapping performed by the Authorization Gateway Service (AGS). The subfield contains information from data field 22, which was included in the authorization request to American Express. V.I.P. populates this field in the response with the same value as sent to American Express in the request.</p> <p>Position 10 of this tag contains the value of 3 (Integrated Circuit Card (ICC)) in responses if positions 1–2 of field 22 contain 05, 07, 91, or 95.</p> <p>When acquirers submit contactless and e-commerce transactions destined to the American Express gateway, the response will contain one of the following values:</p> <p>X = Contactless transaction. These include American Express expresspay transactions.</p> <p>9 = Internet-originated, with delivery mode unknown or unspecified.</p> <p>Contact your American Express account executive.</p>

Table 4-100 Dataset Value Hex 67, MasterCard Clearing Data

Tag	Value	Length	Format	Comment
Tag 01	MasterCard Point-of-Service (POS) Entry Mode	3	UN	V.I.P. creates this and the next two subfields as part of the mapping performed by the Authorization Gateway Service (AGS). This subfield contains data from CIS DE 22, which was included in the authorization request to MasterCard. V.I.P. populates this field in the response with the same value as sent to MasterCard in CIS DE 22 in the request.
Tag 02	MasterCard Point-of-Service (POS) Personal ID Number (PIN) Capture Code	2	UN	This subfield contains data from CIS DE 26, which was included in the authorization request to MasterCard. V.I.P. populates this field in the response with the same value as sent to MasterCard in CIS DE 26 in the request.
Tag 03	MasterCard Point-of-Service (POS) Data	Variable, 26 bytes	AN	<p>This subfield contains data from CIS DE 61, which was included in the authorization request to MasterCard. V.I.P. populates this field in the response with the same value as sent to MasterCard in CIS DE 61 in the request.</p> <p>Values are:</p> <ul style="list-style-type: none"> 0 = Unknown or unspecified 1 = No terminal used (voice/ARU authorization)¹ 6 = Key entry only
Tag 04	Date and Time Format: <i>MMDDhhmmss</i>	10	AN	<p>This subfield contains the date and time when the 0120 confirmation advice was received by the issuer or MasterCard.</p> <p>If sent by MasterCard, the date and time in the 0130 response is mapped by V.I.P. from MasterCard DE 48.15.</p> <p>This data must be supported by acquirers processing MasterCard AFD transactions in the Canada and U.S. regions.</p>

Table 4-100 Dataset Value Hex 67, MasterCard Clearing Data (continued)

Tag	Value	Length	Format	Comment
Tag 05	MasterCard Data Element (DE) 48, Subelement 42— Electronic Commerce Indicators	7 — 19	N	<p>When the 0100 authorization request is processed successfully this tag contains the security-level indicator for issuer-authenticated DSRP transactions in 0103xyz format, where:</p> <ul style="list-style-type: none"> • Positions 1–4, contains a value of 0103 denoting the subfield and length of data that follows • Position 5, security protocol, represented by x • Position 6, cardholder authentication, represented by y • Position 7, UCAF collection indicator, represented by z <p>When the 0100 authorization is unsuccessful this tag contains the security-level indicator for issuer-authenticated DSRP transactions along with the reason of downgrade in 0103xyz0203xyz0301a format, where:</p> <ul style="list-style-type: none"> • Positions 1–4, contains a value of 0103 denoting the subfield and length of data that follows² • Position 5, security protocol, represented by x • Position 6, cardholder authentication, represented by y • Position 7, UCAF collection indicator, represented by z • Positions 8–11, contains a value of 0203 denoting subfield and length of data that follows³ • Position 12, security protocol, represented by x • Position 13, cardholder authentication, represented by y • Position 14, UCAF collection indicator, represented by z • Positions 15–18, contains a value of 0301 denoting subfield and length of data that follows⁴ • Position 19, contains the reason for downgrade represented by a and contains a value of 0 (missing UCAF) or 1 (invalid UCAF): <p>When present in 0110 responses, the first subfield (positions 5–7) contains the electronic commerce indicators that must be used by the acquirer in clearing records.</p>

1. MasterCard recommended value
2. This data contains the modified Electronic Commerce Security Level Indicator and UCAF Collection Indicator
3. This data contains the original Electronic Commerce Security Level Indicator and UCAF Collection Indicator
4. This data contains the reason for UCAF Collection Indicator downgrade

Table 4-101 Dataset Value Hex 68, Diners Club Clearing Data

Tag	Value	Length	Format	Comment
Tag 01	Network Information	Variable, 29 bytes	AN	V.I.P. forwards this field as received from the Issuer. This subfield contains network information that was included in the authorization response from Diners Club.
Tag 02	Transaction Qualifier	Variable, 46 bytes	AN	This subfield contains the transaction qualifier value from Diners Club.

This dataset is used in 0110 responses.

Acquirers that process Diners Club transactions in the countries listed below must support the use of this dataset. (Acquirers that process Diners Club transactions outside of the countries listed below do not need to support field 116 at this time.)

Antigua & Barbuda	Bermuda	Grenada	Puerto Rico
Aruba	Canada	Mexico	Turks and Caicos
Bahamas	Dominica	Montserrat	United States
Barbados	Dominican Republic	Netherlands Antilles	U.S. Virgin Islands

For information regarding VisaNet support of Diners Club authorization processing, contact your VisaNet representative.

For information regarding settlement of Diners Club transaction processing through the Discover Network, contact your Discover Network account executive.

Table 4-102 Dataset Value Hex 68, Discover Clearing Data

Tag	Value	Length	Format	Comment
Tag 01	Network Information	Variable, 29 bytes	AN	V.I.P. forwards this field as received from the Issuer. This subfield contains network information that was included in the authorization response from Discover.
Tag 02	Transaction Qualifier	Variable, 46 bytes	AN	This subfield contains the transaction qualifier value from Discover.

Acquirers that process Discover transactions through VisaNet must support this dataset in 0110 responses.

For information regarding VisaNet support for Discover authorization processing, contact your VisaNet representative.

For information regarding settlement of Discover transaction processing through the Discover Network, contact your Discover Network account executive.

4.110.4 Field Edits

None.

4.110.5 Reject Codes

None.

4.111 Field 117—National Use

4.111.1 Attributes

variable length
 1 byte, binary +
 3 ANS, EBCDIC, +
 252 ANS, EBCDIC, variable by usage;
 maximum 256 bytes

4.111.2 Description

This national use field contains information unique to the processing of Visa transactions by source and destination centers in a given country. The field has the following usages:

- Usage 1—Japan
- Usage 2—Turkish National Data
- Usage 3—Sweden (Visa Europe Authorisation System only; see Visa Europe technical specifications)
- Usage 4—Colombia National Data

Although various usages and formats may be added by individual countries, the field contains a length subfield to specify the number of bytes that follow it, and two additional subfields as shown in the following layout.

	Positions: 1–3	4–x
length	country code	data
Byte 1	Bytes 2–4	Bytes 5–256

Length Subfield: This value is the number of bytes in the field after the length subfield.

Positions 1–3, Country Code: This value is the 3-byte EBCDIC country code for the issuer and acquirer. For codes, see the Country and Currency Codes appendix.

Positions 4–x, Data: This subfield contains additional card transaction processing information using the format and coding determined by joint agreement of those clients in the country specified by the country code.

4.111.3 Usage

This field is for national, domestic-only use, and the VIC forwards it to the destination center only if the source and destination centers are in the same country; otherwise, V.I.P. will remove the field from the message.

NOTE

This field is mandatory in countries with domestic programs that require it.

4.111.4 Field Edits

If the maximum field length is exceeded, the transaction is rejected with reject code **0166**.

If the country code in the field is not numeric, the transaction is rejected with reject code **0167**.

4.111.5 Reject Codes

0166 = Invalid length

0167 = Invalid country code (not numeric)

4.112 Field 117, Usage 1—Japan

4.112.1 Attributes

variable length
1 byte, binary +
3 ANS, EBCDIC, +
135 ANS, EBCDIC-K,
maximum 139 bytes

EBCDIC-K represents the 1-byte (8-bit) code definition for Japanese Katakana characters or Roman text used to describe names, places and words of Japanese origin.

4.112.2 Description

This national use field contains two subfields for information unique to the processing of Visa transactions by clients in Japan.

Positions:		
1–3		4–138
length	country code	data
Byte 1	Bytes 2–4	Bytes 5–139

Length Subfield: This value is the number of bytes in the field after the length subfield.

Positions 1–3, Country Code: This value is the 3-byte EBCDIC country code for the issuer and acquirer. For Japan this value must be **392**.

Positions 4–138, Free-Form Text: This subfield contains the Katakana or Roman text to be printed on the receipt. A maximum of **115** print characters may be present, plus a maximum of **20** nonprintable shift-in and shift-out indicators for changes to and from Katakana and alphanumeric characters. The Credit and Finance Information System (CAFIS) interface formats the text with five lines of **23** printable characters, depending on the response code returned by the issuer. The field length indicator tells the terminal when the end of the text is reached.

4.112.3 Usage

Usage 1 is supported for Japanese issuers in Japan domestic transactions only. It is optional in no-PIN 0110, 0410, and 0430 responses; it is not used in other messages.

4.112.4 Field Edits

The maximum length for field 117 cannot be exceeded, and the country code must be numeric.

4.112.5 Reject Codes

None.

4.113 Field 117, Usage 2—Turkish National Data

4.113.1 Attributes

variable length
1 byte, binary +
3 ANS, EBCDIC, +
50 ANS, EBCDIC,
maximum 54 bytes

4.113.2 Description

Field 117, usage 2 contains six subfields for information unique to the processing of Visa transactions by clients in Turkey.

Positions:					
	1–3	4–11	12–15	16–40	41–53
Length	Country Code	CMI	EFT	Merchant Name	Merchant City
Byte 1	Bytes 2–4	Bytes 5–12	Bytes 13–16	Bytes 17–41	Bytes 42–54

Length Subfield: This value is the number of bytes in the field after the length subfield.

Positions 1–3, Country Code: This value is the 3-byte EBCDIC country code for the issuer and acquirer. For Turkey, this value must be **792**.

Positions 4–11, Central Merchant Identifier (CMI): This subfield contains the Central Merchant Identifier. For ATMs, acquirers use a default value of **88888888**.

Positions 12–15, EFT: This subfield contains the Acquiring Institution Code.

Positions 16–40, Merchant Name: This subfield contains the name of the card acceptor or ATM location in Turkish.

Positions 41–53, Merchant City: This subfield contains the location city of the merchant in Turkish.

4.113.3 Usage

This field is optional in all 01xx and 04xx messages. It is not applicable for 06xx messages.

In original requests, if field 117 is present in the request with Turkish NNSS data and the acquirer is Turkey, the field is passed to the issuer only if the issuer country code is Turkey.

In responses, V.I.P. accepts field 117 with Turkey NNSS data if the issuer country code is Turkey. Field 117 is forwarded to the acquirer only if the acquirer country code is Turkey.

4.113.4 Field Edits

None.

4.113.5 Reject Codes

None.

4.114 Field 117, Usage 4—Colombia National Data

4.114.1 Attributes

variable length
1 byte, binary +
3 ANS, EBCDIC, +
123 ANS, EBCDIC,
maximum 127 bytes

4.114.2 Description

Field 117, usage 4 has a length subfield followed by two subfields containing information unique to the processing of Visa transactions by issuers and acquirers in Colombia.

Positions:		
1–3		4–126
length	country code	national net domestic token data
Byte 1	Bytes 2–4	Bytes 5–127

Length Subfield: This value is the number of bytes in the field after the length subfield.

Positions 1–3, Country Code: This 3–byte numeric subfield must contain a value of **170** (Colombia).

Positions 4–126, National Net Domestic Token Data: This variable-length alphanumeric subfield contains optional supplementary private information for Colombia National Net Settlement Service (NNSS) transactions sent from the acquirer to the issuer. The subfield should not contain all **spaces**.

4.114.3 Usage

This field is optional in 0100 authorization requests and related reversals, advices, and responses.

If an initial request or a reversal does not qualify for the Colombia NNSS and this field usage is present, BASE I will remove it from the message.

4.114.4 Field Edits

If positions 1–3 (country code) do not contain a value of **170**, V.I.P. rejects the request with reject code **0132**.

4.114.5 Reject Codes

0132 = Invalid country code

4.115 Field 118—Intra-Country Data

4.115.1 Attributes

variable length
1 byte, binary +
3 ANS, EBCDIC, +
252 ANS, EBCDIC,
maximum 256 bytes

4.115.2 Description

Field 118 is a national-use field for 0100 requests, reversals, and responses and is currently used for intra-country data as follows:

- Usage 1: Japan
- Usage 2: Korea
- Usage 3: Sweden (Visa Europe Authorization System only; see Visa Europe technical specifications)
- Usage 4: South Africa
- Usage 5: LAC

NOTE

The field layout for Usage 4 differs from the layout presented below. See "Usage 4."

The field comprises two basic subfields for information unique to the processing of Visa transactions by clients in a given country.

Positions:		
	1–3	4–x
length	country code	data
Byte 1	Byte 2–4	Byte 5–256

Length Subfield: This value is the number of bytes in the field after the length subfield.

Positions 1–3, Country Code: This value is the 3-byte EBCDIC country code for the issuer and acquirer. The country code must be a numeric ISO country code. See the Country and Currency Code appendix for codes.

Positions 4–x, Data: This subfield contains additional card transaction processing information by joint agreement of clients in the country identified by the country code, in the format and coding determined by those clients.

4.115.3 Usage

Field usage is conditional, and must be prearranged with Visa. Depending on country specifications, it can be used in POS and ATM 0100 and 0400 requests, responses, and advices. Its presence in an authorization response is optional.

If present in the original request, it is nevertheless optional in reversal requests and their responses. It can also be used in AFD requests, ATM balance inquiries. It is for CPS and non-CPS transactions.

Because it is for national use only, V.I.P. forwards this field to the destination center only if source and destination centers are in the same country.

STIP and Switch Advices: Field 118 is present in 0120 and 0420 advices if it was in the original request.

4.115.4 Field Edits

This field is optional for the countries that use it. There is no reject if the field is not present in an original request. There is also no reject if the field was present in the original but not in a reversal, or reversal response.

V.I.P. rejects the message with reject code **0144** if country code is not numeric.

4.115.5 Reject Codes

0144 = Invalid value

4.116 Field 118—Intra-Country Data (Usage 1: Japan)

4.116.1 Attributes

1 byte, binary +
 3 ANS, EBCDIC, +
 201 ANS, EBCDIC / EBCDIC-K,
 maximum 256 bytes

EBCDIC-K represents the 1-byte (8-bit) code definition for Japanese Katakana characters or Roman text used to describe names, places and words of Japanese origin.

NOTE

Contact your Visa representative.

4.116.2 Description

Usage 1 is a private national-use field entered by acquirers and issuers in Japan for Japan-domestic (intra-country) authorizations. The subfields are described below.

Positions:					
1–3	4–6	7	8–20	21–26	
Subfield 1: Length	Subfield 2: Country Code	Subfield 3: Authorization Response Code	Subfield 4: Message Type	Subfield 5: Terminal Identification Number	Subfield 6: Processing Date
Byte 1	Byte 2–4	Byte 5–7	Byte 8	Byte 9–21	Byte 22–27
27	28–29	30–34	35	36–40	41–47
Subfield 7: Entry Indicator	Subfield 8: Payment Mode	Subfield 9: Sales Slip Number	Subfield 10: Pre-approval Type	Subfield 11: Issuer Company Code	Subfield 12: Goods Code
Byte 28	Byte 29–30	Byte 31–35	Byte 36	Byte 37–41	Byte 42–48
48	49–55	56	57–82	83	84–88
Subfield 13: Field Separator	Subfield 14: Tax Amount	Subfield 15: Field Separator	Subfield 16: Payment Specifics	Subfield 17: Field Separator	Subfield 18: Reserved
Byte 49	Byte 50–56	Byte 57	Byte 58–83	Byte 84	Byte 85–89
89	90–158	159	160–196	197	198–203
Subfield 19: Field Separator	Subfield 20: JIS II Data (Front Stripe)	Subfield 21: Field Separator	Subfield 22: Back Magnetic Stripe Data	Subfield 23: Field Separator	Subfield 24: Authorization Authority
Byte 90	Byte 91–159	Byte 160	Byte 161–197	Byte 198	Byte 199–204
204	205–237	238	A shaded cell means that a reserved subfield must be omitted. A field separator value of 22 is required for each optional field whether or not each optional field is present.		
Subfield 25: Field Separator	Subfield 26: AID/DF Name	Subfield 27: Field Separator			
Byte 205	Byte 206–238	Byte 239			

Length Subfield: This value is the number of bytes in the field after the length subfield.

Positions 1–3, Country Code (Subfield 2): This value is the 3-byte EBCDIC country code which must match that in field 19 (Japan = **392**).

Positions 4–6, Authorization Response Code (Subfield 3): This value is the 3-character CAFIS error code. In 0100 requests and 0400 reversals, the value is **000**. Field 118, usage 1 is used by acquirers rather than field 39. It is never used by the TP or VisaNet connection.

Position 7, Message Type (Subfield 4): This value is a 1-position value:

- Banking data = 1
- Authorization data = 2

Positions 8–20, Terminal Identification Number (Subfield 5): This value is the 13-digit JCCA number.

Positions 21–26, Processing Date (Subfield 6): This value is the 6-digit processing date in the format YYMMDD.

Position 27, Entry Indicator (Subfield 7): This value is the account number source. See the following table.

Table 4-103 Field 118, Usage 1 Subfield 7 Indicators

Account Number Source	Indicator
Back stripe ISO	1
Front stripe JIS II	2
Manual	3
Back stripe JIS I	4
IC Chip Data	5

Positions 28–29, Payment Mode (Subfield 8): This value is a 2-digit code indicating the payment method. The content of this subfield relates to subfield 16, Payment Specifics. See the following table.

Table 4-104 Field 118, Usage 1 Subfield 8 Payment Modes

Payment Method	Code
One-time payment	10
Bonus (one-time) payment	21, 22, 23, 24
Installment payment	61
Integrated (Bonus + Installment) payment	31, 32, 33, 34
Revolving payment	80

Positions 30–34, Sales Slip Number (Subfield 9): This value is a 5-digit number from the current transaction (purchase or reversal).

Position 35, Pre-Approval Type (Subfield 10): This value is a 1-digit number:

- 0 = Normal (authorization with amount and clearing/settlement; data capture or paper draft)
- 1 = Negative card authorization (authorization only with **0** or **1** amount)

- 2 = Reservation of authorization (authorization only with amount)
- 3 = Cancel transaction
- 4 = Merchant-initiated reversal/refund transactions
- 5 = Cancel reservation of authorization
- 6 = Post authorization

Positions 36–40, Issuer Company Code (Subfield 11): This value is a 5-digit value comprising a 1-digit business location code and a 4-digit enterprise code, or zeros if no company code. A value is required for CAFIS transactions. CAFIS interface determines the processing company code.

Positions 41–47, Goods Code (Subfield 12): This value is a 7-digit, right-justified code that identifies the merchandise.

Position 48, Field Separator (Subfield 13): This value is a required entry of **22**.

Positions 49–55, Tax Amount (Subfield 14): This value is a 7-digit amount of the tax (tax amount is included in the field 4 total amount).

Position 56, Field Separator (Subfield 15): This value is a required entry of **22**.

Positions 57–82, Payment Specifics (Subfield 16): This value is a variable-length, 26-digit-maximum subfield for payment information. This field is required if subfield 8, Payment Mode, is present in the message, but not if subfield 8 is **10**, **21**, or **80**. The following table contains examples.

Table 4-105 Determining Field 118, Usage 1 Subfield 16 Payment Specifics Indicator

If Payment Mode (Subfield 8) Is:	The Payment Specifics Indicator Is:	Bytes
22	[4]	2
23	[5]	2
24	[4]+[5]+[5]	6 maximum
61	[1]+[2]	4
31	[1]+[2]	4
32	[1]+[2]+[3]	12
33	[1]+[2]+[4]+[5]+[5]	10 maximum
34	[1]+[2]+[4]+[5]+[3]+[5]+[3]	26 maximum

The following table shows field 118, usage 1 subfield 16 payment indicator names.

Table 4-106 Field 118, Usage 1 Subfield 16 Payment Indicator Names

Indicator	Name	Length	Contents
[1]	First billing month	2	01–12
[2]	Number of payments	2	01–99
[3]	Bonus amount	8	00000001–99999999
[4]	Number of bonus payments	2	01–06
[5]	Bonus month	2	01–12

Payment indicators are entered one after another; for example, if the payment mode is **24**, the number of Bonus Payments is **02**, and the Bonus months are **01** and **03** respectively, the subfield content is: **020103**.

When the number of bonus payments is **02** for codes **24** or **33**, the bonus month [5] is entered twice, for two bonus months. When the number of bonus payments is **02** for code **34**, the bonus month [5] and the bonus amount [3] are entered twice for two bonus months.

Position 83, Field Separator (Subfield 17): This value is a required entry of **22**.

Positions 84–88, Reserved (Subfield 18): This value is a 5-digit subfield reserved for future use.

Position 89, Field Separator (Subfield 19): This value is a required entry of **22**.

Positions 90–158, JIS II Data (Front Stripe) (Subfield 20): This value is a 69-digit subfield that must be present if the Entry Indicator (subfield 7) is present and contains **2**. Start and end sentinel, and LRC are not included. The first position is the ID mark.

Position 159, Field Separator (Subfield 21): This value is a required entry of **22**.

Positions 160–196, Back Mag Stripe Data (Subfield 22): This value is a 37-digit subfield for 0400 or 0410 reversals only that contains the back magnetic stripe data. Start and end sentinel, and LRC are not included.

Position 197, Field Separator (Subfield 23): This value is a required entry of **22**.

Positions 198–203, Authorization Authority (Subfield 24): This value is a 6-digit issuer-supplied approval code, which is passed to merchants via voice authorization processing when the POS terminal is unavailable. This subfield is used in post-authorization transactions only if the merchant provides an approval code.

Position 204, Field Separator (Subfield 25): This value is a required entry of **22**.

Position 205–237, AID/DF Name (Subfield 26): This 32 byte length-maximum EBCDIC-K value is used to identify which chip application was performed between the terminal and the chip product. The included values are the Application Identifier (AID) and the Dedicated File (DF) name. It is available to early- or full-option VSDC issuers.

Position 238, Field Separator (Subfield 27): This value is a required entry of **22**.

4.116.3 Usage

Field 118, usage 1, is used in Japan-domestic 0100 and 0400 messages when the issuer has successfully completed testing to receive it. If an acquirer sends field 118 in a request, the 0100 and 0400 messages contain the field if the issuer has set the indicator to receive it. The field may also be present in responses and advices. Issuers must include this field in all responses when they receive field 118 in the original message. Field contents vary depending on whether the front magnetic stripe data is present in the message. See the main field 118 field description's usage section.

NOTE

Beginning with subfield 12 (position 41), the remaining length of field 118 depends on the presence of optional fields.

For authorizations with front magnetic stripe data only, subfield 20, JIS II Data (Front Stripe) must be present in the message.

Issuers may include an additional response code in subfield 3 (positions 4 through 6).

STIP and Switch Advices: Field 118, usage 1 is present in an 0120 advice.

4.116.4 Field Edits

Length cannot exceed 255.

Positions 1–3 must be a numeric ISO country code; otherwise, V.I.P. rejects the message with reject code **0144**.

4.116.5 Reject Codes

0144 = Invalid value

4.117 Field 118—Intra-Country Data (Usage 2: Korea)

4.117.1 Attributes

variable length
1 byte, binary +
3 ANS, EBCDIC, +
132 ANS, EBCDIC,
maximum 256 bytes

4.117.2 Description

Usage 2 is a private national-use field entered by acquirers and issuers in Korea for Korea-domestic (intra-country) authorizations. The subfields are:

Positions:

1–3		4–5		6–13		14–28		29–40	
Subfield 1: Length	Subfield 2: Country Code	Subfield 3: Number of Installment Payments	Subfield 4: Local Authorization Number	Subfield 5: Merchant ID	Subfield 6: Merchant Business ID				
Byte 1	Byte 2–4	Byte 5–6	Byte 7–14	Byte 15–29	Byte 30–41				
41–52	53–64	65–76	77–89	90	91				
Subfield 7: Terminal ID	Subfield 8: Tax Amount	Subfield 9: Service Charge Amount	Subfield 10: Merchant Representative Resident Registration Number	Subfield 11: Cardholder Fee Indicator	Subfield 12: Merchant Fee Indicator				
Byte 42–53	Byte 54–65	Byte 66–77	Byte 78–90	Byte 91	Byte 92				
92–99	100–107	108–119	120–127	128–130	131–133				
Subfield 13: Merchant Payment Date (YYYYMMDD)	Subfield 14: Cardholder Settlement Date (YYYYMMDD)	Subfield 15: Purchase Reference Number	Subfield 16: Cardholder Payment Start Date (YYYYMMDD)	Subfield 17: Cardholder-Deferred Days	Subfield 18: Merchant-Deferred Days				
Byte 93–100	Byte 101–108	Byte 109–120	Byte 121–128	Byte 129–131	Byte 132–134				

Length Subfield: This value is the number of bytes in the field after the length subfield.

Positions 1–3, Country Code (Subfield 2): This value is the 3-byte EBCDIC country code which must match that in field 19 (Korea = **410**).

Positions 4–5, Number of Installment Payments (Subfield 3): This value is the 2-digit number of installment payments. The values are:

00 = one-time payment

02–60 = The number of installment payment months allowed (for example, **60** months)

If this subfield is not used, it must be space-filled.

Positions 6–13, Local Authorization Number (Subfield 4): This value is an 8-position authorization code provided by the issuer when a transaction is approved. For

Korea-domestic transactions, this subfield must be used instead of field 38. It must be zero-filled in the 0100 request. Response codes provided by each client begins with an asterisk *, followed by the 2-digit local response code (which may or may not be the same as the field 39 response code) with the remaining positions zero-filled.

Positions 14–28, Merchant ID (Subfield 5): This value is the 15-digit merchant identification number. The subfield is left-justified followed by spaces. If this subfield is not used, it must be space-filled.

Positions 29–40, Merchant Business ID (Subfield 6): This value is the merchant's 12-digit business identification. The subfield is left-justified followed by spaces. If there is no merchant business ID, the subfield must be space-filled.

Positions 41–52, Terminal ID (Subfield 7): This is a 12-digit value that identifies the acquirer's terminal. The subfield is right-justified with leading zeros if necessary. If this subfield is not used, it is zero-filled. The first 2 digits are used as the VANs ID.

Positions 53–64, Tax Amount (Subfield 8): This value is a 12-digit tax amount. The subfield is right-justified with leading zeros if necessary. The tax is included with the total transaction amount in field 4. If this subfield is not used, it must be zero-filled.

Positions 65–76, Service Charge Amount (Subfield 9): This value is a 12-digit service charge amount. The subfield is right-justified with leading zeros if necessary. The service charge is included with the total transaction amount in field 4. If this subfield is not used, it must be zero-filled.

Positions 77–89, Merchant Representative Resident Registration Number (Subfield 10): This value is a 12-digit number with leading zeros if necessary. If there is no value, the subfield is filled with zeros.

Position 90, Cardholder Fee Indicator (Subfield 11): This value is a 1-digit indicator. Values:

0 = Installment payment fee charge from merchant

1 = Installment payment fee charge from cardholder

If this subfield is not used, it must be space-filled.

Position 91, Merchant Fee Indicator (Subfield 12): This value is a 1-digit indicator. Values:

1 = Merchant fee charge from cardholder

2 = Merchant fee charge from merchant

If this subfield is not used, it must be space-filled.

Positions 92–99, Merchant Payment Date (Subfield 13): This value is the 8-digit cardholder payment date in the format YYYYMMDD. If this subfield is not used, it must be zero-filled.

Positions 100–107, Cardholder Settlement Date (Subfield 14): This value is the 8-digit merchant settlement date in the format YYYYMMDD. If this subfield is not used, it must be zero-filled.

Positions 108–119, Purchase Reference Number (Subfield 15): This value is the 12-digit retrieval reference number for business-to-business from field 37 of the current purchase transaction. The subfield is right-justified with leading zeros if necessary. If this subfield is not used, it must be zero-filled.

Positions 120–127, Cardholder Payment Start Date (Subfield 16): This value is the 8-digit cardholder payment start date in the format *YYYYMMDD*. If there is no date, zero-fill the subfield. If this subfield is not used, it must be zero-filled.

Positions 128–130, Cardholder-Deferred Days (Subfield 17): This value is the 3-digit number of days the cardholder can defer the payment start date. The subfield is right-justified with leading zeros if necessary. If there is no value, the subfield must be zero-filled.

Positions 131–133, Merchant-Deferred Days (Subfield 18): This value is the 3-digit number of days the merchant can defer the purchase date. The subfield is right-justified with leading zeros if necessary. If there is no value, the subfield must be zero-filled.

4.117.3 Usage

Field 118, usage 2 is used in 0100 and 0400 Korea-domestic requests and their 0110 and 0410 responses when the issuer has successfully completed testing to receive the field. The field is optional in responses. Field 19 must be 410. Issuers may include an authorization code in subfield 4 (positions 6–13). See the main field 118 field description's usage section.

The field 118 subfield presence for original requests is summarized below for the Korea usage. (See Chapter 5 in Volume 2 for complete message/field requirements.)

Position/Subfield	0100s	0110s	Comments
F118.1, Pos. 0: Length	M	M	The length subfield.
F118.2, Pos. 1–3: Country Code	M	M	
F118.3, Pos. 4–5: Number of Installment Payments	M	O	Space-filled if not used.
F118.4, Pos. 6–13: Local Authorization Code	zero-filled	M	Issuer provides code.
F118.5, Pos. 14–28: Merchant ID	M	O	Left-justified, space-filled.
F118.6, Pos. 29–40: Merchant Business ID	O	O	Left-justified, space-filled.
Field 118.7, Pos. 41–52: Terminal ID	M	O	Zero-filled if not used.
Field 118.8, Pos. 53–64: Tax Amount	O	O	Zero-filled if not used.
Field 118.9, Pos. 65–76: Service Charge Amount	O	O	Zero-filled if not used.
Field 118.10, Pos. 77–89: Merchant Representative Resident Registration Number	O	O	Zero-filled if not used.
Field 118.11, Pos. 90: Cardholder Fee Indicator	C	O	Space-filled if not used.
Field 118.12, Pos. 91: Merchant Fee Indicator	C	O	Space-filled if not used.
Field 118.13, Pos. 91–98: Merchant Payment Date	O	O	Zero-filled if not used.
Field 118.14, Pos. 100–107: Cardholder Settlement Date	O	O	Zero-filled if not used.
Field 118.15, Pos. 108–119: Purchase Reference Number	O	O	Zero-filled if not used. Value should not be copied from field 37; it should be a unique number in a B-to-B transaction.
Field 118.16, Pos. 120–127: Cardholder Payment Start Date	O	O	Zero-filled if not used.
Field 118.17, Pos. 128–130: Cardholder-Deferred Days	O	O	Zero-filled if not used.
Field 118.18, Pos. 131–133: Merchant-Deferred Days	O	O	Zero-filled if not used.

STIP and Switch Advices: Field 118, usage 1 is present in an 0120 advice.

4.117.4 Field Edits

Length cannot exceed **255**.

Positions 1–3 must be a valid numeric ISO country code; otherwise, V.I.P. rejects the message with reject code **0144**.

4.117.5 Reject Codes

0144 = Invalid value

4.118 Field 118—Intra-Country Data (Usage 4: South Africa)

4.118.1 Attributes

1 byte, binary +
 3N, 4-bit BCD (unsigned packed); 2 bytes +
 253 ANS, EBCDIC, up to 253 bytes;
 maximum: 256 bytes

4.118.2 Description

Usage 4 is a private national-use field submitted by acquirers and issuers in South Africa for South Africa-domestic (intra-country) authorizations. The field layout is as follows.

Positions:

1–4		5–x
Subfield 1: Length	Subfield 2: Country Code	Data
Byte 1	Byte 2–3	Byte 4–256

Length Subfield: This value is the number of bytes in the field after the length subfield.

Positions 1–4, Country Code: This value is a 3-byte right justified EBCDIC country code, which must match that in field 19 (South Africa = **710**).

Positions 5–x, Data: These positions are governed by a bitmap in the first 2 bytes, followed by bitmapped data in subfields 1–16. The following table shows the bitmap.

Table 4-107 Positions 5–x Bitmap

Bitmap		Byte 1								Byte 2							
		1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8
Subfield 1	Budget	✓															
Subfields 2–16	Reserved for future use		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

Subfields designated in the bitmap are defined as follows.

Subfield 1—Budget: Fixed length, 2 bytes, EBCDIC. Values for this subfield are **00** through **99**. When this subfield is present, bit 1 in the bitmap must be switched ON.

Subfields 2 through 16—Reserved for Future Use: These subfields are to be determined and approved by joint agreement of clients in South Africa.

4.118.3 Usage

Field 118, usage 4 is used in 0100 and 0400 South Africa-domestic requests and their 0110 and 0410 responses when the issuer has successfully completed testing to receive the field. The field is optional in responses. Field 19 must be **710**. See the main field 118 field description's Usage section.

STIP and Switch Advices: Field 118, usage 1 is present in an 0120 advice.

4.118.4 Field Edits

Length subfield cannot exceed **255**.

Positions 1–4 must be a numeric ISO country code; otherwise, V.I.P. rejects the message with reject code **0144**.

4.118.5 Reject Codes

0144 = Invalid value

4.119 Field 118—Intra-Country Data (Usage 5: LAC)

4.119.1 Attributes

variable length
1 byte, binary +
3 AN, EBCDIC, +
249 AN, EBCDIC, +
maximum 256 bytes

NOTE
Contact your Visa representative.

4.119.2 Description

Usage 5 is a private national-use field optionally used by acquirers and issuers in the LAC region to transmit prepaid program-level transaction data in domestic authorization and full financial messages that are initiated with a Visa prepaid product.

NOTE
A message is considered domestic if the acquirer, issuer, and merchant are in the same country.

The subfields are:

Positions:

1–3		4–6	7–256
Subfield 1: Length	Subfield 2: Country Code	Subfield 3: National program ID	Subfield 4: Prepaid program-level transaction data
Byte 1	Byte 2–4	Byte 5–7	Byte 8–256

Length Subfield: This value is the number of bytes in the field after the length subfield.

Positions 1–3, Country Code (Subfield 2): This value is a 3-byte numeric ISO country code for LAC.

Positions 4–6, National Program ID (Subfield 3): This value is a 3-character national program ID controlled by the LAC Visa prepaid office. The data in these positions is not edited.

Positions 7–256, Prepaid Program-level transaction data (Subfield 4): The data in these positions contains country or program data.

4.119.3 Usage

Field 118, usage 5 is used in 0100/0110/0120/0130 authorization request, STIP advice, and responses. It is also used in 0400/0410/0420/0430 reversal, acquirer advice, STIP advice, and responses.

Issuers and acquirers must have successfully completed testing according to program participation requirements to receive this field.

Activation is required to implement field 118, usage 5 for the first time.

NOTE

Activation of Field 118 also activates Field 117. Issuers must be prepared to receive Field 117 if it is sent by the acquirer.

V.I.P drops this field if message:

- Is not initiated with a Visa prepaid product.
- Is not domestic.
- Acquirer is not permitted to send this field.
- Issuer is not permitted to send this field.

STIP and Switch Advices: Field 118, usage 5 is present in an 0120 advice.

4.119.4 Field Edits

Length subfield cannot exceed **255**.

Positions 1–3 must be a numeric ISO country code; otherwise, V.I.P. rejects the message with reject code **0144**.

4.119.5 Reject Codes

0144 = Invalid value

4.120 Field 120—Auxiliary Transaction Data (TLV Format)

4.120.1 Attributes

variable length
1 byte, binary +
TLV Format: 255 binary and ANS, EBCDIC; maximum 256 bytes

4.120.2 Description

This field description contains transaction datasets presented in hex number order. The dataset IDs listed for position 1 can be used as a guide to the Usage section, which specifies the content for each dataset.

The datasets, which are in TLV format, can have multiple sub-elements. The TLV format is shown below.

Positions:			
	1	2–3	4–255
Subfield 1:	Subfield 2:	Subfield 3:	Subfield 4:
Length	dataset ID	dataset length	Verification Data TLV elements
			tlv1 tlvn
Byte 1	Byte 2	Bytes 3–4	Byte 5–256

Length Subfield: One-byte binary subfield that contains the number of bytes in this field. The maximum is **255**

Position 1, Dataset ID: This one-byte binary subfield contains a hexadecimal value that identifies the TLV data that follows. Values:

- [Dataset ID Hex 56, Device Parameters](#)
- [Dataset ID Hex 57, Wallet Parameters](#)

Positions 2–3, Dataset Length: This 2-byte binary subfield specifies the total length of the TLV fields present in the dataset. The length is variable, depending on the data that follows.

Positions 4–255, TLV Data: Each subfield of a dataset has a defined tag, length, and value. The tag is used in conjunction with the dataset ID value. The dataset subfields can be present in any order with other TLV subfields.

The TLV format can be used by all clients regardless of region.

4.120.3 Usage

The following subsection describes the usage for this field.

IMPORTANT

Endpoints that support this field in TLV format must be able to receive dataset IDs and tags defined for this field in any order, including those they do not recognize or expect. Endpoints can receive multiple datasets in this field. Endpoints must ignore dataset IDs or tags they do not recognize and continue to process the field.

Table 4-108 Dataset ID Hex 56, Device Parameters

Tag	Length	Value	Format	Content of Sub-Element
01	24	Device IMEI	AN	This tag contains the hardware ID of the device.
02	24	OS ID	AN	This tag indicates the build of velocity and risk rules.
03	1	Provisioning attempts on the device	N, BCD	This tag contains the number of provisioning attempts on the device within the last 24 hours.
04	2	Account-to-device bonding age	N, BCD	This tag contains the number of days the device was used by this account.
05	2	Device country	AN	This tag contains the two-character alpha ISO country code of the device at time of provisioning.
06	1	Token protection method	N, BCD	Token protection method values: <ul style="list-style-type: none"> • 1 (Software) • 2 (Transaction execution environment (TEE)) • 3 (Secure element (SE)) • 4 (Cloud) <p>NOTE: Cloud applies to electronic commerce only.</p>
07	1	Presentation type	N, BCD	Presentation type values: <ul style="list-style-type: none"> • 1 (Near field communication (NFC)—Host card emulation (HCE) or secure element (SE)) • 2 (Magnetic secure transmission) • 3 (QR—Consumer device) • 4 (QR—Consumer cloud)
08	24	Device serial number	AN	This tag contains the serial number of the mobile device.
09	1	Location source	N, BCD	Location source values: <ul style="list-style-type: none"> • 1 (WiFi) • 2 (Cellular) • 3 (GPS) • 4 (Other)
0A	5	Device time zone	AN	This tag contains the device time zone.
0B	1	Device time zone setting	N, BCD	Device time zone setting values: <ul style="list-style-type: none"> • 1 (Network set) • 2 (Consumer set)
0C	24	Device bluetooth media access control (MAC)	AN	This tag contains the MAC address for Bluetooth.

Table 4-108 Dataset ID Hex 56, Device Parameters (continued)

Tag	Length	Value	Format	Content of Sub-Element
0D	1	OS type	N, BCD	OS type values: <ul style="list-style-type: none"> • 1 (Android) • 2 (iOS) • 3 (Windows) • 4 (Blackberry) • 5 (Tizen) • 6 (Other)

Table 4-109 Dataset ID Hex 57, Wallet Parameters

Tag	Length	Value	Format	Content of Sub-Element
01	2	Wallet provider PAN age	N, BCD	Number of days that the user's PAN has been on file for the user.
02	2	User account age	N, BCD	Number of days since the user account for this user exists.
03	2	Wallet account age	N, BCD	Number of days since the user created the wallet account or started using the wallet.
04	2	Days since last activity	N, BCD	Number of days since the last activity on the account.
05	2	Number of transactions, last 12 months	N, BCD	Number of transactions on this account within the last 12 months.
06	2	Days since last account change	N, BCD	Number of days since account settings were changed.
07	1	Suspended cards in account	N, BCD	Number of cards suspended on the account.
08	2	Wallet account country	AN	Two-character alpha ISO country code of the accountholder.
09	1	Number of active tokens	N, BCD	Number of active tokens on this account.
0A	1	Number of devices with active tokens	N, BCD	Number of devices for this user with the same token.
0B	1	Number of active tokens on all devices	N, BCD	Number of active tokens for this user across all devices.
0C	1	Consumer entry mode	N, BCD	Consumer entry mode values: <ul style="list-style-type: none"> • 1 (Key-entered) • 2 (Camera captured) • 3 (Unkown)

This field is used in the following messages:

- 0100/0120 token activation request/STIP advice.
- 0600/0620 token notification online request/token notification advice when field 63.3 contains value **3700** (token create).

4.120.4 Field Edits

TLV Format: The field must be correctly formatted otherwise V.I.P. rejects the message with code **06** in field 39 and an error code in field 48, usage 1c.

4.120.5 Reject Codes

| None.

4.120.6 File Maintenance Error Codes

| None.

4.121 Field 121—Issuing Institution Identification Code

4.121.1 Attributes

variable length
1 byte, binary +
3–11 AN, EBCDIC; maximum: 12 bytes

4.121.2 Description

Field 121 is a Visa-defined private-use field that contains a code identifying the issuer when the issuer cannot be determined from the message's account number.

NOTE
Because field 121 is a private-use field, the institution ID is in EBCDIC, not in 4-bit BCD as in other institution ID fields (fields 32, 33, and 100).

The common code length is six digits, but it can vary to a length of **11** digits.

Positions:	
1–11	
length	issuing institution ID code
Byte 1	Byte 2–12

4.121.3 Usage

Field 121 applies only to Visa card account numbers that are not ISO-registered numbers (and thus may conflict with a registered number). The field is used in card transaction and file maintenance requests only after prior consultation with Visa. Allowable messages are POS and ATM authorization requests and ATM balance inquiries, their responses, and advices. The field is used in reversals if present in originals.

CPS: This field does not apply to CPS POS or ATM transactions.

Authorization request routing:

- The BIN-level option to route according to the data in this field must be set to “yes.”

STIP and Switch Advices: Field 121 is present in 0120 or 0420 advices if it was in the request.

4.121.4 Field Edits

Field 121 is required when a card account number in fields 102 or 103 includes alphabetic characters. The length subfield value must not exceed **11**. The value in this field must be numeric and must be an institution ID. If present in a request, this field must also be present in the response.

4.121.5 Reject Codes

0128 = Invalid length
0129 = Invalid value

0401 = Field missing

4.121.6 File Edits

None.

4.121.7 File Maintenance Error Codes

None.

4.122 Field 123—Verification Data

4.122.1 Attributes

variable length

1 byte, binary +

255 bytes, variable by usage; maximum 256 bytes

4.122.2 Description

Field 123 is a Visa private-use field for miscellaneous information that involves multiple uses and field formats for different types of transactions and messages.

- Field 123, Usage 1—Verification Data (Fixed Format)
- Field 123, Usage 2—Verification and Token Data (TLV Format)

4.122.3 Usage

See usage descriptions for this field.

4.122.4 Field Edits

See usage descriptions for this field.

4.122.5 Reject Codes

See usage descriptions for this field.

4.123 Field 123—Verification Data (Fixed Format)

4.123.1 Attributes

variable length
1 byte, binary +
Fixed Format: 29 ANS, EBCDIC; maximum 30 bytes

4.123.2 Description

Field 123 is a Visa-defined private-use field that contains information that is used for certain types of verification data, including selected portions of the cardholder's postal code and street address. All merchants whose acquirers subscribe to the Visa Address Verification Service may request postal code and street address verification for a cardholder.

This field has two subfields following the length subfield:

Positions:		
1–9		10–29
length	Postal code	cardholder street address
Byte 1	Bytes 2–10	Bytes 11–30

Length Subfield: This value is the number of bytes in this field after the length subfield.

Positions 1–9, Postal Code: This value is the 5-digit postal code (left-justified with 4 positions of right-space-fill), or 9-digit postal code.

See“U.K Domestic Transactions” in the Usage section.

Positions 10–29, Cardholder Street Address: This subfield contains **20** characters of street address. The acquirer converts spelled-out numbers to digits, left-justified with right space-fill. Examples of street addresses in this standard format are:

Address	Acquirer's Subfield Entry
One Elm St	1 Elm St
123 First St	123 1st St
89 25th Ave	89 25th Ave
22 Walnut St #23	22 Walnut St #23
P.O. Box 12345	P. O. Box 12345

See “U.K. Domestic Transactions” in the Usage section.

Fixed format data can be submitted in compressed or uncompressed form.

Issuers and acquirers outside the U.K. and U.S. must use TLV format. See field 123, usage 2.

NOTE

V.I.P. also converts issuer-generated AVS Result Codes to their counterparts when incompatible data standards are encountered. See Field 44.2, Address Verification Result Code.

Address verification can be requested only for Visa cards, Visa-approved U.S.-issuer proprietary or private label card types, and American Express, MasterCard, or Discover POS transactions. STIP performs address verification for Visa, proprietary, and private label transactions only. See Address Verification Service in *V.I.P. System Services*.

Data Compression

Issuers performing their own address verification can choose to have Visa forward the address data to them uncompressed or compressed. Compression is available *only* for Visa card transactions, not for MasterCard, American Express or Discover card transactions.

- *Uncompressed* data means that the issuer receives postal and street address data as the acquirer sent it, including non-numeric characters. Acquirers must forward at least **20** characters of uncompressed address data unless agreements on compatible compression methods have been established between acquirers and issuers.
- *Compressed* data means that alpha characters and special symbols in a street address have been removed, leaving only numeric values. The address verification services for U.S.- and U.K.-domestic transactions matches only on numerics.

V.I.P. has two compression algorithms, Leading Numerics and First Five Numerics, for data sent to issuers and for postal code and street address data stored in the cardholder database if issuers have chosen to have Visa perform Address Verification. V.I.P. also supports compression methods developed in the regions. For fixed format submissions, compressed data includes spaces necessary to fill out a subfield. Algorithms ignore special characters such as:

/ (forward slash)

\ (backward slash)

(number/pound sign)

- (hyphen in a hyphenated numeric; for example, 214-30)

This compression option applies to postal codes and street addresses except in the U.K., where postal code compression does not apply. See Address Verification Service in *V.I.P. System Services*.

4.123.3 Usage

This field is used in card-present and card-not-present 0100 authorization requests, and in 0120 advices if the issuer chooses to have it included. It is not used in responses or reversals. Address verification does not apply to incremental authorization requests.

If V.I.P. receives an authorization request containing field 123 for a non-AVS-card type, it removes the field before passing the request to the issuer. When V.I.P. receives the 0110 issuer response, it inserts a **U** (unavailable; issuer not an AVS participant) in Field 44.2, Address Verification Service Result Code.

If an acquirer requests the Address Verification Service without providing address data in field 123 of the request message, V.I.P. responds with AVS result code **N** in field 44.2. Transactions that involve AVS in CPS qualification receive Authorization Characteristics Indicator **N** (not qualified). This ensures that acquirers are not afforded a better CPS rate and chargeback protection when requesting address verification without supplying address data for the issuer to verify.

Except for the U.K., acquirers can use an 0100 message to request an address verification by itself or along with an authorization request. U.K. acquirers must include address verification requests with authorization requests.

U.K. Domestic Transactions: Issuer participation in AVS is mandatory. U.K. issuers must perform their own address verification. Issuer-unavailable transactions are routed to STIP according to issuer but address verification is not performed. A **U** is returned in field 44.2 for the AVS result code.

U.K. acquirers submit address data in the U.K. compressed format, subject to the following requirements:

- U.K.-domestic transactions use a U.K.-unique compression method.
- Address verification data from U.K. acquirers is forwarded unaltered to U.K. issuers.
- Address verification data from non-U.K. acquirers using the IDS (International Data Standard) format is converted to the U.K. format and forwarded to U.K. issuers.
- V.I.P. removes fixed format address verification data from requests bound for non-U.K. issuers.
- Address data in international transactions (U.K. merchants and acquirers to non-U.K. issuers) can be in TLV IDS format. See Field 123, usage 2," for TLV format.

U.S. Domestic Transactions: Acquirers may submit only the street address and postal code; the state is not required. Acquirers must forward uncompressed address data unless agreements on compatible methods have been established between acquirers and issuers. If data is compressed, the Leading Numerics algorithm must be used.

U.S. issuer participation in AVS is mandatory. U.S. issuers can choose to receive address data in compressed or uncompressed format. If compressed, the Leading Numerics algorithm or First Five Numerics algorithm can be used.

All Other Users: Participation by non-U.S. and non-U.K. issuers and acquirers is optional. All non-U.S. and non-U.K. clients must use the TLV format. Data sent by U.S. domestic or U.K. domestic acquirers to non-U.S./U.K. issuers is converted if necessary to the TLV format. See "Field 123, usage 2," for TLV format.

NOTE

Issuers performing their own address verification should choose to receive uncompressed data unless their verification approach is compatible with the Leading Numerics or First Five Numerics algorithms.

CPS: See the CPS POS chapters in *V.I.P. System Services* and the latest edition of the *U.S. Interchange Reimbursement Fee Rate Qualification Guide*. See the "Field 62.3" description for a list of possible downgrade reason codes.

Bill Payment Transactions (U.S. Only): AVS data is not required for CPS/Card-Not-Present transactions, to qualify for the CPS/Card-Not-Present Program.

Authorization Gateway Transactions—American Express: V.I.P. transfers field 123 uncompressed fixed-format data to American Express field 63 in the American Express request. Zeros are added to the right of five-digit Postal/ZIP codes to meet the nine-digit subfield requirement.

Authorization Gateway Transactions—MasterCard: V.I.P. transfers field 123 uncompressed fixed-format data to MasterCard DE 120.

See the *Authorization Gateway Service Cross-Reference Guide* for field-by-field data transfer descriptions between VisaNet-format dual-message 0100 authorization requests and responses, and American Express- and MasterCard-format authorization requests and responses.

Authorization Gateway Transactions—MasterCard POS Account Status Inquiry:

Acquirers may use fields 123 and 126.10 (CVV2 authorization request data) in account verification requests, where field 4 is a zero amount and field 25 = **51** (request for verification without authorization). For non-AFD transactions, account verification requests should be used instead of status checks.

See the *Authorization Gateway Service Cross-Reference Guide*.

STIP and Switch Advices: Field 123 is present in 0120 advices if it was in the request and the issuer chooses to receive it, whether the issuer or VisaNet performs the verification.

MasterCard Digital Secure Remote Payment: This field must be present in 0100 authorization request messages.

NOTE

If using Field 123 Usage 2—Verification & Token Data (TLV Format), Dataset ID 66, do not include Field 123 Usage 1—Verification Data (Fixed Format)

Visa Token Service: Fixed format AVS data must not be submitted for token processing.

4.123.4 Field Edits

Fixed Format: BASE I rejects 0100 authorization requests in which the length of this field exceeds **29** bytes. V.I.P. stops editing for numerics when:

- The first alpha character or space (not counting special characters) if within the first five numerics
- The fifth numeric
- The end of the street address field

If the issuer performs verification and opts to receive uncompressed address data, V.I.P. forwards the field as received from the acquirer.

4.123.5 Reject Codes

0137 = Invalid field length

4.124 Field 123, Usage 2—Verification & Token Data (TLV Format)

4.124.1 Attributes

variable length
1 byte, binary +
TLV Format: 255 binary and ANS, EBCDIC; maximum 256 bytes

4.124.2 Description

This field description contains transaction datasets presented in hex number order. The dataset IDs listed for position 1 can be used as a guide to the Usage section, which specifies the content for each dataset.

The datasets, which are in TLV format, can have multiple sub-elements. The TLV format is shown below.

Positions:

1	2–3	4–255
Subfield 1: Length	Subfield 2: dataset ID	Subfield 3: dataset length
		Subfield 4: Verification Data TLV elements
		<div><div>TagLengthValue</div><div>TLV₁</div><div>TagLengthValue</div><div>TLV_N</div></div>
Byte 1	Byte 2	Bytes 3–4
		Byte 5–256

Length Subfield: One-byte binary subfield that contains the number of bytes in this field. The maximum is **255**

Position 1, Dataset ID: This one-byte binary subfield contains a hexadecimal value that identifies the TLV data that follows.

- [Dataset ID Hex 66, Verification Data](#)
- [Dataset ID Hex 67, Activation Verification Data](#)
- [Dataset ID Hex 68, Token Data](#)

Positions 2–3, Dataset Length: This 2-byte binary subfield specifies the total length of the TLV fields present in the dataset. The length is variable, depending on the data that follows.

Positions 4–255, TLV Data: Each subfield of a dataset has a defined tag, length, and value. The tag is used in conjunction with the dataset ID value. The dataset subfields can be present in any order with other TLV subfields.

The TLV format can be used by all clients regardless of region.

4.124.3 Usage

The following subsections (in hex number order) describe the usages for this field.

IMPORTANT

Endpoints that support this field in TLV format must be able to receive dataset IDs and tags defined for this field in any order, including those they do not recognize or expect. Endpoints can receive multiple datasets in this field. Endpoints must ignore dataset IDs or tags they do not recognize and continue to process the field.

Table 4-110 Dataset ID Hex 66, Verification Data

Tag	Length	Value	Format	Content of Sub-Element
C0	9	Postal Code	AN	An EBCDIC postal/ZIP code, left justified. Postal/ZIP codes fewer than 9 alphanumeric characters in length do not require spaces. Numeric-only data is acceptable.
CF	40	Street Address	AN	An EBCDIC street address, left justified. Street addresses fewer than 40 characters in length do not require spaces. Alphabetic numbers in street addresses must be converted to numeric equivalents, for example, "twelve" is 12.
D4	26	Cardholder Name	ANS	This tag contains the cardholder name.

- Issuers and acquirers outside the U.K. and U.S. must use the TLV format.
- U.K. and U.S. acquirers can vary fixed and TLV formats from one transaction to the next depending on merchant support requirements.
- Issuers who support token processing must use the TLV format to send or receive AVS data.

NOTE

V.I.P. converts issuer-generated AVS result codes to their counterparts when incompatible data standards are encountered. See Field 44.2, Address Verification Result Code.

Address verification can be requested only for Visa cards, Visa-approved U.S.-issuer proprietary or private-label card types, and American Express, MasterCard, or Discover POS transactions. STIP performs address verification for Visa, proprietary, and private-label transactions only. See Address Verification Service in *V.I.P. System Services*.

Data Compression

Issuers performing their own address verification can choose to have VisaNet forward the address data to them uncompressed or compressed. Compression is available *only* for Visa card transactions, not for MasterCard, American Express or Discover card transactions.

- *Uncompressed* data means that the issuer receives postal and street address data as the acquirer sent it, including non-numeric characters. Acquirers must forward at least **20** characters of uncompressed address data unless agreements on compatible compression methods have been established between acquirers and issuers.
- *Compressed* data means that alpha characters and special symbols in a street address have been removed, leaving only numeric values. The address verification services for U.S.- and U.K.-domestic transactions matches only on numerics.

V.I.P. has two compression algorithms, Leading Numerics and First Five Numerics, for data sent to issuers and for postal code and street address data stored in the cardholder

database if issuers have chosen to have VisaNet perform Address Verification. V.I.P. also supports compression methods developed in the regions. For fixed format submissions, compressed data includes spaces necessary to fill out a subfield. No space-fill is required for TLV submissions. Algorithms ignore special characters such as:

- / (forward slash)
- \ (backward slash)
- # (number/pound sign)
- (hyphen in a hyphenated numeric; for example, 214-30)

This compression option applies to postal codes and street addresses except in the U.K., where postal code compression does not apply. See Address Verification Service in *V.I.P. System Services*.

Table 4-111 Dataset ID Hex 67, Activation Verification Data

Tag	Length	Value	Format	Content of Sub-Element
03	1	Activation Verification Result	AN	<p>This tag is present if field 63.3 contains message reason code 3712 or 3714.</p> <p>This tag contains one of the following OTP verification result and mobile banking application code values.</p> <p>1 = Successfully verified</p> <p>2 = Verification code expired</p> <p>3 = Verification code failed</p> <p>4 = Verification code missing</p> <p>5 = Verification code retries exceeded</p>
04	2	Active Account Management Velocity Checking Result	N	<p>This tag contains one of the following AAM Velocity Checking result values.</p> <p>02 = Time-to-live exceeded</p> <p>03 = Count exceeded</p> <p>04 = Amount exceeded</p>

Table 4-111 Dataset ID Hex 67, Activation Verification Data (continued)

07	2	Issuer Special Condition Code	AN	<p>This tag contains an issuer-assigned value.</p> <p>NOTE: For 0600 and 0620 issuer token notifications this tag is for messages with Field 63.3—Message Reason Code 3700—Token Create.</p>
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Table 4-112 Dataset ID Hex 68, Token Data

Tag	Length	Value	Format	Content of Sub-Element
1F31	4	Elapsed Time To Live	N	Elapsed time in hours since the current limited-use key (LUK) is provisioned on the device.
1F32	3	Count of Number of Transactions	N	Cumulative count of transactions for the current limited-use key (LUK).
1F33	7	Cumulative Transaction Amount	N	Cumulative total of transaction amounts in USD for the current limited-use key (LUK).
1F35	2	Total Number of Tokens for Token Inquiry Criteria	N, BCD	Total token count based on the token inquiry criteria.
01	13–19	Token	AN	Token that is used to replace the cardholder PAN and is a required data element for token processing.
02	2	Token Assurance Level	AN	Reserved for future use. This field contains spaces.
03	11	Token Requestor ID	N	Token requestor ID.
04	19	Primary Account Number, Account Range	ANS	<p>First nine digits of the cardholder PAN or the full cardholder PAN.</p> <p>V.I.P. forwards the cardholder PAN data to the acquirer in the original response message.</p> <p>Acquirers must not forward the first nine digits of the cardholder PAN or the full PAN to their merchants</p> <p>For MasterCard, this tag contains the full cardholder PAN in 0110 response messages.</p>
05	32	Token Reference ID	AN	Token reference ID.
06	4	Token Expiration Date	N	The date is in <i>yy</i> <i>mm</i> format, where <i>yy</i> = year (00–99) and <i>mm</i> = month (01–12).

Table 4-112 Dataset ID Hex 68, Token Data (continued)

Tag	Length	Value	Format	Content of Sub-Element
07	2	Token Type	AN	01 = ECOM/COF (e-commerce/ card on file). 02 = SE (secure element). 03 = CBP (cloud-based payment). 05 = E-commerce enabler 06 = Pseudo account
08	1	Token Status	AN	A = Active for payment I = Inactive for payment (not yet active) S = Temporarily suspended for payments D = Permanently deactivated for payments
0A	1	Last Updated By	AN	This tag is present in the response when the token is located.
0B	32	PAN Reference ID	ANS	Unique reference ID generated by Visa for the card account number. It is required in 0302 Token File Inquiry Messages if Field 2—Primary Account Number is not present.
1A	6–8	Activation Code	AN	This tag is present in the response when the token is located and contains obfuscated version of the activation code (OTP) on file. This tag is present when the activation code is expired. See activation code expiry date/time.
1B	12	Activation Code Expiry Date/Time	N, BCD	The format is <i>yymmddhhmmss</i> expressed in GMT.
1C	2	Activation Code Verification Attempts	N, BCD	Activation Code Verification Attempts.
1D	2	Number of Activation Codes Issued	N, BCD	Number of Activation Codes Issued.
10	2	Visa Token Score	N	Degree of risk associated with the token from 01–99 .
11	2	Visa Token Decisioning	AN	Results of the token provisioning decision. 00 = Provision and activate. 05 = Do not provision. 85 = Provision inactive state – requires further consumer authentication before activation.

Table 4-112 Dataset ID Hex 68, Token Data (continued)

Tag	Length	Value	Format	Content of Sub-Element
12	2	Number of Active Tokens	N	Number of device tokens currently active for this PAN.
13	2	Number of Inactive Tokens	N	Number of device tokens currently inactive (device tokens that have not been activated) for this PAN.
14	2	Number of Suspended Tokens	N	Number of device tokens that were activated, but are suspended for payments for this PAN.

This usage applies to the following messages:

- 0100/0110/0120/0130 authorization request, preauthorization request, STIP advice and responses.
- 0100/0110 acquirer token activation request and response.
- 0200/0210/0220/0230 full financial request, acquirer advice, STIP advice, BASE II advice, and responses.
- 0220/0230 adjustment advice, STIP advice, and responses.
- 0282 representment status advice.
- 0302/0312 token maintenance request and response.
- 0400/0410/0420/0430 reversal, partial reversal, reversal advice, and responses.
- 0400/0410/0420/0430 financial reversal, acquirer advice, issuer STIP advice, issuer switch advice, and responses.
- 0422/0432 chargeback and response
- 0422/0432/0480/0490 chargeback reversal, chargeback reversal status advice, and responses.
- 0620 issuer token notification advice.
- 9620 fraud notification request

Visa Token Service: Authorizations and full financial messages using iCVV convert service, early chip data or full chip data must include tags from Field 123, Usage 2, Dataset ID 68—Token Data.

This field must be used when submitting address verification data or token data.

Visa Token Convert Service: Field 123, Usage 2, Dataset ID 68—Token Data with Tags 01, 02, and 03 are required for application-based E-Commerce and NFC Visa payWave messages using the Visa Token Convert Service.

4.124.4 Field Edits

TLV Format: The field must be correctly formatted; otherwise, V.I.P. will reject it.

Nonoriginals and Exceptions: If address verification data is present in nonoriginals or exception items, V.I.P. rejects the message with reject code **0699**.

4.124.5 Reject Codes

0137 = Invalid AVS data length

0699 = Presence of PIN/Track/AVS data inconsistent with message type

4.125 Field 125—Supporting Information

4.125.1 Attributes

variable length

1 byte, binary +

255 bytes, variable by usage and subfield; maximum: 256 bytes

4.125.2 Description

Field 125 is a private-use field with the usages listed below. Usage 2 is supported for BASE I.

- Usage 1—Reserved for supporting information in fixed format.
- Usage 2—Supporting Information (TLV Format).
- Usage 3—This usage is no longer supported.
- Usage 4—VCRFS, Optional Text. Applies to SMS POS only.
- Usage 5—Additional Fraud Information (in 9620 fraud advices). Applies to SMS ATM, SMS POS, and Interlink only.
- Usage 6—POS Check Service Supporting Information (U.S. Only). Applies to SMS POS only.

The length subfield specifies the number of bytes in this field after the length subfield.

4.125.3 Usage

See usages V.I.P. System technical specifications.

4.125.4 Field Edits

Field edits vary by usage.

4.125.5 Reject Codes

Field reject codes vary by usage.

4.126 Field 125—Usage 2: Supporting Information (TLV Format)

4.126.1 Attributes

variable length
1 byte, binary +
255 ANS, EBCDIC; maximum: 256 bytes

4.126.2 Description

This field allows for multiple datasets in TLV format. Each dataset can have multiple TLV subfields. The TLV format is shown below.

Positions:			
1		2–3	4–255
Subfield 1: length	Subfield 2: dataset ID	Subfield 3: dataset length	Subfield 4: TLV elements
			<div><div>TagLengthValue</div><div>TLV₁</div><div>TagLengthValue</div><div>TLV_N</div></div>
Byte 1	Byte 2	Bytes 3–4	Bytes 5–256

Length Subfield: This one-byte binary subfield contains the number of bytes following the length subfield. The maximum value is **255**.

Position 1, Dataset ID: This one-byte binary subfield contains a hexadecimal value that identifies the TLV data that follows.

- [Dataset Value Hex 67, MagnePrint Data](#)
- [Dataset Value Hex 6B, Expanded Fleet Service \(CEMEA Region Only\)](#)
- [Dataset Value Hex 01, Token Device](#)
- [Dataset Value Hex 02, Wallet Provider](#)
- [Dataset Value Hex 03, Additional Original Data Elements](#)

Positions 2–3, Dataset Length: This 2-byte binary subfield specifies the total length of the TLV fields present in the dataset. The length is variable, depending on the data that follows.

Positions 4–255, TLV Elements: Each subfield of a dataset has a defined tag, length, and value. The tag is used in conjunction with the dataset ID value. The dataset subfields can be present in any order with other TLV subfields.

4.126.3 Usage

The following subsections (in hex number order) describe the usages for this field.

IMPORTANT

Endpoints that support this field in TLV format must be able to receive dataset IDs and tags defined for this field in any order, including those they do not recognize or expect. Endpoints must ignore dataset IDs or tags they do not recognize and continue to process the field.

Table 4-113 Dataset Value Hex 67, MagnePrint Data

Tag	Length	Value	Format	Content of Sub-Element
D0	54	MagnePrint Data	ANS	MagnePrint data is currently defined as 54 bytes of binary data.

This usage applies to card-present transactions that include the MagnePrint data with the magnetic stripe to prevent skimming.

This usage applies to card-present 0100 authorization requests only and is sent by participating acquirers only to participating issuers. It is optional in 0400 reversal requests for card-present authorizations. If present in reversal requests, it is forwarded to the participating issuer; otherwise, it is dropped at the VIC.

It is not used in incremental authorization requests, or in responses or 0420 reversal advices.

Table 4-114 Dataset Value Hex 6B, Expanded Fleet Service (CEMEA Region Only)

Tag	Length	Value	Format	Contents
01	4	Expanded Non-Fuel Product Code 1	AN	This tag contains the expanded non-fuel product code 1.
02	4	Expanded Non-Fuel Product Code 1 Quantity	N	This tag contains the expanded non-fuel product code 1 quantity.
03	12	Expanded Non-Fuel Product Code 1 Unit Cost	N	This tag contains the expanded non-fuel product code 1 unit cost.
04	4	Expanded Non-Fuel Product Code 2	AN	This tag contains the expanded non-fuel product code 2.
05	4	Expanded Non-Fuel Product Code 2 Quantity	N	This tag contains the expanded non-fuel product code 2 quantity.
06	12	Expanded Non-Fuel Product Code 2 Unit Cost	N	This tag contains the expanded non-fuel product code 2 unit cost.
07	4	Expanded Non-Fuel Product Code 3	AN	This tag contains the expanded non-fuel product code 3.
08	4	Expanded Non-Fuel Product Code 3 Quantity	N	This tag contains the expanded non-fuel product code 3 quantity.
09	12	Expanded Non-Fuel Product Code 3 Unit Cost	N	This tag contains the expanded non-fuel product code 3 unit cost.
0A	4	Expanded Non-Fuel Product Code 4	AN	This tag contains the expanded non-fuel product code 4.
0B	4	Expanded Non-Fuel Product Code 4 Quantity	N	This tag contains the expanded non-fuel product code 4 quantity.
0C	12	Expanded Non-Fuel Product Code 4 Unit Cost	N	This tag contains the expanded non-fuel product code 4 unit cost.

Table 4-114 Dataset Value Hex 6B, Expanded Fleet Service (CEMEA Region Only) (continued)

Tag	Length	Value	Format	Contents
0D	4	Expanded Non-Fuel Product Code 5	AN	This tag contains the expanded non-fuel product code 5.
0E	4	Expanded Non-Fuel Product Code 5 Quantity	N	This tag contains the expanded non-fuel product code 5 quantity.
0F	12	Expanded Non-Fuel Product Code 5 Unit Cost	N	This tag contains the expanded non-fuel product code 5 unit cost.
10	4	Expanded Non-Fuel Product Code 6	AN	This tag contains the expanded non-fuel product code 6.
11	4	Expanded Non-Fuel Product Code 6 Quantity	N	This tag contains the expanded non-fuel product code 6 quantity.
12	12	Expanded Non-Fuel Product Code 6 Unit Cost	N	This tag contains the expanded non-fuel product code 6 unit cost.
13	4	Expanded Non-Fuel Product Code 7	AN	This tag contains the expanded non-fuel product code 7.
14	4	Expanded Non-Fuel Product Code 7 Quantity	N	This tag contains the expanded non-fuel product code 7 quantity.
15	12	Expanded Non-Fuel Product Code 7 Unit Cost	N	This tag contains the expanded non-fuel product code 7 unit cost.
16	4	Expanded Non-Fuel Product Code 8	AN	This tag contains the expanded non-fuel product code 8.
17	4	Expanded Non-Fuel Product Code 8 Quantity	N	This tag contains the expanded non-fuel product code 8 quantity.
18	12	Expanded Non-Fuel Product Code 8 Unit Cost	N	This tag contains the expanded non-fuel product code 8 unit cost.

Acquirers that choose to submit fleet data from fuel merchants must include dataset ID 6B in 0100 authorization requests.

Table 4-115 Dataset Value Hex 01, Token Device

Tag	Length	Value	Format	Content of Sub-Element
01	2	Device Type	AN	00 = Unknown 01 = Mobile phone 02 = Tablet 03 = Watch 04 = Mobile phone or tablet
02	3	Device Language Code	AN	This tag contains a three-character language code that conforms with ISO 639 standards. An example would be eng (English).
03	48	Device ID	ANS	Contains Device ID
04	15	Device Number	N	This tag contains the full phone number or partial phone number when available.
05	16	Device Name	ANS	Contains Device Name
06	25	Device Location	ANS	This tag contains the obfuscated geographic location of the device or the coarse location of the device. Location is latitude/longitude with 4 digits of precision; for instance +37.7799/-122.4290. Precision is rounded off to a less granular level; for instance +37/-122 or +37.78/-122.43.
07	15	IP Address	ANS	This tag contains the IP address of the device at the time of the provisioning request. The value will be in the format: 255.255.255.255. Each octet (255) may be 1–3 digits in length.

It is used in the following message types:

- 0100/0110/0120/0130 token activation requests/responses and token STIP advices/responses.
- 0302/0312 token maintenance file request
- 0620/0630 token notification advice

Table 4-116 Dataset Value Hex 02, Wallet Provider

Tag	Length	Value	Format	Content of Sub-Element
03	1	Wallet Provider Risk Assessment	ANS	0 = Unconditionally approved. 1 = Conditionally approved with further verification. 2 = Not approved.

Table 4-116 Dataset Value Hex 02, Wallet Provider (continued)

Tag	Length	Value	Format	Content of Sub-Element
04	10	Wallet Provider Risk Assessment Version	ANS	This tag contains the Wallet Provider Risk Assessment Version.
05	2	Wallet Provider Device Score	N	This tag contains the value of 1–5 , with 5 being the most trusted.
06	2	Wallet Provider Account Score	N	This tag contains the value of 1–5 , with 5 being the most trusted.
07	30	Wallet Provider Reason Codes	ANS	<p>This tag contains 1 to 15 reason codes.</p> <p>01 = Cardholders' wallet account is too new relative to launch.</p> <p>02 = Cardholders' wallet account is too new relative to provisioning request.</p> <p>03 = Cardholders' wallet account/card pair is newer than date threshold.</p> <p>04 = Changes made to account data within the date threshold.</p> <p>05 = Suspicious transactions linked to this account.</p> <p>06 = Account has not had activity in the last year.</p> <p>07 = Suspended cards in the secure element.</p> <p>08 = Device was put in lost mode in the last 7 days for longer than the duration threshold.</p> <p>09 = The number of provisioning attempts on this device in 24 hours exceeds threshold.</p> <p>0A = There have been more than the threshold number of different cards attempted at provisioning to this phone in 24 hours.</p> <p>0B = The card provisioning request contains a distinct name in excess of the permitted threshold.</p> <p>0C = The device score is less than 3.</p> <p>0D = The account score is less than 4.</p> <p>0E = Device provisioning location outside of the cardholder's wallet account home country.</p> <p>0G = Suspect fraud.</p>

Table 4-116 Dataset Value Hex 02, Wallet Provider (continued)

Tag	Length	Value	Format	Content of Sub-Element
08	2	PAN Source	N	01 = Key-entered. 02 = On file. 03 = Mobile banking app.
09	32	Wallet Account ID	ANS	This tag contains the Wallet Account ID.
0A	32	Wallet Account E-mail Address	Hexidecimal	This tag contains the Wallet Account E-mail Address.

It is used in the following message types:

- 0100/0110/0120/0130 token activation requests/responses and token STIP advices/responses.
- 0302/0312 token maintenance file request
- 0620/0630 token notification advice

Table 4-117 Dataset Value Hex 03, Additional Original Data Elements

Tag	Length	Value	Format	Content of Sub-Element
03	8	Original Transaction Identifier	15 N,BCD	Original transaction identifier, right-justified, same format as field 62.2—Transaction Identifier (Bitmap Format).

It is used in the following message types:

- 0100 authorization
- 0120 advice
- 0200 full financial
- 0220 advice

NOTE

U.S. CPS incremental authorization request messages may be sent without either Field 62.2 —Transaction Identifier (Bitmap Format) or Field 125 Usage 2—Supporting Information (TLV Format).

4.126.4 Field Edits

The field length of the MagnePrint data must be **54** bytes.

4.126.5 Reject Codes

0715 = Incorrect data length

0716 = Length error (TLV format)

4.127 Field 125—Usage 4: VCRFS, Optional Text

4.127.1 Applies to

Usage 4 of field 125 applies to SMS POS only. See *V.I.P. System SMS POS (Visa & Visa Electron) Technical Specifications*.

4.128 Field 125—Usage 5: Additional Fraud Information

4.128.1 Applies to

Usage 5 of field 125 applies to SMS only. See *V.I.P. System ATM Technical Specifications*, *V.I.P. System SMS Interlink Technical Specifications*, or *V.I.P. System POS (Visa & Visa Electron) Technical Specifications*.

4.129 Field 125—Usage 6: POS Check Service Supporting Information (U.S. Only)

4.129.1 Applies to

Usage 6 of field 125 applies to SMS POS only. See *V.I.P. System SMS POS (Visa & Visa Electron) Technical Specifications*.

4.130 Field 126—Visa Private-Use Fields

4.130.1 Attributes

1 byte, binary +
variable by field
minimum: 10 bytes
maximum: 255 bytes

4.130.2 Description

Field 126 is a bitmapped, private-use field for services such as VSEC and CVV2.

Field 126 subfields are listed in the following table.

Table 4-118 Field 126 Subfields

Description	Bytes	Number of Positions	Format
Length Subfield	1	n/a	Binary
126.0 Field 126 Bitmap	8	64	Bit String
126.1 through 126.4 Unused—Reserved	155	155	ANS
126.5 Visa Merchant Identifier	8	8	AN
126.6 Cardholder Certificate Serial Number	17	1 + 16	Binary
126.7 Merchant Certificate Serial Number	17	1 + 16	Binary
126.8 Transaction ID (XID)	20	20	Binary
126.9 CAVV Data	20	20	Binary
126.10 CVV2 Authorization Request Data and American Express CID Data	6	6	AN
126.11 (n/a)	n/a	n/a	n/a
126.12 Service Indicators	3	24	Bit String
126.13 POS Environment	1	1	AN
126.14 (n/a)	n/a	n/a	n/a
126.15 MasterCard UCAF Collection Indicator	1	1	ANS
126.16 MasterCard UCAF Field	33	33	ANS
126.17 Unused (must not be specified)	n/a	n/a	n/a
126.18 Agent Unique Account Result	12	n/a	Binary
126.19 Dynamic Currency Conversion Indicator	1	1	ANS

NOTE

All possible field 126 subfields will never and can never be present in the same message.

4.130.3 Usage

E-Commerce: Field 126 and its subfields are used in card-not-present 0100 authorization requests if the request contains additional security information. The field is not returned in 0110 responses.

CAVV Verification Service: Field 126 is used in card-not-present 0100 authorization requests if the request contains additional security information. The field is not returned in 0110 responses.

How fields 126.8 and 126.9 are used depends on whether the Verified by Visa issuers' ACS is using Protocol 1.0.1 or Protocol 1.0.2.

- Protocol 1.0.1 supports full authentications only (where the merchant, acquirer, issuer and cardholder are all participating); the XID is sent in field 126.8 and the CAVV is sent in field 126.9. In the CAVV Verification Service this is referred to as Field 126.9, Usage 2.
- Protocol 1.0.2 supports authentications and attempts (when the cardholder or issuer are not participating); the CAVV and other authentication data is sent in field 126.9 in compressed format, but the XID, and therefore field 126.8, is not required but is optional. In the CAVV Verification Service, this is referred to as Field 126.9, Usage 3.

CVV2: The CVV2 value must be printed on the back of all Visa credit and debit cards generated after 1 January 1998, but participation in CVV2 is optional. Participating merchants enter the CVV2 values. Participating issuers must be able to accept and process the CVV2 data, and they can choose to have Visa perform CVV2 validation or not.

Field 126 is used if the 0100 authorization request contains CVV2 authorization data. This field is not returned in 0100 responses.

Recurring Payment: Field 126.13 is used for recurring payment indicators.

Check Acceptance (U.S. Only): Not applicable to field 126.

American Express/VisaNet Gateway: Field 126.10 contains the American Express Card Identifier (CID) and is used by Visa acquirers of American Express manually entered, card-not-present transactions to be sent to American Express through VisaNet. See the "Field 126.10-CVV2 Authorization Request Data" description.

4.130.4 Field Edits

See field 126.xx descriptions.

4.130.5 Reject Codes

See field 126.xx descriptions.

4.131 Field 126.0—Field 126 Bitmap

4.131.1 Attributes

64 N, bit string, 8 bytes

4.131.2 Description

Field 126.0 is a bitmap specifying which field 126 subfields are present.

Table 4-119 Field 126.0 Bitmap

Bitmap		Byte 1								Byte 2							
		1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8
126.1–126.4	Unused—Reserved	✓	✓	✓	✓												
126.5	Visa Merchant Identifier					✓											
126.6	Cardholder Certificate Serial Number (VSEC)						✓										
126.7	Merchant Certificate Serial Number (VSEC)							✓									
126.8	Transaction ID (VSEC)								✓								
126.9	CAVV Data									✓							
126.10	CVV2 Authorization Request Data and American Express CID Data										✓						
126.11	Unused (reserved; must not be specified)											✓					
126.12	Service Indicators												✓				
126.13	POS Environment													✓			
126.14	Unused—Reserved														✓		
126.15	MasterCard UCAF Collection Indicator															✓	
126.16	MasterCard UCAF Field																✓

Bitmap		Byte 3								Byte 4								Bytes 5–8
		1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8	n/a
126.17	Unused (must not be specified)	✓																
126.18	Agent Unique Account Result		✓															
126.19	Dynamic Currency Conversion Indicator			✓														
126.20	Reserved				✓													
126.21	Reserved					✓												
126.22–126.64	Unused (must not be specified)						✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	

4.131.3 Usage

This field must be present if any subfields are present.

4.131.4 Field Edits

This field must be present if any subfields are present. The bit switches for subfields marked as “unused” must not be present.

4.131.5 Reject Codes

The reject codes for field 126.0 are:

0180 = Invalid bitmap

4.132 Field 126.5—Visa Merchant Identifier

4.132.1 Attributes

fixed length
8 ANS, EBCDIC; 8bytes,

4.132.2 Description

Field 126.5 contains a unique identifier value assigned by Visa for each merchant included in the identification program.

NOTE

Issuers can obtain a list of Visa-assigned merchant identifiers from Visa Online (VOL).

4.132.3 Usage

This field is required for issuers and appears in authorization and full-financial messages for purchase transactions. It is present in domestic and cross-border transactions. It identifies transactions sent from a merchant with a unique Visa-assigned identifier. This field is optional for acquirers.

4.132.4 Field Edits

None.

4.132.5 Reject Codes

None.

4.133 Field 126.6—Cardholder Certificate Serial Number

4.133.1 Attributes

fixed length

1 byte, binary (number of significant digits) +

16 bytes, binary (32 hexadecimal digits), 17 bytes total

4.133.2 Description

Field 126.6 contains a value assigned to a Visa Secure Electronic Commerce (VSEC) cardholder certificate issued by the acquirer's certificate authority.

The first byte contains the number of significant hexadecimal digits from **1** to **32**. The number is right-justified and zero-filled if less than **16** bytes binary.

4.133.3 Usage

Field 126.6 is present in an 0100 authorization request. It is not returned in 0110 responses. It is not used in reversals. Issuers must have successfully completed testing to receive this field.

4.133.4 Field Edits

None.

4.133.5 Reject Codes

None.

4.134 Field 126.7—Merchant Certificate Serial Number

4.134.1 Attributes

fixed length

1 byte, binary (number of significant digits) +

16 bytes, binary (32 hexadecimal digits), 17 bytes total

4.134.2 Description

Field 126.7 contains a value assigned to a Visa Secure Electronic Commerce (VSEC) merchant certificate issued by the acquirer's certificate authority.

The first byte contains the number of significant hexadecimal digits from **1** to **32**. The number is right-justified and zero-filled if less than **16** bytes binary.

4.134.3 Usage

Field 126.7 is present in an 0100 authorization request. It is not returned in 0110 responses. It is not present in 0400 reversals. Issuers must have successfully completed testing to receive this field.

4.134.4 Field Edits

None.

4.134.5 Reject Codes

None.

4.135 Field 126.8—Transaction ID (XID)

4.135.1 Attributes

fixed length
binary, 20 bytes

4.135.2 Description

Field 126.8 contains a unique Visa Secure Electronic Commerce (VSEC) number—the transaction ID or XID—generated by the merchant server to identify the transaction. The XID is used in conjunction with field 126.9.

4.135.3 Usage

Field 126.8 is present in a CAVV Verification service or other e-commerce 0100 authorization request that requires the XID. The field is not required in 0400 reversals. V.I.P. drops the field, if present, from a reversal before sending the message to the issuer. It is not returned in 0110 or 0410 responses.

Issuers must have successfully completed testing to receive this field.

CAVV Verification Service: This field is present in full authentication requests according to field 126.9, usage 2; the XID is sent in field 126.8 and the CAVV is sent in field 126.9. This field is not required if field 126.9, usage 3, is being used.

CPS: See the CPS ATM and CPS POS chapters in *V.I.P. System Services* and the latest edition of the *U.S. Interchange Reimbursement Fee Rate Qualification Guide*.

NOTE

Although field 126.8 can be included in a CAVV Verification Service authorization request in which a VSDC card was used for authentication purposes, field 126.8 is not considered a VSDC field, and therefore is not shown in the VSDC tables in the Message Formats chapter.

Authorization Gateway Transactions—American Express Safekey: Acquirers that choose to support American Express Safekey processing for electronic commerce transactions must send this field in authorization requests.

Authorization Gateway Transactions—American Express Token Processing (U.S. Only): Acquirers must submit this field in 0100 authorization request messages containing token data. This field contains the token block B data.

NOTE

See the Authorization Gateway Services Cross Reference Guide or contact your Visa representative.

4.135.4 Field Edits

None.

4.135.5 Reject Codes

None.

4.136 Field 126.9—CAVV Data

4.136.1 Attributes

fixed length
binary, 20 bytes

4.136.2 Description

This is a multi-use field for Visa Secure Electronic Commerce transactions. It contains encrypted data for verification purposes depending on the Visa service involved.

Field 126, Usage 1: Reserved for future use.

Field 126, Usage 2: 3-D Secure CAVV.

Field 126, Usage 3: 3-D Secure CAVV, Revised Format.

Field 126, Usage 4: American Express Safekey.

4.136.3 Usage

See usages.

4.136.4 Field Edits

None.

4.136.5 Reject Codes

None.

4.137 Field 126.9—Usage 2: 3-D Secure CAVV

4.137.1 Attributes

fixed length

40 N, 4 bit BCD (unsigned packed); 20 bytes

4.137.2 Description

This field usage contains the Cardholder Authentication Verification Value (CAVV) for 3-D Secure transactions. The CAVV is a cryptographic value calculated by the issuer's Access Control Server (ACS) using the issuer's encryption key and related elements according to Protocol 1.0.1. The CAVV value is unique to the cardholder and to the transaction that was authenticated. The acquirer transfers the ACS data to this field when preparing the VisaNet request. Visa or the issuer verifies the CAVV to ensure that the issuer's ACS authenticated the cardholder for the transaction and that its contents have not been altered.

Positions:

1	2	3	4	5
3-D Secure Authentication Results Code	Second Factor Authentication Code	CAVV Key Indicator	CAVV Value	CAVV Unpredictable Number
Byte 1	Byte 2	Byte 3	Bytes 4–5	Bytes 6–7

See description below.

6.1	6.2	6.3
Card Sequence Number	Card Verification Results	Reserved
Bytes 8–9	Bytes 10–13	Bytes 14–20

Position 1, 3-D Secure Authentication Results Code: This 1-byte/2-BCD value is a 1-digit code indicating the result of the issuer's ACS authentication decision. A leading zero is required to pad the first unused half-byte of the 3D Authentication Results Code.

Table 4-120 Field 126.9, Usage 2, Position 1 Values

Code	Definition
0	Authentication successful (status Y)

Position 2, Second Factor Authentication Code: This 1-byte/2-BCD value is a 2-digit code, determined by the issuer's ACS based on the type of additional authentication performed. This value may indicate when a VSDC card is used. This value is determined by the second factor authentication.

Table 4-121 Field 126.9, Usage 2, Position 2 Values

Code	Definition
00	Not present
11	VSDC card used; cryptogram failed

Table 4-121 Field 126.9, Usage 2, Position 2 Values (continued)

Code	Definition
12	VSDC card used; cryptogram passed

Position 3, CAVV Key Indicator: This 1-byte/1-BCD value is a 1-digit code indicating the CAVV key set used to calculate the CAVV value. A leading zero is required to pad the first unused half-byte of the CAVV Key Indicator. This value is determined by the V.I.P. key ID.

Table 4-122 Field 126.9, Usage 2, Position 3 Values

Code	Definition
01	CAVV key set 1
02	CAVV key set 2

Position 4, CAVV: This 2-byte/3-BCD value is a 3-digit code generated by the issuer's ACS that may be used by the issuer to validate the authentication response during authorization. A leading zero is required in byte 4 to pad the first unused half-byte of the CAVV, for example, **0456**. This value is determined by the ACS and the keys loaded in V.I.P.

Position 5, CAVV Unpredictable Number: This 2-byte/4-BCD value is a 4-digit code used by the issuer's ACS to generate the CAVV.

Position 6.1 and Position 6.2: When a 3D-Secure transaction involves another method of authentication, such as a VSDC card, the positions 6.1 and 6.2 are formatted as shown below. Otherwise, the rest of the field (byte 8–20) is filled with binary zeros. If the first digit of the Second Factor Authentication Code is **1**, it indicates that a VSDC card was used and position 6 will contain the following VSDC authentication data:

Position 6.1, Card Sequence Number: This 2-byte/3-BCD value is a 3-digit code identifying the VSDC card's sequence number that distinguishes it from other cards having the same primary account number. A leading zero in byte 8 is required to pad the first unused half-byte of the Card Sequence Number, for example, **0123**.

When the number of digits is less than **3** digits, zero-fill byte 8 and pad the first unused half-byte of byte 9 with a zero, for example, **0002**. This value is determined by the second factor authentication.

Positions 6.2, Card Verification Results: This position is 4 bytes (binary). It contains a series of card-recorded offline and online processing indicators. This value is determined by the chip terminal. See field 134.3.

Positions 6.3, Reserved: Not used For VSDC—bytes 14–20 are zero-filled.

Table 4-123 Field 126.9 Example With 3-D Secure CAVV Data

Field	Value	Meaning
3-D Secure Authentication Results Code	00	Authentication successful
Second Factor Authentication Code	00	Non-VSDC card used
CAVV key Indicator	01	Key set 1 used
CAVV Output	0114	CAVV
CAVV Unpredictable Number	7993	

Table 4-123 Field 126.9 Example With 3-D Secure CAVV Data (continued)

Field	Value	Meaning
Card Sequence Number	0000	
Card Verification Results (CVR)	00000000	
Zero-fill	0000000000000000	

4.137.3 Usage

Field 126.9, Usage 2, applies to a CAVV Verification Service 0100 authorization request that is for full authentication; field 126.8 is included with the XID. The field is present in an 0100 authorization request. It is not returned in 0110 responses. It is not present in 0400 reversals. Issuers must have successfully completed testing to receive this field.

NOTE

See Usage 3 of this field for sending the Transaction ID (XID) and the CAVV together in compressed format.

CPS: See the CPS/ATM and CPS/POS chapters in *V.I.P. System Services* and the latest edition of the *U.S. Interchange Reimbursement Fee Rate Qualification Guide*.

NOTE

Although field 126.8 can be included in a CAVV Verification Service request in which a VSDC card was used for authentication purposes, field 126.8 is not considered a VSDC field, and therefore is not shown in the VSDC message format tables.

NOTE

If a request contains a CAVV and CVV2, CAVV validation takes precedence over CVV2 validation. See the CAVV Verification Service in V.I.P. System Services.

4.137.4 Field Edits

None.

4.137.5 Reject Codes

None.

4.137.6 Valid Values

Values are listed in the Description section by position.

4.138 Field 126.9—Usage 3: 3-D Secure CAVV, Revised Format

4.138.1 Attributes

fixed length
40 N, 4 bit BCD (unsigned packed); 20 bytes

4.138.2 Description

This field usage contains an Authentication Tracking Number (ATN) and the Cardholder Authentication Verification Value (CAVV) in compressed format for CAVV Verification Service transactions. The CAVV is a cryptographic value calculated by the issuer's Access Control Server (ACS) using the issuer's encryption key and related elements. The CAVV value is unique to the cardholder and to the transaction that was authenticated. The ATN replaces the need for the XID (field 126.8).

See Usage 2 of this field for sending only the CAVV in uncompressed format.

Positions:				
1	2	3	4	5
3-D Secure Authentication Results Code	Second Factor Authentication Code	CAVV Key Indicator	CAVV Value	Unpredictable Number
Byte 1	Byte 2	Byte 3	Bytes 4–5	Bytes 6–7
See description below.				
6	7	8		
Authentication Tracking Number	Version and Authentication Action	IP Address in Hex Format		
Bytes 8–15	Bytes 16	Bytes 17–20		

Position 1, 3-D Secure Authentication Results Code: This 1-byte/2-BCD value is a 1-digit code indicating the result of the issuer's ACS authentication decision. A leading zero is required to pad the first unused half-byte of the Verified by Visa Authentication Results Code. The value is determined from the Payer Authentication Request's (PAR's) transaction status.

First BCD digit = 0.

Table 4-124 Field 126.9 (Usage 3) Position 1, 3-D CAVV Secure Authentication Results Code

Status	CAVV ACS Result	CAVV ACS Result Definition	Associated Field 60.8 ECI
Y (Success)	0	Authentication successful (status Y)	5
U (Unable)	5	Authentication could not be performed (status U)	7

Table 4-124 Field 126.9 (Usage 3) Position 1, 3-D CAVV Secure Authentication Results Code (continued)

Status	CAVV ACS Result	CAVV ACS Result Definition	Associated Field 60.8 ECI
N (Failed)	9	Authentication failed (status N)	n/a issuer unable to authenticate cardholder; merchants are not permitted to submit these transactions for authorization
A (Attempt)	7	Acquirer attempt (status A); proof of authentication attempt generated for non-participating issuer or cardholder	6
N (Attempt—issuer ACS unavailable)	8	Acquirer attempt, issuer ACS not available (status A); proof of authentication attempt generated for participating issuer with server unavailable (Visa Proof of Attempts STIP)	6

NOTE

V.I.P. sets the field 44.13 code to 0 when field 126.9, position 1 is 5 or 9.

Position 2, Second Factor Authentication Code: This 1-byte/2-BCD value is a 2-digit code, determined by the issuer's ACS based on the type of additional authentication performed. This value may indicate when a VSDC card is used. This value is determined by the second factor authentication.

Table 4-125 Field 126.9, Usage 3, Position 2 Values

Code	Definition
00	3DS 1.0.2 or prior, All authentication methods
01	3DS 2.0 ¹ Challenge flow using static passcode
02	3DS 2.0 ¹ Challenge flow using One Time Passcode (OTP) via SMS method
03	3DS 2.0 ¹ Challenge flow using OTP via key fob or card reader method
04	3DS 2.0 ¹ Challenge flow using OTP via App method
05	3DS 2.0 ¹ Challenge flow using OTP via any other method
06	3DS 2.0 ¹ Challenge flow using Knowledge Based Authentication (KBA) method
07	3DS 2.0 ¹ Challenge flow using Out of Band (OOB) authentication with biometric method
08	3DS 2.0 ¹ Challenge flow using OOB authentication with App login method
09	3DS 2.0 ¹ Challenge flow using OOB authentication with any other method
10	3DS 2.0 ¹ Challenge flow using any other authentication method
11	Deprecated ²
12	Deprecated ³
98	3DS 2.0 ¹ Attempts server responding

Table 4-125 Field 126.9, Usage 3, Position 2 Values (continued)

Code	Definition
99	3DS 2.0 ¹ Frictionless flow

1. 3DS 2.0 refers to the 3DS 2.0 specification and all its subsequent versions.
2. This value is deprecated, formerly known as 11 (VSDC card used; cryptogram failed).
3. This value is now deprecated and was formerly known as 12 (VSDC card used; cryptogram passed).

Position 3, CAVV Key Indicator: This 1-byte/1-BCD value is a 1-digit code indicating the CAVV key set used to calculate the CAVV value. A leading zero is required to pad the first unused half-byte of the CAVV Key Indicator. This value is determined by the V.I.P. key ID.

Table 4-126 Field 126.9, Usage 3, Position 3 Values

Code	Definition
01	CAVV key set 1
02	CAVV key set 2
03–09	Reserved for Visa key(s)
10	US Region attempt server Visa key #1
11	US Region attempt server Visa key #2
12–99	Reserved for Visa key(s)

Position 4, CAVV: This 2-byte/3-BCD value is a 3-digit code generated by the issuer's ACS that may be used by the issuer to validate the authentication response during authorization. A leading zero is required in byte 4 to pad the first unused half-byte of the CAVV, for example, **0456**. This value is determined by the ACS and the keys loaded in V.I.P. (attempts only).

Position 5, Unpredictable Number: This 2-byte/4-BCD value is a 4-digit code that contains the four least significant digits for the authentication tracking number. The value is derived from the authentication tracking number by the ACS.

Position 6, Authentication Tracking Number (ATN). This 8-byte/16 BCD value is a 16-digit code generated by the issuer's ACS to identify the transaction.

Position 7, Version and Authentication Action: The left nibble of this 1-byte/1-BCD value identifies a version; the right nibble identifies the authentication action.

Table 4-127 Field 126.9, Usage 3, Position 7 Values

Code	Definition
Version	
0	Authentication action and cardholder IP address not present.
1	Authentication action and cardholder IP address present.
3	Visa Token Service Payment Requirements.
Authentication Value	
0	Standard authentication performed (no ADS or FYP performed).
1	ADS—registration authentication performed.

Table 4-127 Field 126.9, Usage 3, Position 7 Values (continued)

Code	Definition
2	<p>Forgot your password (FYP)—re-registration/re-authorization performed.</p> <p>NOTE: <i>If an invalid value is submitted for this position, Field 44.13—CAVV Results Code will be populated with a 0 (CAVV authentication results invalid) for U.S. issuers.</i></p>
4	Token authentication verification value (TAVV)—Token authentication verification performed.

Position 8, IP Address in Hex Format: This 4-byte value identifies the client IP address submitted in the authorization message from ACS. The IP address must be in hexadecimal format to fit in the field.

4.138.3 Usage

Field 126.9, Usage 3, applies to a CAVV Verification Service 0100 authorization request being submitted as an attempt or as a full authentication where the ATN is being used in place of an XID. The field is not present in subsequent reversals. It is not returned in 0110 or 0410 responses. Issuers must have successfully completed testing to receive this field.

CPS: See the CPS/ATM and CPS/POS chapters in *V.I.P. System Services* and the latest edition of the *U.S. Interchange Reimbursement Fee Rate Qualification Guide*.

NOTE

If a request contains a CAVV and CVV2, CAVV validation takes precedence over CVV2 validation. See the CAVV Verification Service in V.I.P. System Services.

Visa Token Service: This field is required with a value of **3** in position 7, byte 16 – version and authentication in e-commerce messages containing token data.

Visa Token Convert Service: This field is required with a value of **3** in position 7, byte 16 – version and authentication, for application-based e-commerce and NFC Visa payWave messages using the Visa Token Convert Service.

Field 126.9, usage 3, can contain the Token Authentication Verification Value (TAVV).

4.138.4 Field Edits

None.

4.138.5 Reject Codes

None.

4.138.6 Valid Values

Values are listed in the Description section by position.

4.139 Field 126.9—Usage 4: American Express Safekey/Token Processing

4.139.1 Attributes

fixed length
binary, 20 bytes

4.139.2 Description

This field contains the American Express Safekey information that Visa maps to DF 61, or data related to token processing.

Reference: See American Express documentation.

4.139.3 Usage

Acquirers that choose to support American Express Safekey processing for electronic commerce transactions must send this field in authorization requests and must include Safekey data in the correct format, including the plan type and number of installments.

American Express Token Processing (U.S. Only): Acquirers must submit this field in 0100 authorization request messages containing token data. This field contains the token block A data.

NOTE

See the Authorization Gateway Services Cross Reference Guide or contact your Visa representative.

4.139.4 Field Edits

None.

4.139.5 Reject Codes

None.

4.139.6 Valid Values

See American Express documentation.

4.140 Field 126.10—CVV2 Authorization Request Data

4.140.1 Attributes

fixed length
6 ANS, EBCDIC, 6 bytes

4.140.2 Description

Field 126.10 contains CVV2 data for the card-not-present CVV2 service, the manually entered card-not-present American Express Card Identifier (CID) or MasterCard CVC2 data, and the optional card-present CVV2 pass-through service.

Positions:		
1	2	3–6
Subfield 1: Presence Indicator	Subfield 2: Response Type	Subfield 3: CVV2 Value
Byte 1	Byte 2	Byte 3–6

NOTE
This field may be present in a card-present request, but V.I.P. does not consider card-present CVV2s as candidates for the CVV2 Verification Service.

Visa CVV2 Data:

Position 1, Presence Indicator: The merchant provides this code to indicate that the CVV2 value is on the card. The CVV2 values are described in the following table.

Table 4-128 Field 126.10, Position 1 Valid Values

Value	Description	Usage
0	CVV2 value not provided	Indicates that the merchant is not providing a CVV2 value for verification.
1	CVV2 value is present	Indicates that the merchant is providing the CVV2 value for verification.
2	CVV2 value is on the card but is illegible	Indicates that the merchant wants to provide the CVV2 value but cannot because the cardholder states that the value is illegible.
9	No CVV2 value on card	Indicates that the merchant wants to provide the CVV2 value but cannot because the cardholder states that there is no value on the card.

Position 2, Response Type: The merchant provides this code to indicate the type of response to be returned. Values:

- 0** = Only the normal response code in field 39 should be returned.
 - 1** = The normal response code in field 39 and the CVV2 result in field 44.10 should be returned.
- V.I.P. uses **0** (zero) as a default value when the response type is not **0** or **1**.

Positions 3–6, CVV2 Value: This value is the 3-digit value on the back of the Visa card in a unique, reverse italic font. The value helps detect fraud in non-PIN-based

transactions. This subfield is right-justified and filled with blanks. (Visa uses three digits while other card products can use four digits.)

MasterCard CVC2 or American Express, Discover Card, or Japan Credit Bureau (JCB) Cardholder Identification Data (CID): This field contains card verification data for non-Visa card transactions: American Express and Discover Cardholder Identification Data (CID), MasterCard Card Card Validation Code **2** (CVC2), and JCB Card Authentication Value **2** (CAV).

4.140.3 Usage

Visa, Card Not Present: Field 126.10 is present in a card-not-present 0100 authorization request. It is not returned in 0110 responses. CCV2 results are returned in field 44.10. Issuers must have successfully completed testing to receive this field. For nonparticipating issuers, Visa will remove this field from the request before forwarding it to the issuer.

NOTE

The card expiration date is used to determine which key set, if used.

CPS/Account Funding: This field must be present in the request. The value must be **1**, **2**, or **9** (downgrade reason code **PI**).

CPS program requirements for e-commerce transactions using stored-value cards include a CVV2 value. For stored-value cards that are to be refilled more than once, the CVV2 is required only in the initial funding request for the authorization or full financial request to qualify; subsequent transactions can also qualify for the CPS program without the CVV2 being present.

Authorization Gateway Transactions

This field is optional in non-Visa card 0100 requests.

American Express: Gateway maps the CID to American Express field 53 and sets American Express field 22.7 to **S** (key-entered, including the CID). The field is dropped if it contains hex zeros or spaces, or if the message includes Track 1 or Track 2. For responses, if field 126.10 was present in the request, field 44.10 in the response is set to **U** (issuer not participating).

Discover: If field 126.10 position 2 was **1** in the Visa 0100 request to the Discover issuer, the result code is transferred to field 44.10 in the Visa 0110 response to the acquirer, along with the field 39 response code.

JCB: JCB transactions use the VisaNet message format throughout. If the CAV is present in the request, the validation result code is returned in field 44.10. If the field was not present in the request, acquirers may receive field 39 response code **N7** (decline for CVV2 No Match) in addition to field 44.10 = **N** (CVV2/CAV no match), **P** (not processed), or **S** (CVV2/CAV should be on the card but the merchant indicates it is not).

MasterCard: For requests, the gateway maps the CVC2 to MasterCard DE 48.92. For CVC2 responses, if field 126.10 position 2 was **1**, the MasterCard result code is transferred to Visa field 44.10, which is included with field 39 in the Visa response.

NOTE

If MasterCard requests include CVC1 and CVC2 data, CVC1 processing supersedes CVC2 processing, and CVC1 results take precedence over CVC2 results.

See the *Authorization Gateway Service Cross-Reference Guide*.

Authorization Gateway Transactions—MasterCard POS Account Status Inquiry:

Acquirers may use fields 126.10 and 123 (verification data) in account verification requests, where field 4 is a zero amount and field 25 = **51** (request for verification without authorization). For non-AFD transactions, account verification requests should be used instead of status checks.

See the *Authorization Gateway Service Cross-Reference Guide*.

CVV2 Card-Present: Field 126.10 is present in a card-present 0100 authorization request and passed directly to participating issuers. It is not returned in 0110 responses. (V.I.P. does not populate field 44.10 or field 39 in the 0100 request or the 0110 response based on the field 126.10 data.)

NOTE

If a request contains a CAVV and CVV2, CAVV validation takes precedence over CVV2 validation. See the CAVV Verification Service in V.I.P. System Services.

CVV2 Verification-Only Requests: These U.S.-only requests are used to check CVV2 data in a card-present transaction at the point of sale. This is useful when the magnetic stripe cannot be read. Acquirers submit CVV2 verification-only 0100 request messages, with the CVV2 data to be verified in this field, a condition code of **51** in field 25, and a transaction amount of zero in field 4.

Issuers that perform their own CVV2 validation must be prepared to receive CVV2 verification-only requests. Issuer 0110 responses must contain a transaction amount of zero in field 4, a response code of **85**, and a CVV2 results value in field 44.10. If V.I.P. performs CVV2 validation on behalf of the issuer, V.I.P. will check the CVV2 in all eligible requests and provide results data in responses.

MasterCard Digital Secure Remote Payment: Field 126.10 must be present in 0100 authorization request messages.

Visa Token Service: For cloud-based payment transactions with Magnetic Secure Transmission (MST).

- Acquirers must not send field 126.10
- Issuers must not send field 126.10 in responses that contain CVV2 data

4.140.4 Field Edits

If this field is present, the value in position 1 must be **0, 1, 2, or 9**.

4.140.5 Reject Codes

0148 = Invalid value (position 1 not equal to **0, 1, 2, or 9**)

4.141 Field 126.12—Service Indicators

4.141.1 Attributes

fixed length
24 N, Bit string, 3 bytes

4.141.2 Description

Field 126.12 is a Visa private-use field containing a string of bit indicators, each defining a characteristic of the transaction.

Its current uses are listed below.

Clients must have successfully completed testing to send and receive this field in its entirety whether or not they participate in its service applications.

Transponder Indicator: To identify participating client transactions that use radio frequency (RF) devices to exchange information in certain attended and unattended environments. This is for MasterCard, American Express, and Visa transactions.

Relationship Indicator: To identify transactions originating from merchants participating in the Visa U.S.A. Relationship Manager Service that regularly collect recurring payments from customers.

Deferred Billing: To identify transactions from participating clients that use deferred billing. Participating and nonparticipating acquirers may include the field in requests.

Remote Terminal Indicator: Used in the UK and the U.S. to indicate that a transaction occurred at a remote terminal.

Digital Commerce Program Indicator: This indicator identifies merchants that participate in the Digital Commerce Program.

Positions:

1	2	3	4	5	6–24
Transponder Indicator	Relationship Participant Indicator	Deferred Billing Indicator	Remote Terminal Indicator	Digital Commerce Program Indicator	Reserved
Bit 1	Bit 2	Bit 3	Bit 4	Bit 5	

Position 1, Transponder Indicator: This code is provided by the merchant. Values:

- 0 = Not provided
- 1 = Transponder-initiated

Participating merchants put a value of **1** in this position when a transponder was used at the point of service. This also applies to MasterCard and American Express.

Position 2, Relationship Participant Indicator: This code is provided by the merchant. Values:

- 0 = Not provided

1 = Relationship Participant

A value of **1** indicates that the merchant and acquirer are service participants.

Position 3, Deferred Billing Indicator: This code is provided by the merchant through U.S. region acquirers to indicate that a Visa card transaction is to be billed on a deferred basis, that is, the cardholder is to be billed for merchandise received. Deferred Billing Indicator values are:

0 = Not provided

1 = Deferred Billing Transaction

The Deferred Billing Indicator is only for Visa card products.

Position 4, Remote Terminal Indicator: This code indicates that a UK-domestic or U.S.-acquired cash disbursement transaction occurred at a remote terminal (for example, an ATM machine that is not in a branch location). Position 4 is for all U.S. ATM originals. For network 4, this also includes deposits. UK and U.S. acquirers and issuers must support this capability. Values:

0 = Not provided

1 = Remote Terminal Indicator

Position 5, Digital Commerce Program Indicator: This code indicates that a merchant is enrolled in the Digital Commerce Program. Values:

0 = Not provided

1 = Digital Commerce Program Indicator

V.I.P. assigns the value of **1** in this position if the merchant is enrolled in the Digital Commerce Program.

Position 6–24, not applicable: These positions are set to all **zeros**.

4.141.3 Usage

Field 126.12 can be present in 0100 and 0400 requests and their responses. It is also present in 0120 STIP advices and 0420 reversal advices. Issuers must have successfully completed testing to receive this field regardless of usage. Issuers must be able to receive and process this field. If field 126.12 contains all **zeros**, V.I.P. drops it before forwarding the request.

This field can contain more than one indicator in a message with the unused positions filled with zeros. For instance, in one request, this field could contain a Transponder Indicator and a Deferred Billing Indicator. In this case, the Transponder Indicator would be in position 1, position 2 would be a zero, the Deferred Billing Indicator would be in position 3, and positions 6–24 would be zeros.

Field 126.12 is present in the following transactions.

- 0100/0110/0120/0130 authorization request, STIP advice, and responses
- 0400/0410/0420/0430 financial reversal, acquirer advice, issuer STIP advice, issuer switch advice, and responses

Authorization Gateway Transactions—American Express: This field applies to Transponder Indicator transactions. If this field is present in the request with the value **1** (transponder initiated), V.I.P. sets American Express field 22.7 = **W**. See the *Authorization Gateway Service Cross-Reference Guide* for field-by-field data transfer descriptions between VisaNet-format dual-message 0100 authorization requests and responses, and American Express- and MasterCard-format authorization requests and responses.

Authorization Gateway Transactions—MasterCard: If this field is present in the Visa request with **1** (transponder initiated), V.I.P. overlays current values in DE 61.10 with **7** and retains the values it overlays for responses. See the *Authorization Gateway Service Cross-Reference Guide*.

4.141.4 Field Edits

None.

4.141.5 Reject Codes

None.

4.142 Field 126.13—POS Environment

4.142.1 Attributes

fixed length
1 AN, EBCDIC; 1 byte

4.142.2 Description

This field may contain an indicator for:

- Recurring payments. The value in this field indicates that the cardholder and merchant have agreed to periodic billing for goods and services, such as utility bills and magazines, or
- Installment payments. The value in this field indicates that the message is being used for an installment payment.

4.142.3 Usage

The following subsections provide instructions for using recurring payment indicators and installment payment indicators.

Participating acquirers and issuers must have successfully completed testing to receive this field. Otherwise, V.I.P. drops it before forwarding the request to the issuer.

Recurring Payment Indicator: In authorization messages, the transaction indicator may appear in field 60.8 (value = **02**) or field 126.13 (value = **R**).

Field 126.13 is optionally included in the following messages (it is not used in responses):

- 0100 and 0120 original POS authorizations and advices
- 0400 and 0420 original POS reversals and reversal advices

A value of **02** in field 60.8 (positions 9 and 10) is mandatory for recurring payment transactions acquired in the U.S. region and optional for non-U.S.-acquired transactions. A value of **R** in field 126.13 is required for recurring payment transactions originating from a non-U.S. acquirer outside the U.S. region and optional for U.S. acquirers.

Unless otherwise specified by a region, acquirers may send recurring transaction values in field 60.8 and field 126.13.

If field 60.8 is not present in an interregional recurring transaction destined for a U.S. issuer, V.I.P. inserts field 60.8 with the value **02** if the transaction includes field 126.13 = **R**.

If field 126.13 is not present in a U.S.-originated recurring transaction destined for a non-U.S. issuer, V.I.P. inserts field 126.13 with a value of **R** if the transaction includes field 60.8 = **02**.

NOTE

*Issuers that choose STIP options for recurring payment transaction authorizations will receive a STIP advice with reason code **9035** (Process recurring payment in STIP) in Field 63.4—STIP/Switch Reason Code. Japanese issuers that choose verification only STIP or full STIP recurring payment authorizations will not have chargeback rights with chargeback reason code **72** (No authorization) for these transactions. Contact your Visa representative.*

Authorization Gateway Transactions—MasterCard: If this field is present with **R** and/or if field 60.8 is present with **02**, V.I.P. populates DE 61.4 with the value **4**. See the *Authorization Gateway Service Cross-Reference Guide* for field-by-field data transfer

descriptions between VisaNet-format dual-message 0100 authorization requests and responses, and American Express- and MasterCard-format authorization requests and responses.

Installment Payment Indicator: In non-U.S.-acquired transactions, **I** in field 126.13 indicates the message is for an installment payment. In U.S.-acquired authorizations, however, acquirers should use **03** in field 60.8.

This indicator is supported in the following messages:

- 0100/0120 authorization and STIP advice.
- 0400/0420 POS reversal, partial reversal, and reversal advice.

Additional installment payment information can be sent in field 104, usage 2.

Credential on File: Acquirers must submit a value of **C** when a merchant is initiating the first transaction in a series on behalf of the cardholder using credentials stored on file.

The credential on file indicator is supported in the following messages:

- 0100 authorization
- 0120 advice
- 0200 full financial
- 0220 advice
- 0400 reversal
- 0420 reversal advice

NOTE

U.S. CPS installment and recurring request messages, in addition to sending Field 126.13, must continue to send Field 60.8—Mail/Phone/Electronic Commerce and Payment Indicator or Field 63.6, position 4—Mail/Phone/Electronic Commerce (MOTO/ECI) and Payment Indicator to meet CPS qualification requirements.

4.142.4 Field Edits

If present in a request, the value must be **C**, **I**, or **R**.

4.142.5 Reject Codes

0175 = Invalid value.

4.142.6 Valid Values

Table 4-129 Field 126.13 Values

Code	Definition
C	Credential on file
I	Indicates that the message is for an installment payment.
R	Indicates that the cardholder and merchant have agreed to periodic billing for goods and services, such as utility bills and magazines.

4.143 Field 126.15—MasterCard UCAF Collection Indicator

4.143.1 Attributes

fixed length

1 ANS, EBCDIC; 1 byte

4.143.2 Description

This field contains an e-commerce indicator that MasterCard Universal Cardholder Authentication data is included in the message. The UCAF data is contained in field 126.16. Fields 126.15 and 126.16 can also contain MasterCard telephone order data.

4.143.3 Usage

This field may be present in 0100 authorization requests destined only for MasterCard issuers. V.I.P. transfers the indicator value to DE 48.42.3. If field 126.15 is not present but field 126.16 is, V.I.P. sets DE 48.42.3 = **2**. If neither field is present, V.I.P. sets DE 48.42 = **0**. If present in the request, field 126.15 may also be present in 0400 reversal requests. It is not present in 0120 or 0420 advices. It is not present in responses.

Acquirers may send full UCAF data with Digital Secure Remote Payment.

NOTE

MasterCard no longer requires UCAF data for e-commerce transactions; however, if this field is present in a message, VisaNet forwards information to or from MasterCard.

Telephone Orders with UCAF Data: Field 126.15 may be present in MasterCard telephone orders. See the *Authorization Gateway Service Cross-Reference Guide*.

4.143.4 Field Edits

If present, the request must be destined for a MasterCard issuer; otherwise, this field, along with field 126.16, is dropped from the message by V.I.P.

4.143.5 Reject Codes

None.

4.143.6 Valid Values

Table 4-130 Field 126.15 UCAF Values

Code	Definition
0	UCAF data collection is not supported at the merchant's website.
1	UCAF data collection is supported by the merchant and UCAF data may be available.
2	UCAF data collection is supported by the merchant, and the UCAF data is supplied in this authorization request.
3	Specialized UCAF data
5	Issuer risk-based decisioning (MasterPass transactions)
6	Merchant risk-based decisioning (MasterPass transactions)

Table 4-130 Field 126.15 UCAF Values (continued)

Code	Definition
7	Partial shipment or recurring payment

NOTE

*If the value in field 126.15 is **1**, the UCAF data can also be sent in field 126.16.*

4.144 Field 126.16—MasterCard UCAF Field

4.144.1 Attributes

variable length
1 byte, binary +
32 ANS, EBCDIC; maximum 33 bytes

4.144.2 Description

This field contains MasterCard e-commerce Universal Cardholder Authentication data in encrypted form. Field 126.15 contains the indicator. The field can also contain MasterCard telephone order data.

4.144.3 Usage

This field may be present in 0100 authorization requests destined only for MasterCard issuers, in which case V.I.P. transfers the data to DE 48.43 in the MasterCard request. If present in the request, this field may also be present in 0400 reversal requests. It is not present in 0120 or 0420 advices. It is not present in responses.

Acquirers may send full UCAF data with Digital Secure Remote Payment.

NOTE

MasterCard no longer requires UCAF data for e-commerce transactions; however, if this field is present in a message, VisaNet forwards information to or from MasterCard.

Telephone Orders with UCAF Data: Field 126.16 may be present in MasterCard telephone orders. See the *Authorization Gateway Service Cross-Reference Guide*.

MasterCard Digital Secure Remote Payment: Field 126.16 must contain the value **j** (MasterCard 3-D secure SPA AAV for first and subsequent transactions) for MasterCard 3D secure transactions in 0100 authorization request messages.

This field must contain a 28 character value of **PARTIALbSHIPMENTbbbbbbbbbbbb**, where **b** indicates a **space** for subsequent digital secure remote payment transactions in partial shipment authorizations. For such transactions, field 126.15 must contain a **7** (partial shipment or recurring payment).

4.144.4 Field Edits

If this field is present, there is a length check but no data edits. The length cannot be zero or greater than the currently defined maximum of **32** bytes. Otherwise, the request will be rejected with V.I.P.'s generic parse error code, 0400.

If this field is present, the request must be destined for a MasterCard issuer; otherwise, this field, along with field 126.15, is dropped from the message by V.I.P.

4.144.5 Reject Codes

0400 = Invalid length.

4.145 Field 126.18—Agent Unique Account Result

4.145.1 Attributes

Fixed length
binary value 11, 1 byte, +
5 ANS, EBCDIC, 5 bytes +
48 N bit string, 6 bytes
12 bytes total

4.145.2 Description

This field is used in POS transactions only; it is not used in ATM transactions.

Positions:		
1	2–6	7–12
Fixed Value	Agent Unique ID	Reserved
Byte 1	Bytes 2–6	Bytes 7–12

Position 1, Fixed Value: This position contains the binary value **11** (0B).

Positions 2–6, Agent Unique ID: For a Visa Checkout transaction, Visa requires the digital entity identifier value in the table below.

Table 4-131 Field 126.18, Positions 2–6, Digital Entity Identifier Values

Value	Description	Usage
VCIND	Visa Checkout	Indicates that the transaction was processed through Visa Checkout.

NOTE
V.I.P. forwards this value to issuers that receive this field to indicate the transaction was processed through Visa Checkout.

Positions 7–12, Reserved: Positions 7–12 are not used. For Visa Checkout, positions 7–12 must be included and must be set to all **zeros (000000)**.

4.145.3 Usage

Visa Checkout: This field must contain **VCIND**. Acquirers must send this value if received by the merchant. This field is optional for issuers. If an issuer supports field 126.18, V.I.P. forwards this field to the issuer in the authorization message and returns it to the acquirer in the response message.

IMPORTANT
V.I.P. forwards this field to issuers that support field 126.18 regardless of the POS entry mode code in field 22.

NOTE
Field 126.18 is not present in Visa Checkout online messages destined to BASE I issuers. BASE I issuers receive the value in the BASE II draft data.

4.145.4 Field Edits

None.

4.145.5 Reject Codes

None.

4.146 Field 126.19—Dynamic Currency Conversion Indicator

4.146.1 Attributes

Fixed length

1 ANS, EBCDIC, 1 byte

4.146.2 Description

Dynamic Currency Conversion (DCC) is an optional non-Visa service offered by merchants at the point of sale. The service involves offering the cardholder the option to pay for goods or services in their own billing currency or in the merchant's own local currency. DCC occurs when a merchant performs currency conversion locally and submits the transaction in the cardholder's billing currency.

To allow accurate reporting and monitoring of DCC globally, this field contains a unique identifier to indicate that DCC was performed by the merchant at the point of sale.

4.146.3 Usage

If the merchant performs currency conversion at the point of sale, acquirers must send a value of **1** in field 126.19 of authorization and reversal messages.

NOTE

Acquirers must ensure that they receive the DCC indicator value from their merchants when DCC is performed for a transaction.

This field is used in 0100 authorizations and related reversals, partial reversals, and reversal advices.

Acquirers that support Dynamic Currency Conversion (DCC) must also participate in the Multicurrency Service when submitting authorizations in the cardholders' currency.

4.146.4 Field Edits

None.

4.146.5 Reject Codes

None.

4.147 Field 126.20—3-D Secure Indicator

4.147.1 Attributes

fixed length
1 AN, EBCDIC; 1 byte

4.147.2 Description

This field enables issuers and acquirers to identify the 3DS version number and the 3DS authentication method used in the authorization message. The value of the 3DS indicator is extracted from the request message in Field 126.9—CAVV Data and sent in this field to the issuer and in the response message to the acquirer. The data value in this field is part of the encrypted 3DS 2.0 CAVV data created by the issuer's access control service (ACS) or an attempt server.

4.147.3 Usage

Issuers that choose to support the 3DS indicator must be prepared to receive the value in authorization and full financial messages for VbV e-commerce transactions.

4.147.4 Field Edits

None.

4.147.5 Reject Codes

None.

4.147.6 Valid Values

Table 4-132 3DS Indicator

Value	Description
0	3DS 1.0.2 or prior, All authentication methods
1	3DS 2.0 ¹ Challenge flow using static passcode
2	3DS 2.0 ¹ Challenge flow using One Time Passcode (OTP) via SMS method
3	3DS 2.0 ¹ Challenge flow using OTP via key fob or card reader method
4	3DS 2.0 ¹ Challenge flow using OTP via App method
5	3DS 2.0 ¹ Challenge flow using OTP via any other method
6	3DS 2.0 ¹ Challenge flow using Knowledge Based Authentication (KBA) method
7	3DS 2.0 ¹ Challenge flow using Out of Band (OOB) authentication with biometric method
8	3DS 2.0 ¹ Challenge flow using OOB authentication with App login method
9	3DS 2.0 ¹ Challenge flow using OOB authentication with any other method

|
|
|
|
|
|

Table 4-132 3DS Indicator (continued)

Value	Description
A	3DS 2.0 ¹ Challenge flow using any other authentication method
E	3DS 2.0 ¹ Attempts server responding
F	3DS 2.0 ¹ Frictionless flow

1. 3DS 2.0 refers to the 3DS 2.0 specification and all its subsequent versions.

4.148 Field 127—File Record(s): Action and Data

4.148.1 Attributes

variable length

1 byte, binary +

255 bytes, variable by subfield; maximum: 256 bytes

4.148.2 Description

Field 127 is a multipart, private-use field used to maintain and display records in the Cardholder Database and the Merchant Central File. It is used in these messages:

- 0300–0310 and 0302–0312 file maintenance messages
- 0322 file update advices for Visa-initiated file updates

When updating the Exception File, issuers must send file maintenance update messages rather than include the update information in the 0110 response message.

NOTE

If an issuer sends this field in an 0110 response to update the Exception File, Visa will drop the data in field 127. The response will not be rejected to the issuer, and Visa will not update the cardholder database (CDB).

File Maintenance: Visa 03xx messages are used for maintaining the Exception File, Address Verification File, Merchant Central File, PIN Verification File, Portfolio File, and Risk-Level File.

These messages permit an issuer to update or display issuer-maintained files in the Cardholder Database and permit an acquirer to maintain the Merchant Central File.

The messages (which can be used to process any type of account number) support exception and portfolio listings, PIN verification values, address verification, and the assignment of risk levels and activity limits. CRB subregion codes are not supported.

Each subfield for each possible type of 03xx request and response message is described on the following pages.

NOTE

A file inquiry has a successful response if the field 39 response code = 00.

4.148.3 Usage

See individual "Field 127" descriptions.

4.148.4 Field Edits

See individual "Field 127" descriptions.

4.148.5 Reject Codes

See individual "Field 127" descriptions.

4.149 Field 127—File Maintenance

4.149.1 Attributes

variable length

1 byte, binary +

255 bytes, variable by subfield; maximum: 256 bytes

4.149.2 Description

This section describes the requirements for this field, as used to update or review the Exception File, PIN Verification File, Address Verification File, and Risk-Level File in the VisaNet Cardholder Database. The field is also used to update the Merchant Central File and the Portfolio File.

Field 127 has multiple subfields for some of the data needed in an 0300 or 0302 request to update one record in the file identified in field 101 (File Name). The remaining data is located in other fields of the 0300 and 0302 request. The length specifies the number of bytes that follow the length subfield.

NOTE

For cardholder files, a 0302 request is required for each update and inquiry. For the Merchant Central File, a 0300 request is required for each update and inquiry.

4.149.3 Usage

Field 127 is used in 0300 and 0302 messages that request file updating. It is needed in all file add, change, or replace requests, but is needed in a file delete request only to delete a Merchant Central File record to identify the card type of the record being changed. When it is present in an 0300 or 0302 request, this field is returned in the 0310 or 0312 response. This field is also present in 0322 file maintenance advices.

This field is not used in 0300 or 0302 file inquiry requests. If field 127 is present in the message, V.I.P. ignores it. It is present in the 0310 and 0312 response to a file inquiry.

The following figure illustrates the subfields for each file. Note that the field numbers, by which these subfields are known, are in the following format:

- 127
- + an alpha identifier derived from the file name
- + a decimal point
- + the sequence number of the subfield
- subfield file name

EXAMPLE

The first subfield of field 127 for an exception file update is labeled "Field 127E.1."

NOTE

The naming convention described above does not apply to the Portfolio File, which is labeled 127.PF.

Figure 4-1 Field 127 Layout of Applicable Files

File Name A2—Address Verification File

127A.1	127A.2
Postal Code	Address Verification Value

File Name E2—Exception File

127E.1	127E.2
Action Code	Region Coding

File Name M9—Merchant Central File

127M.1		127M.2	127M.3	127M.4	127M.5
Merchant Record Type	A	Reserved	Reserved		
	D	Terminal ID			
	M	Category Code	Postal Code		
	V	Category Code			
	X	Terminal ID			
	U	Category Code	Card Acceptor Name Location	Card Acceptor State/County/ZIP	10-Digit Merchant Verification Value

File Name P2—PIN Verification File

127P.1		
Algorithm Identifier	PVKI	Verification Value

Figure 4-2 Field 127 Layout of Applicable Files (Continued)

File Name R2—Risk Level File							
127R.1	127R.2	127R.3	127R.4	127R.5	127R.6	127R.7	
Risk Level			Filler		Travel Activity Limits		
					Available	Unavailable	
127R.8	127R.9	127R.10	127R.11	127R.12	127R.13	127R.14	127R.15
Lodging Activity Limits		Auto Rental Activity Limits		Restaurant Activity Limits		Mail/Telephone Activity Limits	
Available	Unavailable	Available	Unavailable	Available	Unavailable	Available	Unavailable
127R.16	127R.17	127R.18	127R.19	127R.20	127R.21	127R.22	127R.23
Risk Purchase Activity Limits		Total Purchase Activity Limits		Total Cash Activity Limits		ATM Cash Activity Limits	
Available	Unavailable	Available	Unavailable	Available	Unavailable	Available	Unavailable

File Name **PF**—Portfolio File

127.PF
PPCS Code

4.149.4 Field Edits

Field 127 is required in an 0300 request if field 91 is **1**, **2**, **3**, or **4**, and in an 0302 request if field 91 is **1**, **2**, or **4**. Length cannot exceed **255**.

4.149.5 Reject Codes

0075 = Invalid length (exceeds **255**)

0399 = Field missing

4.149.6 File Edits

In 0302 adds, changes, and replaces, the length must be allowed based on the subfields required for the File Name.

- If field 101 is **A2**, length must be **5**, **9**, or **14**.
- If field 101 is **E2**, length must be **11**.
- If field 101 is **P2**, length must be **7**.
- If field 101 is **R2**, length must be **1**, **31**, **41**, **51**, **61**, **71**, **81**, **91**, **101**, or **111**.

In 0302 inquiries, the length returned in the 0312 is the same length as an add or change, except for:

- If field 101 is **R2**, length must be **141**.

In 0300 adds, changes, and replaces where field 101 (File Name) is **M9**, the length must be allowed for the merchant record type (field 127M.1):

- If field 127M.1 is **A**, length must be **17**.
- If field 127M.1 is **D**, length must be **16**.
- If field 127M.1 is **M**, length must be **14**.
- If field 127M.1 is **U**, length must be **5** or **45**, or **4** through **61**.
- If field 127M.1 is **V**, length must be **5**.
- In 0300 deletes where field 101 is **M9**, length must be **1**.

4.149.7 File Maintenance Error Codes

0699 = Length is invalid for file name.

0801 = Invalid length in 0300 request

0809 = Field is all **spaces** in 0300 request.

4.150 Field 127—Terms & Conditions, Usage 2

4.150.1 Attributes

variable length
1 byte, binary +
TLV Format: 255 binary and ANS, EBCDIC; maximum 256 bytes

4.150.2 Description

This field description contains datasets presented in hex number order. The dataset IDs listed for position 1 can be used as a guide to the Usage section, which specifies the content for each dataset.

The datasets, which are in TLV format, can have multiple sub-elements. The TLV format is shown below.

Positions:

1	2–3	4–255
Subfield 1: Length	Subfield 2: dataset ID	Subfield 3: dataset length
		Subfield 4: Verification Data TLV elements
		<div><div>TagLengthValue</div><div>TLV₁</div><div>TagLengthValue</div><div>TLV_N</div></div>
Byte 1	Byte 2	Bytes 3–4
		Byte 5–256

Length Subfield: One-byte binary subfield that contains the number of bytes in this field. The maximum is **255**

Position 1, Dataset ID: This one-byte binary subfield contains a hexadecimal value that identifies the TLV data that follows. Values:

- Hex 40 = Terms and Conditions

Positions 2–3, Dataset Length: This 2-byte binary subfield specifies the total length of the TLV fields present in the dataset. The length is variable, depending on the data that follows.

Positions 4–255, TLV Data: Each subfield of a dataset has a defined tag, length, and value. The tag is used in conjunction with the dataset ID value. The dataset subfields can be present in any order with other TLV subfields.

The TLV format can be used by all clients regardless of region.

4.150.3 Usage

The following subsection describes the usage for this field.

IMPORTANT

Endpoints that support this field in TLV format must be able to receive dataset IDs and tags defined for this field in any order, including those they do not recognize or expect. Endpoints can receive multiple datasets in this field. Endpoints must ignore dataset IDs or tags they do not recognize and continue to process the field.

Table 4-133 Dataset ID Hex 40, Terms and Conditions

Tag	Length	Value	Format	Content of Sub-Element
01	64	Terms and Conditions Verification	AN	This field contains the terms and conditions data when field 63.3 contains message reason code 3700 .
02	32	Issuer Terms and Conditions Date/Time	AN	This field contains the date and time.

This field is used in the following messages:

- 0620/0630 issuer token notification advice and response.

4.150.4 Field Edits

TLV Format: The field must be correctly formatted; otherwise, V.I.P. will reject the message with a value of **06** in field 39 and an error code in field 48, usage 1c.

4.150.5 Reject Codes

None.

4.151 Field 127.PAN—PAN File Maintenance (TLV Format)

4.151.1 Attributes

variable length
1 byte, binary +
TLV Format: 255 binary and ANS, EBCDIC; maximum 256 bytes

4.151.2 Description

This field description contains transaction datasets presented in hex number order. The dataset IDs listed for position 1 can be used as a guide to the Usage section, which specifies the content for each dataset.

The datasets, which are in TLV format, can have multiple sub-elements. The TLV format is shown below.

Positions:

1	2–3	4–255
Subfield 1: Length	Subfield 2: dataset ID	Subfield 3: dataset length
		Subfield 4: Verification Data TLV elements
		<div><div>TagLengthValue</div><div>TLV₁</div></div> <div><div>TagLengthValue</div><div>TLV_N</div></div>
Byte 1	Byte 2	Bytes 3–4
		Byte 5–256

Length Subfield: One-byte binary subfield that contains the number of bytes in this field. The maximum is **255**

Position 1, Dataset ID: This one-byte binary subfield contains a hexadecimal value that identifies the TLV data that follows. Values:

- Hex 41 = Token Vault PAN Update

Positions 2–3, Dataset Length: This 2-byte binary subfield specifies the total length of the TLV fields present in the dataset. The length is variable, depending on the data that follows.

Positions 4–255, TLV Data: Each subfield of a dataset has a defined tag, length, and value. The tag is used in conjunction with the dataset ID value. The dataset subfields can be present in any order with other TLV subfields.

The TLV format can be used by all clients regardless of region.

4.151.3 Usage

The following subsection describes the usage for this field.

IMPORTANT

Endpoints that support this field in TLV format must be able to receive dataset IDs and tags defined for this field in any order, including those they do not recognize or expect. Endpoints can receive multiple datasets in this field. Endpoints must ignore dataset IDs or tags they do not recognize and continue to process the field.

Table 4-134 Dataset ID Hex 41, Token Vault PAN Update

Tag	Length	Value	Format	Content of Sub-Element
01	13–19	Replacement PAN	N, BCD	This field contains the replacement primary account number. This field is required when the PAN contained in Field 2—Primary Account Number is being replaced with a new PAN.
02	4	Replacement PAN Expiration Date	N, BCD	This field contains the expiration date of the new PAN in tag 01 or the updated expiration date of the existing PAN. Format = <i>yyymm</i> .
04	1	Account Status	AN, EBCDIC	<ul style="list-style-type: none"> • A (Account number change (the account number or account number and expiration date are being updated)) • C (Closed account advice) • E (Expiration date change) • Q (Contact cardholder advice (the merchant should contact the cardholder for additional information on the account))
05	1	Conversion Code	AN, EBCDIC	<ul style="list-style-type: none"> • V (Visa portfolio conversion) • M (Non-Visa portfolio conversion)
06	5	VAU Segment ID	AN, EBCDIC	Segment ID assigned by VAU.

This field is used in the following messages:

- 0302/0312 primary account number maintenance file request/response.

4.151.4 Field Edits

TLV Format: The field must be correctly formatted otherwise V.I.P. rejects the message with code **06** in field 39 and an error code in field 48, usage 1c.

4.151.5 Reject Codes

None.

4.151.6 File Maintenance Error Codes

749 = PAN FM request sent without replacement expiry date

768 = Token expiration date invalid

771 = Replacement PAN has invalid account length or invalid check digit

772 = PAN and replacement PAN match: PAN expiry change request required

4.152 Field 127A.1—Address Verification Postal Code

4.152.1 Applies to

Address Verification File (Field 101—File Name = A2)

4.152.2 Attributes

fixed length

9 ANS, EBCDIC, 9 bytes

4.152.3 Description

Field 127A.1, contains the ZIP or other postal code of the cardholder's address.

4.152.4 Usage

Field 127A.1, is used in all 0302 file update requests when the card issuer must add, change, or replace a cardholder's address verification data; that is, it is required in 0302 requests if field 101 is **A2** and field 91 contains **1**, **2**, or **4**.

In a change or replace request, this field, with a code or spaces, is needed even when it is only the address verification value (AVV) being changed.

This field is not used in a delete request. If it is present in an 0302 update request, this field is returned in the 0312 response. It is not used in a file inquiry request. It is present in a successful 0312 response.

The postal code must be left-justified in this field. Unused positions must be filled with spaces.

4.152.5 Field Edits

None.

4.152.6 Reject Codes

None.

4.152.7 File Edits

When field 101 is **A2** and field 91 is **1**, **2**, or **4**, this edit applies:

For a U.S. account, the code must be five numerics followed by four spaces, or nine numerics.

When field 91 contains **3**, this field should not appear in the message, but V.I.P. does not reject it if it is space-filled.

4.152.8 File Maintenance Error Codes

The error codes for field 127A.1, are:

0651 = Invalid postal code

4.153 Field 127A.2—Address Verification Value

4.153.1 Applies to

Address Verification File (Field 101—File Name = A2)

4.153.2 Attributes

fixed length

5 ANS, EBCDIC, 5 bytes

4.153.3 Description

Field 127A.2, contains an AVV (Address Verification Value), which is the first **5** digits of the cardholder's address, including numeric equivalents of numbers that are spelled out.

4.153.4 Usage

Field 127A.2, is used in all 0302 file update requests when the card issuer must add, change, or replace a cardholder's address verification data; that is, it is required in 0302 requests if field 101 contains **A2** and field 91 contains **1**, **2**, or **4**. It is not used in a delete request. If it is present in an 0302 request, V.I.P. returns it in the 0312 response. It is not used in a file inquiry request. It is present in a successful 0312 response. This AVV is needed in a change or replace, even when it is only the postal code that is being changed. The AVV must be left-justified in this field, and unused positions must be filled with **spaces**.

Address examples.

AVV	Cardholder Address
1	One Elm Street
1231	123 First St
8925	89 25th Avenue
2223	22 Walnut St Apt 23
12345	P. O. Box 12345
4567	4567 Birch Rd Apt A
46002	4600 Birch Rd Apt 29

4.153.5 Field Edits

None.

4.153.6 Reject Codes

None.

4.153.7 File Edits

When field 101 is **A2** and field 91 is **1**, **2**, or **4**, these edits apply:

- The AVV must be numeric.
- This subfield must be five bytes long. That is, the AVV must be left-justified and trailing spaces are required after an AVV with fewer than five positions.

When field 91 contains a **3**, this field should not appear in the message but V.I.P. does not reject it if it is space-filled.

4.153.8 File Maintenance Error Codes

0696 = Invalid value

4.154 Field 127E.1—Action Code

4.154.1 Applies to

Exception File (Field 101—File Name = E2)

4.154.2 Attributes

fixed length

2 ANS, EBCDIC; 2 bytes

4.154.3 Description

Field 127E.1 contains the issuer-designated action code to be used by STIP when authorizing on the issuer's behalf.

4.154.4 Usage

Field 127E.1 is used in 0302 add, change, and replace requests for the Exception File, and it is returned in responses. It is not used in delete requests. It is not used in an 0302 file inquiry request. It is present in a successful 0312 response and in 0322 advices. It is also present in 0120 file maintenance advices.

4.154.5 Field Edits

There are no field edits for field 127E.1.

4.154.6 Reject Codes

There are no reject codes for field 127E.1.

4.154.7 File Edits

Field 127E.1 must be present in a 0302 request if field 101 is **E2** and field 91 is **1**, **2**, or **4**.

The value in this field must be one of the codes listed in [Table 4-135](#).

Code **01** (referral) is not allowed for an Electron account listing.

When field 91 is **3**, this field should not be present.

The Activity Limits for Action Codes **A1** through **A9** represent consolidated limits for all merchant category groups, not limits for individual ones.

Action code **11** (approval for VIP cardholder) means activity checking is bypassed during STIP. V.I.P., however, still uses applicable mandatory and issuer-specified amount limits to determine whether to route a transaction to an available issuer. Action code **11** does not trigger a referral if the transaction is routed to STIP.

Only one action code per record is allowed.

Auto-CDB: If the account is listed in the Exception File with something other than pickup status, Auto-CDB changes the listing to pickup status.

4.154.8 File Maintenance Error Codes

0650 = Invalid value

4.154.9 Valid Values

Table 4-135 Field 127E.1 Exception File Action Codes

Code	Definition			
01	Refer to card issuer			
04	Pickup card			
05	Do not honor			
07	Pickup card, special condition			
11	Approval for VIP			
14	Invalid/closed account			
41	Lost card, pickup			
43	Stolen card, pickup			
54	Expired card			
Codes A1 through A9 are V.I.P. codes associated with special high-value activity limits. Amount limits are in U.S. dollars.				
	One-Day Limits		Four-Day Limits	
	Amount	Count	Amount	Count
A1	US\$1,500	3	US\$1,500	9
A2	US\$2,000	5	US\$3,500	12
A3	US\$3,000	8	US\$6,000	14
A4	US\$4,500	12	US\$8,000	25
A5	US\$6,000	15	US\$10,000	40
A6	US\$8,000	20	US\$14,000	50
A7	US\$10,000	25	US\$20,000	100
A8	US\$1,500	4	US\$2,000	10
A9	US\$2,250	6	US\$3,500	13
XA	Forward to issuer; default to 00			
XC	MasterCard Account Management System (Restricted Card List) pickup card. NOTE: <i>Issuers cannot put this action code in an add or change request, but issuers may receive it in an inquiry.</i>			
XD	Forward to issuer; default to 05			

4.155 Field 127E.2—Region Coding

4.155.1 Applies to

Exception File (Field 101—File Name = E2)

4.155.2 Attributes

fixed length

9 ANS, EBCDIC; 9 bytes

4.155.3 Description

Field 127E.2 contains one or more CRB region codes that define the distribution of a Visa cardholder account number in Card Recovery Bulletin Service files.

4.155.4 Usage

Field 127E.2 is used in 0302 add, change, and replace requests for the Exception File, and is returned in the responses. It is not used in delete requests. It is not used in an 0302 file inquiry request. It is present in a successful 0312 response and in 0120 and 0322 file maintenance advices.

This field contains one or more codes whenever the action code in an update request is a pickup code: **04**, **07**, **41**, or **43**. Otherwise, it contains spaces. If an update is received with a region code that is not a pick-up code, that update is accepted and the region coding is ignored; in this case, the CRB is not updated.

When more than one region code is placed in this field, spaces can be used to separate them, although V.I.P. ignores them.

When region code **0** is used, the account number is present in the National Card Recovery File (NCRF) but not in Regional Card Recovery File (RCRF).

NOTE

The National Card Recovery File (NCRF) is available only for the U.S. region.

Region code **E** means the account should be included in the Visa Europe CRB. The code **E** is used for all electronic STIP authorizations regardless of acquirer or issuer Visa region.

NOTE

*The U.S. region CRB has been eliminated. Old region codes **X1** (region 1) through **X9** (region 9) do not apply.*

For details on the countries within CRB regions, see the *VisaNet Card Recovery Bulletin User Guide*.

This field is present in GCAS advices.

4.155.5 Field Edits

There are no field edits.

4.155.6 Reject Codes

None.

4.155.7 File Edits

Field 127E.2 must be present in an 0302 request if field 101 is **E2** and field 91 is **1**, **2**, or **4**. The codes must be left-justified. The remainder of the field must be space-filled.

When field 91 is **3**, this field should not be present in the message, but it will not be rejected if it is set to spaces.

Combinations of region codes can be placed in field 127E.2 in any order, with or without imbedded **spaces**, except no other region code can be specified in combination with region code **0**.

4.155.8 File Maintenance Error Codes

The error codes for field 127E.2 are:

0577 = Invalid code

0578 = Invalid spaces (action code is a pickup)

4.155.9 Valid Values

Table 4-136 Field 127E.2 CRB Region Codes

Region Code	Geographic Area
0	No Bulletin / V.I.P. Only (cannot be combined with other region codes)
A	All countries in the Asia-Pacific region
B	All countries in the Central Europe, Middle East, and Africa (CEMEA) region
C	All Visa Canada
D	National Card Recovery Bulletin
E	All countries in Visa Europe
F	All countries in the Latin America and Caribbean (LAC) region

4.156 Field 127M.1—Merchant Record Type

4.156.1 Applies to

Merchant Central File (Field 101—File Name = M9)

4.156.2 Attributes

fixed length

1 AN, EBCDIC; 1 byte

4.156.3 Description

Field 127M.1 contains a code indicating the type of Merchant Central File record to be added, changed, replaced, or deleted. This code determines the content and format of the rest of field 127.

4.156.4 Usage

Field 127M.1 is used in 0300 and 0310 messages only. It is used for adds, changes, replaces, deletes, and file inquiry requests, and it is returned in the responses.

4.156.5 Field Edits

None.

4.156.6 Reject Codes

None.

4.156.7 File Edits

Field 127M.1 must be present in every 0300 request.

4.156.8 File Maintenance Error Codes

0800 = Invalid value

4.156.9 Valid Values

Table 4-137 Field 127M.1: Merchant Record Type Codes

Code	Definition
A	Check acceptance
D	Discover
M	MasterCard
U	Universal Visa data
V	Visa
X	American Express

4.157 Field 127M.2—Merchant Data 1

4.157.1 Applies to

Merchant Central File (Field 101—File Name = M9)

4.157.2 Attributes

4 ANS, EBCDIC; 4 bytes
or 15 ANS, EBCDIC; 15 bytes

4.157.3 Description

The length and content of field 127M.2 depends on the field 127M.1 record type.

Table 4-138 Field 127M.2: Record Types

Record Type	Content
A	15-digit vendor-assigned terminal ID, right-justified and zero-filled
D	15-digit Discover terminal ID, left-justified and space-filled
M	4-digit merchant category code
U	4-digit Visa merchant category code
V	4-digit merchant category code
X	15-digit American Express terminal ID, right-justified and zero-filled

4.157.4 Usage

Field 127M.2 is used in 0300 add, change, and replace requests for the Merchant Central File, and is returned in the responses. It is not used in delete requests. It is not used in a file inquiry request. It is present in a successful 0310 response.

Check Acceptance: When sent by the acquirer, V.I.P. uses the terminal ID value as received for field 127M.2 with no right-justification or left-justification.

4.157.5 Field Edits

None.

4.157.6 Reject Codes

None.

4.157.7 File Edits

American Express, Discover, Visa, Check Acceptance, and MasterCard: Field 127M.2 must be present in a 0300 request if the value in field 101 is **M9** and the value in field 91 is **1**, **2**, or **4**. A merchant category code must be numeric.

Universal Data: Field 127M.2 is used if the value in field 101 is **M9**, and the value in field 91 is **1**, **2**, or **4**. This field, if supplied, must be a valid merchant category code. If

this field is not supplied, it must be space-filled and fields 127M.3 and 127M.4 must be supplied. If field 127M.3 and field 127M.4 are not supplied, length of field 127 should be **5**.

Visa and Universal Data: Merchant category code, if supplied, must be a valid merchant category code.

If field 91 is **3**, this field should not be present.

4.157.8 File Maintenance Error Codes

0803 = Invalid merchant category code

0808 = Invalid replacement terminal ID

4.158 Field 127M.3—Merchant Data 2

4.158.1 Applies to

Merchant Central File (Field 101—File Name = M9)

4.158.2 Attributes

1 ANS, EBCDIC; 1 byte total
or 9 ANS, EBCDIC; 9 bytes total
or 40 ANS, EBCDIC; 40 bytes total

4.158.3 Description

The length and content of field 127M.3 depend on the field 127M.1 record type.

Table 4-139 Field 127M.3: Record Types

Record Type	Content
A	1-position vendor ID, left-justified and space-filled
D	n/a
M	9-digit ZIP code or 9-position postal code, left-justified and space-filled
U	40-digit Card Acceptor Name/Location, comprised of: <ul style="list-style-type: none"> • 25-digit Card Acceptor Name (127M.3.1) + • 13-digit City Name (127M.3.2) + • 2-digit Country Code (127M.3.3)
V	n/a
X	n/a

4.158.4 Usage

American Express, Discover, and Visa: Not applicable field 127M.3.

Check Acceptance, Universal Data, and MasterCard: Field 127M.3 is used in 0300 add or change, or replace requests for the Merchant Central File.

When this field is present in a request, it is returned in the response. It is not used in delete requests or a file inquiry request. It is present in a successful response.

4.158.5 Field Edits

None.

4.158.6 Reject Codes

None.

4.158.7 File Edits

Field 127M.3 must be present in an 0300 request if:

- The value in field 101 is **M9**.
- The value in field 91 is **1**, **2**, or **4**.
- The value in field 127M.1 is **A** or **M**.

When the record type is **A**, the check acceptance vendor ID must be one of the codes listed in the following table.

Table 4-140 Check Acceptance Vendors

Vendor Code	Vendor	Routing ID
1	TeleCredit, LA (Equifax Card Services)	894300
2	TeleCheck	861400
3	JBS/NPC	810000
4	TeleCredit, Tampa (Equifax Card Services)	894400
5	State Street Bank	862000
6	ETC/Scan (Deluxe Data System)	813500

When the record type is **M**, the postal code must be 9 numerics, or 5 numerics followed by spaces.

Universal Data: Field 127M.3 must be present in the message if field 127M.4 is present or neither field 127M.2 nor 127M.4 is supplied. This field is omitted when not applicable and field 127M.4 is not supplied. If supplied, all subfields, 127M.3.1, 127M.3.2, and 127M.3.3 must be present. Country Code (subfield 127M.3.3), if present, must be a 2-digit alphabetic Country Code. If field 127M.3 is supplied and field 127M.4 is not supplied, the length of field 127 should equate to decimal **45**.

If field 91 is **3**, this field should not be present in the message, but it will not be rejected if it is set to spaces.

4.158.8 File Maintenance Error Codes

0804 = Invalid vendor ID

0805 = Invalid postal code

0810 = Card Acceptor Name and Location is missing when Card Acceptor State/County ZIP is present

0811 = Not all subfields of the Card Acceptor Name and Location are present

0812 = Invalid Country Code

4.159 Field 127M.4—Merchant Data 2

4.159.1 Applies to

Merchant Central File (Field 101—File Name = M9)

4.159.2 Attributes

16 ANS, EBCDIC; 16 bytes total

4.159.3 Description

The length and content of field 127M.4 depend on the field 127M.1 record type:

Record Type	Content
A	Not applicable
D	Not applicable
M	Master Card
U	2-digit length + 14-digit Card Acceptor State, Country, ZIP or Province Code
V	Not applicable
X	Not applicable

For record type **U**, the length and content of this field depend on the country code given in field 127M.3.3.

If the country code is US:

127M.4.1	127M.4.2	127M.4.3	127M.4.4
2-digit length field	2-digit numeric state code	3-digit numeric country code	5- or 9-digit numeric ZIP code

If the Country Code is CA (Canada):

127M.4.1	127M.4.2
2-digit length field	2-digit numeric province code

If the country code is not US and is not CA:

127M.4.1	127M.4.2
2-digit length field	1- to 14-digit alphanumeric postal code

MasterCard: For record type M, this field contains the following:

127M.4.1	127M.4.2	127M.4.3
25-digit card acceptor name	13-digit city name	2-digit alphanumeric country code

4.159.4 Usage

American Express, Discover, Visa, and Check Acceptance: Not applicable to field 127M.4.

Universal Data: Field 127M.4 is used in 0300 add, change, or replace requests for the Merchant Request File.

MasterCard: This field is omitted when not applicable. If present, all subfields must be supplied (127M.4.1, 127M.4.2, 127M.4.3). The country code must be a 2-digit alphanumeric code. If field 127M.3 is supplied but field 127M.4 is not, the field 127 length should be decimal **45**. If field 91 = **3**, this field should not be present but will not reject if it is set to **spaces**.

This field is not used in delete requests or a file inquiry request. It may be present in a successful response.

4.159.5 Field Edits

None.

4.159.6 Reject Codes

None.

4.159.7 File Edits

Field 127M.4 is omitted when not applicable. It must be present if neither field 127M.2 nor field 127M.3 are present.

If this field is supplied, the length field (field 127M.4.1) must be present and must be numeric.

If this field is supplied, and the country code in field 127M.3.3 is **US**, these rules apply:

- The value of the length field 127M.4.1 must be **10** or **14**, depending on the ZIP code supplied in subfield 127M.4.4.
- A 2-digit numeric state code must be present in subfield 127M.4.2.
- Subfield 127M.4.3 must contain a numeric country code, or zeros, if this subfield is not supplied.
- A 5-digit or 9-digit numeric ZIP code must be present in subfield 127M.4.4. A ZIP code of all **zeros**.
- The length of field 127 should equate to decimal **57** or **61**, depending on the ZIP code supplied in subfield 127M.4.4.

If this field is supplied, and the country code in field 127M.3.3 is **CA**, these rules apply:

- The value in the length 127M.4.1 must be **02**.
- A 2-digit number province code must be present in subfield 127M.4.2.
- The length of field 127 should equate to decimal **49**.

If this field is supplied, and the country code in field 127M.3.3 is not **US** and is not **CA**, these rules apply:

- The value of the length field 127M.4.1 must be **01** to **14**, depending on the length of the postal code in subfield 127M.4.2.
- A variable length, 1- to 14-digit alphanumeric postal code must be present in subfield 127M.4.2.
- The length of field 127 should equate to decimal **48** through **61**.

4.159.8 File Maintenance Error Codes

0805 = Invalid postal code

0811 = Not all subfields of the card acceptor name/location are present

0812 = Invalid country code

0813 = The length subfield (field 127M.4.1) is missing when the other field 127M.4 subfields are present

0814 = State, county or ZIP data is not present, but the length subfield 127M.4.1 is present

0815 = The length subfield (field 127M.4.1) is invalid

0816 = State code is invalid or missing

0817 = Invalid county code

0818 = Postal code is missing

0819 = Province code is invalid or missing

4.160 Field 127M.5—Merchant Data 2

4.160.1 Applies to

Merchant Central File (Field 101—File Name = M9)

4.160.2 Attributes

10 ANS, EBCDIC; 10 bytes total

4.160.3 Description

The length and content of field 127M.5 depend on the field 127M.1 record type:

Record Type	Content
A	Not applicable
D	Not applicable
M	Not Applicable
U	10-digit Merchant Verification Value
V	Not applicable
X	Not applicable

4.160.4 Usage

This field applies to Universal Data only.

Universal Data: Field 127M.5 is used in 0300 add, change, or replace requests for the Merchant Request File.

This field is not used in delete requests or a file inquiry request. It may be present in a successful response.

4.160.5 Field Edits

Field 127M.5 is omitted when not applicable. If present, the length of field 127M.5 depends on ZIP code and MVV length but must not exceed **10** bytes.

4.160.6 Reject Codes

None.

4.160.7 File Edits

Field 127M.5 is omitted when not applicable. If present, the length of field 127M.5 depends on ZIP code and MVV length but must not exceed **10** bytes.

4.160.8 File Maintenance Error Codes

0801 = Invalid service update length

0821 = Invalid or missing data

4.161 Field 127P.1—PIN Verification Data

4.161.1 Applies to

PIN Verification File (Field 101—File Name = P2)

4.161.2 Attributes

fixed length

7 AN, EBCDIC; 7 bytes

4.161.3 Description

Field 127P.1 has three subfields.

Positions 1–2, Algorithm Identifier: This is a code that identifies the algorithm used by the issuer to verify the PIN.

Position 3, PVKI: This is a 1-digit PIN Verification Key Index (PVKI) value.

If the verification value is a Visa PVV, the PVKI is a value between **1** and **6**. The value indicates which of six possible pairs of PIN Verification Keys was used by the card issuer to generate the PVV. If the verification value is an IBM PIN Offset, the PVKI must be **1**, representing the single key used to generate the offset.

Positions 4 –15, Verification Value: This is a 4–12-digit PIN Verification Value (PVV) or PIN Offset Value.

The card issuer derives this value using the Visa PVV method or the IBM PIN offset method. The verification value is calculated using the account number and the PIN. Depending on the verification method, other data such as the PVKI, one or more PIN Verification Keys, and a decimalization table may be employed. To verify a PIN in an authorization request, the verification value is first recalculated. The recalculated value is compared to the value on file.

4.161.4 Usage

Field 127P.1 is used in 0302 add, change, and replace requests when the card issuer must add or change PIN verification data; that is, it is required in 0302 requests if field 101 contains **P2** and field 91 contains **1**, **2**, or **4**.

This field is not used in a delete request or a file inquiry request. When this field is present in an 0302 request, it is returned in the 0312 response.

Issuers can use either the IBM PIN Offset or Visa PIN Verification Value (PVV) method for PIN verification. IBM PIN Offset method accommodates twelve digits. Visa PVV method accommodates four digits in field 127P.1.

IMPORTANT

V.I.P. rejects messages with a PVV greater than four digits generated with the Visa PVV method.

4.161.5 Field Edits

None.

4.161.6 Reject Codes

None.

4.161.7 File Edits

When field 101 is **P2** and field 91 is **1**, **2**, or **4**, these edits apply:

- The algorithm ID must be **01** or **04**.
- The PVKI must be a value from **1** through **6**.
- The verification value must be numeric.

When the value in field 91 is **3**, field 127P.1 should not be present but will not be rejected if set to zeros.

4.161.8 File Maintenance Error Codes

0582 = Invalid algorithm ID

0583 = Invalid PVKI

0584 = Invalid verification value

4.161.9 Valid Values

Table 4-141 Field 127P.1: File Update PIN Verification Algorithm ID

Code	Definition
01	Visa PVV Method
04	IBM PIN Offset

4.162 Field 127R.1—Risk Level

4.162.1 Applies to

Risk-Level File (Field 101—File Name = R2)

4.162.2 Attributes

fixed length

1 ANS, EBCDIC; 1 byte

4.162.3 Description

Field 127R.1 contains a 1-character alphabetic code describing the cardholder risk level. The codes are **A**, **B**, **C**, and **D**, where **A** represents the lowest risk and **D** the highest.

4.162.4 Usage

Field 127R.1 is used in 0302 add, change and replace requests for the Risk-Level File. It is returned in the responses. This field is not used in delete requests or a file inquiry request. It is present in a successful 0312 response. If an account risk level does not apply to the cardholder, this field should contain the issuer's default value, if one is selected, or **C** (the default risk level assumed by V.I.P.). If this field in a change or replace request contains a **space**, the account code on file is changed to the issuer's default risk level or to the system default.

It is assumed the issuer has previously established risk levels for BASE I processing.

4.162.5 Field Edits

Field 127R.1 must be present in an 0302 request if field 101 is **R2** and field 91 is **1**, **2**, or **4**. The code must be **A** through **D**. In a change or replace involving assignment of lower risk, the new code must be the next lower code. For instance, if the risk level on file is **C**, it can be changed to **B** but not **A**. (This "next code" edit does not apply when higher risk is assigned. For instance, there is no problem in changing code **A** to **D**.)

If field 91 is **3**, field 127R.1 should not be present in the message, but it will not be rejected if it set to spaces.

4.162.6 Reject Codes

0653 = Invalid value

4.163 Field 127R.2 Through 127R.5—Filler

4.163.1 Applies to

Risk-Level File (Field 101—File Name = R2)

4.163.2 Attributes

fixed length
20 ANS, EBCDIC; 20 bytes

4.163.3 Description

Subfields 127R.2 through 127R.5 contain filler only.

4.163.4 Usage

These subfields must be space-filled.

4.163.5 Field Edits

None.

4.163.6 Reject Codes

None.

4.164 Field 127R.6 Through 127R.23—Activity Limits

4.164.1 Applies to

Risk-Level File (Field 101—File Name = R2)

4.164.2 Attributes

variable length

120 ANS, EBCDIC; maximum: 120 bytes

4.164.3 Description

These 18 fields contain amount activity limits for a certain type of transaction. See [Table 4-142](#) for the applicable limits and subfield content. The limits in these fields override those in effect for all cardholders of this issuer; they do not impact count limits. Each limit is expressed in whole U.S. dollars.

Table 4-142 Field 127R.6–127R.23: Risk-Level Activity Limits

Subfield	Bytes	Type of Activity Limit
127R.6	1–5	Travel limit (issuer available)
127R.7	6–10	Travel limit (issuer unavailable)
127R.8	11–15	Lodging limit (issuer available)
127R.9	16–20	Lodging limit (issuer unavailable)
127R.10	21–25	Auto rental limit (issuer available)
127R.11	26–30	Auto rental limit (issuer unavailable)
127R.12	31–35	Restaurant limit (issuer available)
127R.13	36–40	Restaurant limit (issuer unavailable)
127R.14	41–45	Mail/telephone limit (issuer available)
127R.15	46–50	Mail/telephone limit (issuer unavailable)
127R.16	51–55	Risky purchase limit (issuer available)
127R.17	56–60	Risky purchase limit (issuer unavailable)
127R.18	61–65	Total purchase limit (issuer available)
127R.19	66–70	Total purchase limit (issuer unavailable)
127R.20	71–75	Total cash limit (issuer available)
127R.21	76–80	Total cash limit (issuer unavailable)
127R.22	81–85	ATM cash limit (issuer available)
127R.23	86–90	ATM cash limit (issuer unavailable)
Reserved for future use	91–120	Spaces returned in inquiry

4.164.4 Usage

The fields are used in 0302 add, change, and replace requests for the Risk-Level File when the issuer elects to set unique activity limits for this cardholder. When these fields are

present in a request, they are returned in the update response. They are not used in a delete.

These fields are not used in a file inquiry request. They are present in a successful 0312 response.

In an add, issuers provide numeric values for fields when it wants unique activity limits for this cardholder, and uses **spaces** in fields when the limit for this cardholder is the default limit for all the issuer's cardholders (as specified in the risk level in BASE I).

In a change or replace, issuers can remove a unique limit by setting its field to **spaces**, change established limits by providing a new value for its field, but must provide the value for any limits that are not being changed. When V.I.P. processes a change, it replaces the entire record.

When no unique activity limits apply, all 18 of these fields are omitted from the update message.

4.164.5 Field Edits

None.

4.164.6 Reject Codes

None.

4.164.7 File Edits

These fields can be present in an 0302 request if field 101 contains **R2** and field 91 contains **1**, **2**, or **4**. A **space**-filled field must be included only if it is followed by a non-**space** field. Trailing **space**-filled fields can be omitted. The maximum limit that can be specified in these fields is USD\$65,000.

If field 91 contains **3**, these fields should not be present, but V.I.P. does not reject it if it is set to **spaces**.

4.164.8 File Maintenance Error Codes

0658 = Invalid (available) travel limit

0659 = Invalid (unavailable) travel limit

0660 = Invalid (available) lodging limit

0661 = Invalid (unavailable) lodging limit

0662 = Invalid (available) auto rental limit

0663 = Invalid (unavailable) auto rental limit

0664 = Invalid (available) restaurant limit

0665 = Invalid (unavailable) restaurant limit

0666 = Invalid (available) mail or telephone limit

0667 = Invalid (unavailable) mail or telephone limit

0668 = Invalid (available) risky purchase limit

0669 = Invalid (unavailable) risky purchase limit

0670 = Invalid (available) total purchase limit

0671 = Invalid (unavailable) total purchase limit

0672 = Invalid (available) total cash limit

0673 = Invalid (unavailable) total cash limit

0674 = Invalid (available) ATM cash limit

0675 = Invalid (unavailable) ATM cash limit

4.165 Field 127.L1—ALP Product File Maintenance

4.165.1 Attributes

variable length
1 byte, binary +
255 ANS, EBCDIC; maximum: 256 bytes

4.165.2 Description

Issuers in specified countries can use this field to update account-level processing (ALP) data in the CDB through the use of 03xx file maintenance messages. The specified countries are:

- Australia, Hong Kong, India, and Singapore in the Asia-Pacific region.
- Canada.
- United Arab Emirates in the CEMEA region.

This usage of Field 127 is in tag-length-value (TLV) format and based on the ISO TLV Format. The TLV format is shown below.

Positions:			
1	2–3	4–255	
Subfield 1: length	Subfield 2: dataset ID	Subfield 3: dataset length	Subfield 4: TLV elements
			<div><div><div>Tag</div><div>Length</div><div>Value</div></div><div>TLV₁</div><div><div><div>Tag</div><div>Length</div><div>Value</div></div><div>TLV_N</div></div></div>
Byte 1	Byte 2	Byte 3–4	Byte 5–256

Length Subfield: This value is the total length of field 127.L1.

Position 1, Dataset ID: This one-byte binary subfield must contain a hexadecimal value of **6A**, which indicates that the TLV data that follows is ALP product processing data.

Positions 2–3, Dataset Length: Variable, depending on the length of the TLV subfields that follow.

Positions 4–255, TLV Elements: Each subfield in a dataset has a defined tag, length, and value. The tag is used in conjunction with the dataset ID value. Each subfield can be present in any order with other TLV subfields.

4.165.3 Usage

IMPORTANT

Endpoints that support this field must be able to receive dataset IDs and tags defined for this field in any order, including those they do not recognize or expect. Endpoints can receive multiple datasets in this field. Endpoints must ignore dataset IDs or tags they do not recognize and continue to process the field.

For the countries specified in the previous section, issuers that choose to participate in account-level processing and send online messages to add account-level cardholder records to the CDB, field 127.L1 is used as follows.

- In an ALP product CDB update, the issuer must include this field in the 0302 request. Visa returns it in the response.
- This field is not present in an 0302 ALP product inquiry, which issuers send to review their ALP updates. However, Visa sends field 127.L1 in the 0312 response.
- This field is present in 0322 ALP product CDB error advices, which V.I.P. sends to issuers if it finds errors during the record update process. Issuers do not return this field in 0332 responses.

The following table shows the tags and values for Dataset ID 6A, which contains the required file maintenance data for adding account-level cardholder records to the CDB.

Table 4-143 Dataset ID 6A—ALP Product Processing Data

Tag	Length	Value	Format	Contents
DF20	6	Account Open Date	AN	Message Presence: <ul style="list-style-type: none"> • 0302 update, 0312 update response • 0322 error advice <p>This tag is required and contains the date when the cardholder account was first opened.</p> <p>The format of this field is <i>yymmdd</i>, where:</p> <p>yy = Year mm = Month dd = Day</p>
DF21	8	Sender ID	AN	Message Presence: <ul style="list-style-type: none"> • 0302 update, 0312 update response • 0322 error advice <p>This tag is required and typically is the same as the business ID (BID) or center identification block (CIB), a 6-digit unique identifier for a processor's endpoint, of the originator of the request. This field is right-justified, zero-filled.</p>
DE22	6	Activation Date	AN	Message Presence: <ul style="list-style-type: none"> • 0312 inquiry response <p>This tag is sent in the 0312 ALP product inquiry response and shows the date the account-level information was activated. The format is <i>yymmdd</i>.</p>
DE23	6	Creation Date	AN	Message Presence: <ul style="list-style-type: none"> • 0312 inquiry response <p>This tag is sent in the 0312 ALP product inquiry response and contains the date the account-level information was created. The format is <i>yymmdd</i>.</p>

4.165.4 Field Edits

None.

4.165.5 Reject Codes

None.

4.165.6 File Edits

In an 0302 ALP product cardholder database update request, the following edits apply. For messages that fail an edit, Visa will respond with a value of **06** (error) in field 39 and send an error code in field 48, usage 1b.

- Tag DF20 must contain the account open date; otherwise, Visa will send an error code of **0741**. The content of Tag DF20 cannot be **999999**, or Visa will send an error code of **0742**.
- Tag DF21 must contain the sender ID; otherwise, Visa will send an error code of **0743**. The content of Tag DF21 cannot be all **zeros**, or V.I.P. returns error code **0744**.

4.165.7 File Maintenance Error Codes

0741 = Tag DF20 does not contain account open date

0742 = Tag DF20 contains an invalid date format or **999999**

0743 = Tag DF21 does not contain the sender ID

0744 = Tag DF21 contains an invalid format or all **zeros**

4.166 Field 127.L3—Account Linking File Maintenance

4.166.1 Attributes

variable length
1 byte, binary +
255 ANS, EBCDIC; maximum: 256 bytes

4.166.2 Description

This field is used for account linking file maintenance.

This usage of Field 127 is in tag-length-value (TLV) format and based on the ISO TLV Format. The TLV format is shown below.

Positions:			
1	2–3	4–255	
Subfield 1: length	Subfield 2: dataset ID	Subfield 3: dataset length	Subfield 4: TLV elements
			<div><div><div>Tag</div><div>Length</div><div>Value</div></div><div>TLV₁</div><div><div>Tag</div><div>Length</div><div>Value</div></div><div>TLV_N</div></div>
Byte 1	Byte 2	Byte 3–4	Byte 5–256

Length Subfield: This value is the total length of field 127.L3.

Position 1, Dataset ID: This one-byte binary subfield must contain a hexadecimal value of **6A**, which indicates that the TLV data that follows is ALP product processing data.

Positions 2–3, Dataset Length: Variable, depending on the length of the TLV subfields that follow.

Positions 4–255, TLV Elements: Each subfield in a dataset will have a defined tag, length, and value. The tag is used in conjunction with the dataset ID value. Each subfield can be present in any order with other TLV subfields.

4.166.3 Usage

IMPORTANT

Endpoints that support this field must be able to receive dataset IDs and tags defined for this field in any order, including those they do not recognize or expect. Endpoints can receive multiple datasets in this field. Endpoints must ignore dataset IDs or tags they do not recognize and continue to process the field.

The following table shows the tags and values for Dataset ID 6A, which contains the required account linking file maintenance data for account linking update processing.

Table 4-144 Dataset ID 6A—Account Linking File Maintenance Data

Tag	Name	Length	Format	Description
DF21	Sender ID	8	AN	<p>Message Presence:</p> <ul style="list-style-type: none"> • 0302 update, 0312 update response • 0322 error advice <p>This tag is required and typically is the same as the business ID (BID) or center identification block (CIB), a 6-digit unique identifier for a processor's endpoint, of the originator of the request. This field is right-justified, zero-filled.</p>
DF24	Linked Card Number	28	AN	<p>This tag is tag is required when the value in Tag DF25—Group Type is replace. It is optional for other group types.</p>
DF25	Group Type	16	AN	<p>This tag identifies the group type and is required. Values:</p> <ul style="list-style-type: none"> • Replace (Links a replacement account number to a lost or stolen card) • LOC (Groups a primary card account with authorized accounts from other cardholders) • Customer (Groups a set of card accounts for the same cardholder) <p>Multiple card number groupings can be defined using the group type. Multiple cards can be put in the same group. When that is the case, issuers must provide a record for each of those cards, and they cannot all be submitted in one record.</p>
DF26	Group Id	32	AN	<p>This tag will contain the issuer-supplied name of the group for the group type specified in Tag DF25—Group Type. For group types of Customer and LOC, this will typically be the primary account number for the group as specified in Field 2—Primary Account Number.</p> <p>This tag will be required if the value in Tag DF25—Group Type is LOC or Customer.</p> <p>When the value in Tag DF25 is Replace and Tag DF24—Linked Card Number is not space-filled, this tag must not be included in the message.</p>

Table 4-144 Dataset ID 6A—Account Linking File Maintenance Data (continued)

Tag	Name	Length	Format	Description
DF27	Link Reason Code	1	AN	<p>This tag is optional and can only be used when the value in Tag DF25—Group Type is Replace.</p> <p>When the value in Field 91—File Update Code is 1 (Add), this tag must contain one of the following link reason code values:</p> <ul style="list-style-type: none"> • L (Lost: Consumer reports the card has been lost) • S (Stolen: Consumer reports the card has been stolen) • U (Upgrade/Downgrade: Consumer has been issued a new product) • O (Other: Used when no other value applies) <p>When the value in Field 91—File Update Code is 3 (Delete), this tag must not be included in the message.</p>
DF28	Unlink Indicator	1	AN	<p>This tag can only be used when the value in Tag DF25—Group Type is Replace.</p> <p>When the value in Field 91—File Update Code is 3 (Delete), this tag must contain the value Y. If the value in this tag is not a Y, the tag must not be included in the message.</p>
DF29	Cardholder Primary Account Flag	1	AN	<p>This optional tag is used for group types that have a primary or owner account. A value of Y in this tag will specify that this card account is the primary or owner account for the group.</p> <p>When the value in Tag DF25—Group Type is Replace, this tag must not be included in the message.</p>

4.166.4 Field Edits

None.

4.166.5 Reject Codes

None.

4.166.6 File Edits

In an 0302 ALP product cardholder database update request, Tag DF21 must contain the sender ID; otherwise, Visa will send an error code of **0743**. The content of Tag DF21 cannot be all **zeros**, or V.I.P. returns error code **0744**.

For messages that fail a file edit, V.I.P. responds with **06** (error) in field 39 and send an error code in field 48, usage 1c. It sends an 0322 account linking error advice to the issuer.

The account linking file maintenance processing occurs daily, so the error advice is not sent the same day as the update message.

4.166.7 File Maintenance Error Codes

0743 = Tag DF21 does not contain the sender ID

0744 = Tag DF21 contains an invalid format or all **zeros**

The ALM file maintenance error codes for this field are:

L2 = Link indicator is invalid

L3 = Unlink indicator is invalid

L4 = Replaced account number is specified but link indicator and unlink indicator are **spaces**

L6 = Link indicator and unlink indicator are not **spaces**

L7 = Replaced account number is invalid

L8 = Replaced account number is not in an eligible account range for this issuer

LA = Invalid deletion of primary account from link group

LB = Invalid link group ID

LC = Account exists in a different link group

LD = Primary account indicator must be supplied

LE = Invalid link group type

N1 = Linking account from a different country

N2 = Invalid action code

N3 = Invalid group code

N4 = Invalid primary card indicator

N5 = Account number exists with a different sender/sub-sender

N6 = Invalid change request

N7 = Invalid link; attempt to link to more than one account

N8 = Primary card and replaced card are the same

N9 = Cyclic link; attempt to link replacement card with older card in replacement chain

NA = Same card present in another spend assessed group

NB = Duplicate change record

NC = Duplicate delete record

ND = Add and delete record for same account in the same file

NE = Invalid product ID

NF = Invalid CMF product ID

NG = Invalid issuer BID linking

NH = Invalid cross-product category link

NI = Product platform does not match account range platform

NJ = Invalid add/change/delete of a small business primary card

NOTE

V.I.P. uses this reject reason code when there is an attempt to link accounts that are from different issuers.

WL = Link present

NOTE

This is a warning code, not an error code.

4.167 Field 127.PF—Portfolio File

4.167.1 Applies to

Portfolio File (Field 101—File Name = PF)

4.167.2 Attributes

variable length
1 byte, binary +
255 ANS, EBCDIC; maximum 256 bytes

4.167.3 Description

Field 127.PF contains an issuer-supplied stop payment command for a recurring payment transaction. The field is used by the U.S. region's Preauthorized Payment Cancellation Service (PPCS).

Positions:				
1		2–3	4–65	66–255
Subfield 1: length	Subfield 2: dataset ID	Subfield 3: dataset length	Subfield 4: Stop Payment Data (TLV elements)	Unused
			<div><div><div>Tag</div><div>Length</div><div>Value</div></div><div>TLV₁</div><div><div><div>Tag</div><div>Length</div><div>Value</div></div><div>TLV_N</div></div></div>	
Byte 1	Byte 2	Byte 3–4	Byte 5–66	Byte 67–256

Length Subfield: A one-byte binary subfield that contains the number of bytes in this field. The maximum value is **255** bytes.

Position 1, Dataset Identifier: A one-byte binary identifier. The identifier is: **69**.

Positions 2–3, Dataset Length: A two-byte maximum binary value representing the total length of the type of stop order, cardholder name, and merchant account number TLV fields.

Positions 4–65, Stop Payment Data: A 62-maximum-byte subfield that contains the type of stop order, the cardholder’s name, and the merchant’s account number. Each occurrence of the stop payment data set follows the Tag, Length, Value format and contains one or more subfields as follows.

Type of Stop Order. This subfield is required in stop payment transactions.

Tag: A 2-byte value that must be **DF11**.

Length: A 1-byte value indicating how many bytes of data follow.

Value: A 2-byte value, which is **R0** to stop specific payment, **R1** to revoke authorization for further payments, or **R3** to cancel all recurring payments for the card number in the request.

Cardholder Name. This subfield is optional. If present, it is in EBCDIC format.

Tag: A 2-byte value that must be **DF12**.

Length: A 1-byte binary value.

Value: A 23-byte-maximum cardholder name.

Merchant Account Number. This subfield is optional. If present, it is in EBCDIC format.

Tag: A 2-byte value that must be **DF13**.

Length: A 1-byte value.

Value: A 27-byte-maximum merchant account number.

Positions 66–255: Reserved.

4.167.4 Usage

IMPORTANT

Endpoints that support this field must be able to receive dataset IDs and tags defined for this field in any order, including those they do not recognize or expect. Endpoints can receive multiple datasets in this field. Endpoints must ignore dataset IDs or tags they do not recognize and continue to process the field.

Field 127.PF is used in an 0302 add or replace request when the card issuer must add or replace Portfolio Stop Payment data. The field is required in 0302 requests if the file name in field 101 is **PF** and the requested action in field 91 is **1** (add) or **4** (replace). It is also used in record deletion and inquiry requests (field 91 = **3** or **5**, respectively). When field 127.PF is present in 0302 requests, it is returned in 0312 responses.

For stop codes **R0** and **R1**, at least one of the following fields must be present in a PPCS 0302 add or replace message: field 42 (card acceptor ID), field 43 (merchant name), or field 62.20 (MVV). For stop code **R3**, however, none of these can be present in the message.

4.167.5 Field Edits

None.

4.167.6 Reject Codes

None.

4.167.7 File Edits

If the number of bytes in the Value position of a TLV subfield does not match the number of bytes specified in the Length position, V.I.P. returns the transaction with error code **0588**.

If an R0/R1 0302 add/replace message is submitted without at least one of the fields in the optional field group of field 42, field 43, or field 62.20, V.I.P. returns the transaction with error code **0589**.

If an R3 0302 add/replace message is submitted with one or more of the fields in the optional field group of field 42, field 43, or field 62.20, V.I.P. returns the transaction with error code **0586**.

If the 2-byte tag value **DF11** is missing from an addition or replacement, V.I.P. returns the transaction with error code **0592**.

In related edits, if field 62.2 is missing from a deletion or a replacement, V.I.P. returns the transaction with error code **0590**.

If field 19 is missing from a PPCS transaction, V.I.P. returns the transaction with error code **0591**.

4.167.8 File Maintenance Error Codes

0586 = Fields 42, 43, and 62.20 are not allowed with stop code R3.

0588 = Field 127 TLV format error.

0589 = Field missing.

0592 = The 2-byte tag value DF11 is missing. This field is required in additions and replacements.

Related error codes are:

0590 = Field 62.2 is missing. This field is required in deletions and replacements.

0591 = Field 19 is missing. This field is required.

4.167.9 Valid Values

Table 4-145 Field 127.PF: Type of Stop-Order Values

Code	Definition
R0	Stop payment order
R1	Revocation of authorization order
R3	Revocation of all authorizations order

4.168 Field 127—Inquiry Control Data (TLV Format)

4.168.1 Attributes

variable length
1 byte, binary +
TLV Format: 255 binary and ANS, EBCDIC; maximum 256 bytes

4.168.2 Description

This field description contains datasets presented in hex number order. The dataset IDs listed for position 1 can be used as a guide to the Usage section, which specifies the content for each dataset.

The datasets, which are in TLV format, can have multiple sub-elements. The TLV format is shown below.

Positions:			
1	2–3	4–255	
Subfield 1: Length	Subfield 2: dataset ID	Subfield 3: dataset length	Subfield 4: Verification Data TLV elements
			<div><div>TagLengthValue</div><div>TLV₁</div></div> <div><div>TagLengthValue</div><div>TLV_N</div></div>
Byte 1	Byte 2	Bytes 3–4	Byte 5–256

Length Subfield: One-byte binary subfield that contains the number of bytes in this field. The maximum is **255**

Position 1, Dataset ID: This one-byte binary subfield contains a hexadecimal value that identifies the TLV data that follows. Values:

- [Dataset ID Hex 42, Inquiry Control Data](#)

Positions 2–3, Dataset Length: This 2-byte binary subfield specifies the total length of the TLV fields present in the dataset. The length is variable, depending on the data that follows.

Positions 4–255, TLV Data: Each subfield of a dataset has a defined tag, length, and value. The tag is used in conjunction with the dataset ID value. The dataset subfields can be present in any order with other TLV subfields.

The TLV format can be used by all clients regardless of region.

4.168.3 Usage

Issuers may optionally send this field in the 0302 Token file inquiry request message. Issuers will receive this tag in the 0312 Token file inquiry response if sent in the 0302 Token file inquiry request.

If this field is not sent in the 0302 Token file inquiry request, Visa will send the list of tokens matching any other requested criteria, beginning with the first token. This tag is not sent in the 0312 Token file inquiry response if not sent in the 0302 Token file inquiry request.

IMPORTANT

Endpoints that support this field in TLV format must be able to receive dataset IDs and tags defined for this field in any order, including those they do not recognize or expect. Endpoints can receive multiple datasets in this field. Endpoints must ignore dataset IDs or tags they do not recognize and continue to process the field.

Table 4-146 Dataset ID Hex 42, Inquiry Control Data

Tag	Length	Value	Format	Content of Sub-Element
01	2	Starting Query Number	N, BCD	Contains the starting number the issuer wants to query.

This field is used in the following messages:

- 0302/0312 maintenance file request/response.

4.168.4 Field Edits

TLV Format: The field must be correctly formatted otherwise V.I.P. rejects the message with code **06** in field 39 and error code **0751** in field 48, usage 1b.

4.168.5 Reject Codes

None.

4.168.6 File Maintenance Error Codes

None.

4.169 Field 127.TL—Maximum Transaction Amount Limit

4.169.1 Applies to

CDB (Card Data Bulletin) Transaction Amount Limit Segment (Field 101— File Name = TL)

4.169.2 Attributes

fixed length

8 N, 4-bit BCD, (unsigned packed) 4 bytes

4.169.3 Description

Field 127.TL contains the maximum account-level transaction amount limit for a cardholder.

4.169.4 Usage

Field 127.TL is used in 0302 add, change, and replace requests for CDB transaction amount limit segments. This field is not used in delete or inquiry requests. It is present in a successful 0312 response.

A value in field 127.TL can be used to set or update the cardholder maximum transaction amount limit in the CDB segment.

4.169.5 Field Edits

Field 127.TL must be less than or equal to the issuer's approved transaction amount limit (of up to US\$10,000,000.00). If the amount is greater than the issuer's approved transaction amount limit, V.I.P. rejects the request with reject code **0713**.

4.169.6 Reject Codes

0713 = Invalid value

4.169.7 File Edits

Field 127.TL must be present in an 0302 request if field 101 contains the value **TL** and field 91 contains the value **1**, **2**, or **4**. The value must be numeric digits.

When field 91 contains a **3** or **5**, field 127.TL must not appear in the message, but V.I.P. does not reject the request when it is space-filled.

4.169.8 File Maintenance Error Codes

None.

4.170 Field 130—Terminal Capability Profile

4.170.1 Attributes

fixed length
24 bit string; 3 bytes

4.170.2 Description

Field 130 is carried in VSDC transactions and indicates the card data input, the Cardholder Verification Method (CVM), and the security capabilities supported by the terminal.

The field is not used in authentication processing.

This field maps to Field 55, Tag 9F33—Terminal Capabilities.

Positions:						
1	2	3	4–8	1	2	3
manual key entry capability	magnetic stripe-read supported	chip-read supported	reserved	offline plaintext PIN supported	online PIN capability	signature supported
Byte 1				Byte 2		
Positions:						
4	5	6–8	1	2	3	4
offline enciphered PIN supported	no CVM required supported	reserved	SDA supported	DDA supported	card capture supported	reserved
Byte 2			Byte 3			
Positions:						
5	6–8					
CDA supported	reserved					
Byte 3						

The names of the subfields align with the *EMV Integrated Circuit Card Specifications for Payment Systems*..

Table 4-147 shows the field 130 subfields and related values.

Table 4-147 Field 130 Subfield Values

Position	Description	Values
Byte 1		
1	Manual key entry supported	1 = Yes 0 = Other
2	Magnetic stripe read supported	1 = Yes 0 = Other
3	Chip read supported	1 = Yes 0 = Other
4–8	Reserved for future use	n/a
Byte 2		
1	Offline plaintext PIN supported	1 = Yes 0 = Other
2	Online PIN supported	1 = Yes 0 = Other
3	Signature supported	1 = Yes 0 = Other
4	Offline enciphered PIN supported	1 = Yes 0 = Other
5	No CVM required supported	1 = Yes 0 = Other
6–8	Reserved for future use	n/a
Byte 3		
1	Static data authentication (SDA) supported	1 = Yes 0 = Other
2	Dynamic data authentication (DDA) supported	1 = Yes 0 = Other
3	Card capture supported	1 = Yes 0 = Other
4	Reserved for future use	n/a
5	Combined DDA/Application Cryptogram generation (CDA) supported	1 = Yes 0 = Other
6–8	Reserved for future use	n/a

4.170.3 Usage

For full VSDC transactions, this field is required in 0100 authorization and account verification requests. It is optional in 0120 STIP advices, ATM cash disbursements and ATM balance inquiries, and 0120 STIP advices.

4.170.4 Field Edits

None.

4.170.5 Reject Codes

None.

4.171 Field 131—Terminal Verification Results (TVR)

4.171.1 Attributes

fixed length

40 bit string; 5 bytes

4.171.2 Description

Field 131 is carried in VSDC transactions and contains indicators from a terminal perspective. The terminal records the results of offline and online processing by setting a series of indicators in this field. These indicators are available to clients in the online message and clearing transaction.

This field maps to Field 55, Tag 95—Terminal Verification Results.

Positions:

1	2	3	4	5	6
offline authentication not performed	SDA failed	chip data missing	PAN on terminal exception file	DDA failed	CDA failed
Byte 1					

Positions:

7	8	1	2	3	4	5
sda selected	reserved	chip and terminal have different application versions	expired application	application not yet effective	requested service not allowed for card product	new card
Byte 1		Byte 2				

Positions:

6–8	1	2	3	4	5
reserved	cardholder verification was not successful	unrecognized CVM	Offline PIN try limit exceeded	PIN entry, required, PIN pad not working or not present	PIN entry required, PIN pad present but PIN not entered
Byte 2		Byte 3			

Positions:

6	7–8	1	2	3	4
online PIN entered	reserved	transaction exceeds floor limit	lower consecutive offline limit exceeded	upper consecutive offline limit exceeded	transaction selected randomly for on online
Byte 3			Byte 4		

Positions:					
5	6–8	1	2	3	4
merchant forced transaction online	reserved	default TDOL used	issuer authentication failed	script processing failed before generating final cryptogram	script processing failed after generating final cryptogram
Byte 4			Byte 5		
Positions:					
5–8					
reserved					
Byte 5					

The names of the subfields align with *EMV Integrated Circuit Card Specifications for Payment Systems*.

Table 4-148 shows the field 131 subfields and related values.

Table 4-148 Field 131 Subfield Values

Position	Description	Values
Byte 1		
1	Offline data authentication not performed	1 = Yes 0 = Other
2	Static Data Authentication (SDA) failed	1 = Yes 0 = Other
3	Chip data missing	1 = Yes 0 = Other
4	Primary account number on terminal exception File	1 = Yes 0 = Other
5	DDA failed	1 = Yes 0 = Other
6	Combined DDA/Application Cryptogram generation (CDA) failed	1 = Yes 0 = Other
7	SDA selected	1 = Yes 0 = Other
8	Reserved for future use	n/a
Byte 2		
1	Chip and terminal are different application versions	1 = Yes 0 = Other

Table 4-148 Field 131 Subfield Values (continued)

Position	Description	Values
2	Expired application	1 = Yes 0 = Other
3	Application not yet effective	1 = Yes 0 = Other
4	Requested service not allowed for card product	1 = Yes 0 = Other
5	New card	1 = Yes 0 = Other
6–8	Reserved for future use	n/a
Byte 3		
1	Cardholder verification was not successful	1 = Yes 0 = Other
2	Unrecognized CVM	1 = Yes 0 = Other
3	Offline PIN try limit exceeded	1 = Yes 0 = Other
4	PIN entry required and PIN pad not working or not present	1 = Yes 0 = Other
5	PIN entry required and PIN pad present, PIN not entered	1 = Yes 0 = Other
6	Online PIN entered	1 = Yes 0 = Other
7–8	Reserved for future use	n/a
Byte 4		
1	Transaction exceeds floor limit	1 = Yes 0 = Other
2	Lower consecutive offline limit exceeded	1 = Yes 0 = Other
3	Upper consecutive offline limit exceeded	1 = Yes 0 = Other
4	Transaction selected randomly for online transmission	1 = Yes 0 = Other
5	Merchant forced transaction online	1 = Yes 0 = Other
6–8	Reserved for future use	n/a

Table 4-148 Field 131 Subfield Values (continued)

Position	Description	Values
Byte 5		
1	Default terminal data object list (TDOL) used	1 = Yes 0 = Other
2	Issuer authentication failed	1 = Yes 0 = Other
3	Script processing failed before generating final cryptogram	1 = Yes 0 = Other
4	Script processing failed after generating final cryptogram	1 = Yes 0 = Other
5–8	Reserved for future use	n/a

4.171.3 Usage

For full VSDC transactions, this field is required in 0100 authorization and account verification requests, 0100 cash disbursements, ATM balance inquiries and account transfers. It is optional in 0120 STIP ,confirmation, and preauthorization completion advices. It is also required in the following messages if Issuer Authentication failed and TVR is present: 0400 reversal requests and 0420 reversal advices.

NOTE

The Terminal Verification Results (TVR) field sent in reversals contains the final values, not those that were sent in the original request.

4.171.4 Field Edits

None.

4.171.5 Reject Codes

None.

4.172 Field 132—Unpredictable Number

4.172.1 Attributes

fixed length

8 hexadecimal digits; 4 bytes

4.172.2 Description

Field 132 contains the number used in the generation of the cryptogram for VSDC full transactions and contactless magnetic stripe transactions. It provides variability and uniqueness to the cryptogram.

This field maps to Field 55, Tag 9F37—Unpredictable Number.

4.172.3 Usage

VSDC: For full VSDC transactions, this field is required in:

- 0100 authorization and account verification requests
- 0100 cash disbursements, balance inquiries, and account transfers

It is optional in:

- 0120 stand-in advices
- 0120 confirmation advices
- 0120 preauthorization completion advices

Contactless Magnetic Stripe: This field is supported in 0100 authorization and 0120 STIP advices.

4.172.4 Field Edits

None.

4.172.5 Reject Codes

None.

4.173 Field 133—Terminal Serial Number

4.173.1 Attributes

fixed length

8 AN, EBCDIC; 8 bytes

4.173.2 Description

This field is carried in VSDC transactions and contains a unique identification number of the VSDC terminal assigned by the manufacturer. It is used to track devices regardless of their location.

This field maps to Field 55, Tag 9F1E—IFD Serial Number.

4.173.3 Usage

VSDC: This field was used for sending the Interface Device (IFD) Serial Number (Tag '9F1E'). There is no global standard for its use and has resulted in unnecessary declines.

VisaNet now deletes this field from the message prior to sending to the issuer. Therefore, acquirers are advised not to supply this optional VisaNet field in authorization requests.

4.173.4 Field Edits

None.

4.173.5 Reject Codes

None.

4.174 Field 134—Visa Discretionary Data

4.174.1 Attributes

variable length

1 byte binary +

255 data bytes; variable by usage and subfield; maximum 256 bytes

4.174.2 Description

This field contains information from the chip that is:

- All issuer application data (IAD)—for the expanded format of field 134, used by acquirers, or
- Only the Visa Discretionary Data portion of the IAD—for the standard format of field 134, used by issuers

The content can be VIS, CCD, or Generic EMV data.

The acquirer sends the IAD data in:

- The expanded format of field 134, in which case field 135 must not be included in the request from the acquirer, or
- Field 55, tag 9F10, in which case tag 9F10 is formatted as described for the expanded format of field 134

The issuer can receive the IAD in the request message in:

- The standard format of field 134, in which case field 135 may also be included in the request (if the IAD from the acquirer contains Issuer Discretionary Data and Visa Discretionary Data). Fields 134 and 135 are used to receive the IAD, or
- Field 55, tag 9F10, in which case tag 9F10 is formatted as described for the standard format of fields 134 and 135.

The formats are listed below and are described in their individual field descriptions.

- Format 1, Standard Format
 - VIS Usage
 - CCD Usage
- Format 2, Expanded Format
 - VIS Usage
 - CCD Usage
 - Generic EMV Transport Usage

Field 134 maps to Field 55, Tag 9F10—Issuer Application Data.

4.174.3 Usage

This field is used in full VSDC transactions and Contactless Magnetic Stripe transactions.

VSDC: For full VSDC transactions, this field is required in the following messages:

- 0100 authorization and account verification requests
- 0100 cash disbursements and balance inquiries
- 0400 reversal requests and 0420 reversal advices if Issuer Authentication failed.

It is optional in the following messages:

- 0120 stand-in advices
- 0120 confirmation advices
- 0120 preauthorization completion advices

For full VSDC transactions, the format of the field will vary depending on the client-specified preference.

- Field 134 Format 1: When this format is used, field 135 can also be present in the transaction. For CCD transactions, field 135 must be present.
- Field 134 Format 2: When this format is used, field 135 should not be present in the transaction.

Field 134 Format 2 is not supported in transactions going to or from issuers. For issuers, the data is carried in field 134, standard format, or field 55, Tag 9F10, depending on the issuer-specified preference.

Contactless Magnetic Stripe: This field is supported in 0100 authorizations and 0120 STIP advices.

4.174.4 Field Edits

Field edits vary according to usage.

4.174.5 Reject Codes

0369 = Invalid length (length varies by format)

4.175 Field 134—Format 1, Standard Format

4.175.1 Attributes

variable length
1 byte binary +
15 bytes; maximum 16 bytes

4.175.2 Description

Field 134, format 1, is carried in VSDC transactions, and contains the Visa discretionary data portion of the IAD that is transmitted from the card to the issuer. When this format is used, field 135 can also be present in the transaction. Fields 134.1 and 134.2 are hexadecimal subfields and field 134.3 is a bit string subfield, regardless of chip card type (VIS or CCD).

For Issuer Application Data (IAD), issuers can elect to use:

- Field 134, format 1, with field 135, or
- Field 55, tag 9F10.

The format for the VIS type of VSDC card is shown below.

	Positions:			
	1	2	3	4
data byte 1 (length)	DKI	CVN	CVR	n/a
Byte 1	Byte 2	Byte 3	Bytes 4–7	Bytes 8–16

NOTE

In the standard format, Byte 1 (length) should be populated with Byte 1 of the Issuer Application Data.

The format for the CCD type of VSDC card is shown below:

	Positions:			
	1	2	3	4
data byte 1 (length)	CCI	DKI	CVR	Counters
Byte 1	Byte 2	Byte 3	Bytes 4–8	Bytes 9–16

VIS Data:

- **Byte 1, Length Subfield:** A one-byte field that contains the number of bytes in the field after the length subfield. The maximum value is **6** bytes for VIS transactions.
- **Position 1, Derivation Key Index (Field 134.1):** This is a two-hexadecimal digit, one-byte subfield. It contains an index into the issuer's list of keys used in the Online Card Authentication Method (Online CAM), Issuer Authentication, and validation of the clearing cryptogram.
- **Position 2, Cryptogram Version Number (Field 134.2):** This is a two- hexadecimal digit, one-byte subfield used to calculate the cryptogram contained in the message. It indicates which version of the cryptogram algorithm was used for ARQC, TC, AAC, or ARPC generation.
- **Position 3, Card Verification Results (CVR) (Field 134.3):** This subfield is comprised of a one-byte binary length indicator plus **3** bytes of indicator (the subfield maximum is **4** bytes). The card records the results of offline and online processing by setting a series of indicators in this field. These indicators are available to clients in the online message and clearing transaction. The length subfield specifies the number of bytes present in this field.
- **Position 4:** These bytes are reserved for future use.

See Appendix H.

CCD-Compliant Data:

- **Byte 1, Length Subfield:** A one-byte field that contains the number of bytes in the field after the length subfield. The maximum value is **15** bytes for CCD-compliant transactions.
- **Position 1, Common Core Identifier (CCI) (Field 134.1):** This is a one-byte field containing two pieces of information that is used to determine STIP CVR and TVR processing and routing, and cryptogram processing. The content of this subfield is as follows:
 - Left nibble = Format code. The setting in these bits indicates that the format is CCD. The settings are bits that equate to hexadecimal **A–F**, although only a bit setting that equates to hexadecimal **A** has currently been defined for Authentication Services.
 - Right nibble = Cryptogram version. The setting in these bits indicates the version number. The settings are bits **0–9** and **A–F**.
- **Position 2, Derivation Key Index (Field 134.2):** Like VIS cards, the DKI in CCD-compliant cards is a two hexadecimal digit, one-byte subfield that contains an index into the issuer's list of keys. These keys are used in the Online Card Authentication Method (Online CAM), Issuer Authentication, and validation of the clearing cryptogram.
- **Position 3 Card Verification Results (CVR) (Field 134.3):** This 5-byte subfield contains indicators that reflect the results of offline and online processing.
- **Position 4, Counters (Field 134.4):** This subfield is an 8-byte field that contains counters. The format of the counters is issuer-defined.

See Appendix H.

4.175.3 Usage

This field is used in full VSDC transactions. Subfields requirements are as follows:

- **VIS:** Field 134.1 through 134.3 (field 134, positions 1–3) are required.
- **CCD:** Fields 134.1 through 134.4: (field 134, positions 1–4) are required.

NOTE

The Card Verification Results (CVR) and Card Verification Results Extension fields sent in reversals contains the final values, not those that were sent in the original request.

VSDC: For full VSDC transactions, this field is required in the following messages:

- 0100 authorization and account verification requests
- 0100 cash disbursements and balance inquiries

It is optional in the following messages:

- 0120 stand-in advices
- 0120 confirmation advices
- 0120 preauthorization completion advices

4.175.4 Field Edits

If the field length exceeds the maximum length, V.I.P. rejects the message with reject code **0369**.

CCD Format: The maximum length of the field is **15** bytes, excluding the length byte.

VIS Format: The maximum length of the field is **6** bytes, excluding the length byte.

4.175.5 Reject Codes

0369 = Invalid length (length greater than **15** bytes)

4.176 Field 134—Format 2, Expanded Format

4.176.1 Attributes

variable length
1 byte binary +
32 bytes; maximum 33 bytes

4.176.2 Description

Field 134, format 2, contains Issuer Application Data (IAD) either VIS or CCD data. Format 2 is applicable to expanded third bit map acquirers, and issuers or acquirers supporting field 55. When the expanded format is used, field 135 should not be present in the transaction.

When submitting VSDC transactions using the expanded format, acquirers must also populate the Chip Transaction Indicator (field 60.6) with the value of **2**.

In the expanded format, Visa discretionary data and issuer discretionary data are concatenated in one field as shown below.

Positions: 1–32	
length	issuer application data
Byte 1	Byte 2–33

NOTE
With Format 2 the length byte is the length of the Issuer Application Data and is not part of Issuer Application Data.

See Appendix H, which also contains information about IAD Format 2 content and VIS Format 2 values.

Acquirers that do not submit token data in Field 55 must submit this field when token data is present in a transaction.

Field 134 maps to Field 55, Tag 9F10—Issuer Application Data.

4.176.3 Usage

Acquirers must support field 134, format 2/Tag '9F10' for all card types. Acquirers that support expanded third bit map must use field 134, format 1.

This format is sent to issuers that support field 55 in contact and contactless MSD CVN_17 and qVSDC transactions. Expanded third bit map and field 55 acquirers send this format for IAD.

All or part of this field is used when the Issuer Application Data (IAD) or Card Verification Results (CVR) are included in calculating the cryptogram.

The card type is transparent to expanded third bit map acquirers. Acquirers do not need to format the field by card type. For VSDC card type, the acquirer uses the Issuer Application Data from the card/device and places it in Field 134.

The CVR sent in reversals contains the final values.

For full VSDC transactions, this field is required in the following messages:

- 0100 authorization and account verification requests
- 0100 cash disbursements and ATM balance inquiries
- 0400 reversal requests and 0420 reversal advices if Issuer Authentication failed

It is optional in the following messages:

- 0120 stand-in advices
- 0120 confirmation advices
- 0120 preauthorization completion advices

For data requirements on VIS and CCD chip card types, see field 134, format 1, for Visa discretionary data, and field 135 for issuer discretion data.

Data field requirements for advices from BASE II endpoints are identical to those for stand-in advices.

4.176.4 Field Edits

If field 134, format 2, is present, the length cannot exceed **32** bytes.

4.176.5 Reject Codes

0369 = Invalid length (length greater than **32** bytes)

4.176.6 Valid Values

Values for VIS and CCD-compliant subfields are in Appendix H, which also includes information about VIS Format 2.

4.177 Field 135—Issuer Discretionary Data

4.177.1 Attributes

variable length
1 byte binary + 30 hexadecimal digits; maximum 16 bytes

4.177.2 Description

This field contains the issuer discretionary data portion of the Issuer Application Data (IAD) that is defined by the issuer on the card. This data is in online messages for use by the issuer in online processing.

The field must be supported by full VSDC acquirers and issuers that use the standard format of Field 134—Visa Discretionary Data. Third bitmap acquirers that use the expanded format of field 134 (format 2) should not include field 135 in submitted transactions. If present, field 135 will be dropped.

Positions: 1–15	
Length	Issuer Discretionary Data
Byte 1	Bytes 2–16

NOTE
The Length byte is the first of Issuer Discretionary Data. The location of this byte within Issuer Application Data varies depending on the number of bytes contained in Visa Discretionary Data in field 134. The number of bytes in field 134 varies by type of chip card.

This field, along with field 134, maps to Field 55, Tag 9F10—Issuer Application Data.

4.177.3 Usage

VSDC: This field applies to full VSDC transactions. It will be present in CCD-compliant transactions, and may be present in VIS transactions.

For CCD-compliant transactions, all **32** bytes of Visa discretionary data and issuer discretionary data must be included in the message. When field 135 is present, the length (IAD data byte 17) must be **15** bytes.

If Issuer Discretionary Data is present on the card (as part of Issuer Application Data, Tag '9F10'), it must be included in the following messages:

- 0100 authorization and account verification requests
- 0100 cash disbursements and balance inquiries

It is optional in the following messages:

- 0120 stand-in advices
- 0120 confirmation advices
- 0120 preauthorization completion advices

Contactless Magnetic Stripe: This field is supported in 0100 authorization and 0120 STIP advices.

4.177.4 Field Edits

If field 135 is present, its length cannot exceed **15** bytes.

4.177.5 Reject Codes

0370 = Invalid length

4.178 Field 136—Cryptogram

4.178.1 Attributes

fixed length
16 hexadecimal digits; 8 bytes

4.178.2 Description

This field contains an Authorization Request Cryptogram (ARQC), Transaction Certificate (TC), or an Application Authentication Cryptogram (AAC). Since this data element represents the cryptogram itself, acquirers must provide the cryptogram value generated by the card at the point of service without modification.

NOTE

The Card Verification Results (CVR) bytes in field 134 in VIS and CCD-compliant VSDC transactions indicate which cryptogram type is present in this field. In general, an ARQC means that the card determined that the transaction should be sent online, a TC indicates that the transaction was approved offline, and an AAC indicates that the transaction was declined offline.

This field maps to Field 55, Tag 9F26—Application Cryptogram.

4.178.3 Usage

VSDC: For full VSDC transactions, this field is required in:

- 0100 authorization and account verification requests
- 0100 cash disbursements and ATM balance inquiries

It is optional in the following messages:

- 0120 stand-in advices
- 0120 confirmation advices
- 0120 preauthorization completion advices

Contactless Magnetic Stripe: This field is supported in 0100 authorization and 0120 STIP advices.

PIN Change/Unblock Request: This is an optional field that is not used by V.I.P.

4.178.4 Field Edits

None.

4.178.5 Reject Codes

None.

4.179 Field 137—Application Transaction Counter

4.179.1 Attributes

fixed length
4 hexadecimal digits; a 2-byte binary value

4.179.2 Description

This field contains a count of the transactions performed within the card application. The count is incremented by one each time a transaction is initiated.

Multiple authorization requests for the same transaction will have the same ATC; for example, when online PIN fails and the next authorization represents a different PIN try for the same transaction, the ATC will be the same. For reversals and advices, the ATC is the value from the original message.

This field maps to Field 55, Tag 9F36—Application Transaction Counter.

4.179.3 Usage

This field (or TLV 9F36 in field 55) is used as described in this section. In acquirer requests, the VIC will remove the ATC if the issuer is an early data participant or send it to the issuer if the issuer is a full data participant.

The field is optional in responses to original requests and to related reversals or reversal advices. If the issuer includes the ATC in a response, the VIC will forward it to the acquirer. If the issuer does not include the ATC in the response, the VIC will not add it.

If the field is present in issuer responses other than those for original requests, reversals, and reversal advices, it will be dropped before the message is forwarded to the acquirer.

VSDC: For full VSDC transactions, this field is required in the following:

- 0100 authorization and account verification requests
- 0100 cash disbursements and balance inquiries

It is optional in the following messages:

- 0120 stand-in advices
- 0120 confirmation advices
- 0120 preauthorization completion advices

It is recommended in 0420 advices if available.

Contactless Magnetic Stripe: This field is supported in the following messages:

- 0100 authorizations
- 0120 STIP advices

It is recommended in 0420 advices if available.

4.179.4 Field Edits

None.

4.179.5 Reject Codes

None.

4.180 Field 138—Application Interchange Profile

4.180.1 Attributes

fixed length
16 bit string; 2 bytes

4.180.2 Description

Field 138 is carried in VSDC transactions and provides a series of indicators that reflect the functions supported by the chip card account, for example, whether cardholder verification is supported.

This field maps to Field 55, Tag 82—Application Interchange Profile.

Positions:			
1	2	3	4
reserved	SDA supported	DDA supported	cardholder verification supported
Byte 1			
Positions:			
5	6	7	8
terminal risk management to be performed	issuer authentication supported	reserved	CDA supported
Byte 1			
Positions:			
1–8			
reserved			
Byte 2			

Table 4-149 defines the subfields for field 138.

Table 4-149 Field 138 Subfield Values

Position	Description	Values
Byte 1		
1	Reserved for Visa	n/a
2	Static Data Authentication (SDA) supported	1 = Yes 0 = Other
3	Dynamic Data Authentication (DDA) supported	1 = Yes 0 = Other
4	Cardholder Verification supported	1 = Yes 0 = Other

Table 4-149 Field 138 Subfield Values (continued)

Position	Description	Values
5	Terminal risk management to be performed	1 = Yes 0 = Other
6	Issuer Authentication supported	1 = Yes 0 = Other
7	Reserved for Visa	1 = Yes 0 = Other
8	Combined DDA/Generate AC (CDA) is supported	n/a
Byte 2		
1–8	Reserved for future use	n/a

4.180.3 Usage

For full VSDC transactions, this field is required in:

- 0100 authorization and account verification requests
- 0100 cash disbursements and balance inquiries

It is optional in the following messages:

- 0120 stand-in advices
- 0120 confirmation advices
- 0120 preauthorization completion advices

4.180.4 Field Edits

None.

4.180.5 Reject Codes

None.

4.181 Field 139—ARPC Response Cryptogram and Code

4.181.1 Attributes

fixed length
16 hexadecimal digits +
2 AN EBCDIC; 10 bytes total

4.181.2 Description

This field is optional for full VSDC transactions when Field 134, Format 1, is used. There are two layouts that a third bitmap issuer can use to transmit the authentication information in a response message, VIS or CCD. Acquirers must no longer use field 139 for ARPC Response Cryptogram and Code. Acquirers should use field 140 or field 55, Tag 91 to receive this data.

The content of the first 8 bytes in the field are the chip card type. Bytes 9–10 in formats contain the ARPC response code. The following illustration shows the differences in the formats.

Type of VSDC Card	Byte Content		
VIS (CVNs: 10, 12, 50–59)	ARPC cryptogram		ARPC response code
CCD or VIS CVN 18	ARPC cryptogram Bytes 1–4	CSU Bytes 5–8	ARPC response code
	Bytes 1–8		Bytes 9–10

- This field maps to the following fields:
- Field 140—Issuer Authentication Data-Expanded Third Bitmap
 - Field 55, Tag 91—Issuer Authentication Data

4.181.3 Usage

VSDC: This field is used on full VSDC transactions. Issuers should only populate field 139 when they are performing Issuer Authentication. The issuer provides the same data in the ARPC response code as in the response code (field 39).

V.I.P. populates field 139 under the following conditions:

- The issuer subscribes to the VisaNet Issuer Authentication Service.
- The issuer uses the standard format of field 134.
- The transaction meets the processing guidelines for Issuer Authentication performance.

V.I.P. sends the content of field 139 to the acquirer in the format that the acquirer uses to exchange chip data. An invalidly formatted value will result in field 140 being dropped from the response back to the acquirer.

Field 139 is required in the following full VSDC transactions if issuer authentication was performed:

- 0110 authorization and account verification responses
- 0110 cash disbursements and balance inquiry responses
- 0120 stand-in advices, if present in the original

4.181.4 Field Edits

None.

4.181.5 Reject Codes

None.

4.182 Field 139—Format 1, VIS Usage: ARPC Response Cryptogram and Code

4.182.1 Attributes

fixed length
16 hexadecimal digits +
2 AN EBCDIC; 10 bytes total

4.182.2 Description

This VSDC field contains the authorization response cryptogram (ARPC) and response code that is used by the card to perform Issuer Authentication for VIS transactions.

This layout of field 139 must be supported by full VSDC issuers that use the standard format of Field 134—Visa Discretionary Data and issue VIS cards.

Position:	
1	2
Field 139.1 ARPC cryptogram	Field 139.2 ARPC response code
Bytes 1–8	Bytes 9–10

Position 1, Authorization Response Cryptogram (Field 139.1): This 8-byte subfield contains an Authorization Response Cryptogram used to authenticate the issuer.

Position 2, ARPC Response Code (Field 139.2): This field contains the response code value used by the issuer to calculate the ARPC. The acquirer may modify the response code value in field 39 before sending it to the terminal. When the card generates an ARPC and compares it to the ARPC generated by the issuer, it must have access to the same value used by the issuer. This field has been added to the message to ensure that the issuer and the card are using the same value to compute the cryptogram.

- This field maps to the following fields:
- Field 140—Issuer Authentication Data
 - Field 55, Tag 91—Issuer Authentication Data

4.182.3 Usage

VSDC: This field is used in full VSDC transactions. Issuers should only populate it when they are performing Issuer Authentication. The issuer provides the same data in the ARPC response code as in the response code (field 39).

- V.I.P. populates field 139 using this format under the following conditions:
- The issuer subscribes to the VisaNet Issuer Authentication Service.
 - The issuer uses the standard format of field 134.
 - The transaction was identified as a VIS transaction.
 - The transaction meets the processing guidelines for Issuer Authentication performance.
- V.I.P. sends field 139 information received from the issuer to the acquirer in field 140. An invalidly formatted value will result in field 140 being dropped from the response back to the acquirer.

Field 139 is required in the following full VSDC messages if issuer authentication was performed:

- 0110 authorization and account verification responses, 0110 cash disbursements and ATM balance inquiry responses.
- 0120 STIP advices.

4.182.4 Field Edits

None.

4.182.5 Reject Codes

None.

4.183 Field 139—Format 2, CCD Usage: Issuer Authentication Data

4.183.1 Attributes

fixed length
16 hexadecimal digits +
2 AN EBCDIC; 10 bytes total

4.183.2 Description

This field is carried in VSDC transactions and contains the authorization response cryptogram (ARPC), Card Status Updates (CSU), and response code that is used by the card to perform Issuer Authentication for CCD transactions.

This layout of field 139 must be supported by full VSDC issuers that use the standard format of Field 134—Visa Discretionary Data and issue CCD cards.

Positions:

1	2	3
ARPC cryptogram	card status updates (CSU)	ARPC response code or filler
Bytes 1–4	Bytes 5–8	Bytes 9–10

Position 1, Authorization Response Cryptogram: This 4-byte subfield contains the authorization response cryptogram used to authenticate the issuer.

Position 2, Card Status Updates (CSU): This 4-byte subfield contains indicators that are used by issuers to update specific card elements without using Issuer Script Processing. The CSUs are sent by the issuer in the response message or generated as default CSUs by V.I.P. for issuers that participate in the service. When generated by V.I.P., the default is approve or decline as shown below.

Response Type	Default CSU Bit Settings by Byte	Description
Approval	Byte 1 = 0000 0000 Byte 2 = 1000 0110 Byte 3 = 0000 0000 Byte 4 = 0000 0000	Byte 2 bit 6 indicates that the CSU was created by a proxy for the issuer. The update counter bits may be processed or ignored depending on how the card is personalized.
Decline	Byte 1 = 0000 0000 Byte 2 = 0000 0100 Byte 3 = 0000 0000 Byte 4 = 0000 0000	Byte 2 bit 6 indicates that the response was created by a proxy for the issuer.

Position 3, ARPC Response Code or Filler: This 2-byte subfield contains the ARPC response code or filler (EBCDIC 00). The contents are not used by CCD cards, but the issuer may choose to send the ARPC response code in these bytes.

- This field maps to the following fields:
- Field 140—Issuer Authentication Data
 - Field 55, Tag 91—Issuer Authentication Data

4.183.3 Usage

This field is used in full VSDC transactions. Issuers should only populate field 139 when they are performing Issuer Authentication. The issuer provides the same data in the ARPC response code as in the response code.

If issuer authentication was performed, field 139 is required for full VSDC transactions in 0110 authorization request and account verification responses and in 0110 cash disbursement and ATM balance inquiry responses. It is required in an 0120 advice if it was in the original.

V.I.P. sends the field 139 information received from the issuer to the acquirer in field 140 after converting the ARPC Response Code from EBCDIC to ASCII.

V.I.P. populates field 140 (on behalf of the issuer) using this format under the following conditions:

- The issuer subscribes to the VisaNet Issuer Authentication Service.
- The acquirer uses field 134 expanded format instead of field 55 tag 9F10.
- The transaction was identified as a CCD-compliant transaction.
- The transaction meets the processing guidelines for Issuer Authentication performance.
- Issuer Authentication Data was not in the response from the issuer or the ARPC Cryptogram portion of Issuer Authentication from the issuer was equal to binary zeros.

An invalidly formatted value will result in field 140 being dropped from the response back to the acquirer.

4.183.4 Field Edits

None.

4.183.5 Reject Codes

None.

4.184 Field 140—Issuer Authentication Data

4.184.1 Attributes

variable length
1 byte binary +
255 bytes variable by usage; maximum 256 bytes

4.184.2 Description

This field is carried in VSDC transactions and contains information to be used by the card to perform issuer authentication. There are three field 140 formats: VIS, CCD and Generic EMV Transport. There is a field description for each of these formats.

The content of the field is the same as that for field 139 except that:

- The ARPC response code in field 140, format 1, is in ASCII format.
- The proprietary authentication data (PAD) used in field 140, format 2, for CCD-compliant transactions is not supported in field 139.

Issuers do not use field 140. Issuers using the standard format (Format 1) of field 134 should refer to field 139.

Field 140 must be supported by full VSDC acquirers that use the expanded format of Field 134—Visa Discretionary Data. Acquirer systems cannot differentiate between the card types.

This field is not used by issuers.

VSDC Card Type	Byte Content			
VIS: CVN10, CVN12, CVN50–CVN59	Length	ARPC cryptogram		ARPC response code n/a
CCD or VIS: CVN18		ARPC cryptogram Bytes 2–5	CSU Bytes 6–9	Proprietary authentication data (PAD) Bytes 10–17
Generic EMV Transport		Issuer Defined 1 to 16 bytes		
	Byte 1	Bytes 2–9	Bytes 10–11	Bytes 12–17

Byte 1, Length subfield: A one-byte field that contains the total number of bytes in the field. The maximum value is **16** bytes.

Positions 1–16, Issuer Authentication Data: The contents of these positions vary depending on the type of chip card. Bytes 10–11 must contain the ARPC response code for VIS cards. Bytes 10–17 may optionally contain the PAD for CCD cards.

This field maps to Field 55, Tag 91—Issuer Authentication Data.

4.184.3 Usage

This field is used in full VSDC transactions. V.I.P. populates field 140 under the following conditions:

- The issuer subscribes to the VisaNet Issuer Authentication Service.
- The transaction meets the processing guidelines for Issuer Authentication performance.
- Issuer Authentication Data was not in the issuer response.
- The acquirer uses the expanded format (Format 2) of field 134.

If issuer authentication was performed, field 140 is required in 0110 authorization and account verification responses, 0110 cash disbursements and ATM balance inquiry responses to third bitmap acquirers that use expanded formats.

An invalidly formatted value will result in field 140 being dropped from the response back to the acquirer.

4.184.4 Field Edits

None.

4.184.5 Reject Codes

None.

4.185 Field 140—Format 1, VIS Usage: Issuer Authentication Data

4.185.1 Attributes

variable length
1 byte binary +
16 hexadecimal digits and two bytes binary, ASCII equivalent; maximum 11 bytes

4.185.2 Description

This VSDC field contains the authorization response cryptogram (ARPC) and response code that is used by the card to perform Issuer Authentication for VIS transactions. The content of the field is the same as that in field 139 except that the ARPC response code in bytes 10–11 in field 140 is in ASCII format.

Field 140 must be supported by full VSDC acquirers that use the expanded format (Format 2) of Field 134—Visa Discretionary Data. Acquirer systems cannot differentiate between the card types.

This field is not used by issuers.

Positions:		
1		2
length	ARPC cryptogram	ARPC response code
Byte 1	Bytes 2–9	Bytes 10–11

Byte 1, Length Subfield: A one-byte field that contains the total number of bytes in the field. The maximum value is **10** bytes.

Position 1, ARPC Cryptogram: This 8-byte subfield contains the authorization response cryptogram used to authenticate the issuer.

Position 2, ARPC Response Code: This 2-byte subfield contains the response value. Because the acquirer may modify the response code value in field 39 before sending it to the terminal, field 140 contains the response value used by the issuer to generate the ARPC. When the card generates an ARPC and compares it to the ARPC generated by the issuer, it must have access to the same value used by the issuer. This field has been added to the message to ensure that the issuer and the card are using the same value to compute the cryptogram.

This field maps to Field 55, Tag 91—Issuer Authentication Data.

4.185.3 Usage

This field is used in full VSDC transactions. V.I.P. populates field 140 under the following conditions:

- The issuer subscribes to the VisaNet Issuer Authentication Service.
- The acquirer uses the expanded format (Format 2) of field 134.
- The transaction was identified as a VIS transaction.
- The transaction meets the processing guidelines for Issuer Authentication performance.
- Issuer Authentication Data was not in the issuer response, or the Authorization Response Cryptogram received from the issuer was equal to binary zeros.

If issuer authentication was performed, field 140 is required in:

- 0110 authorization and account verification responses
- 0110 cash disbursements and balance inquiry responses

An invalidly formatted value will result in field 140 being dropped from the response back to the acquirer.

NOTE

Issuer Authentication Data is not sent in the authorization response if the online CAM validation fails.

4.185.4 Field Edits

None.

4.185.5 Reject Codes

None.

4.186 Field 140—Format 2, CCD Usage: Issuer Authentication Data

4.186.1 Attributes

variable length
1 byte binary +
16 hexadecimal bytes; minimum 9 bytes; maximum 17 bytes

4.186.2 Description

This field is carried in VSDC transactions and contains the authorization response cryptogram (ARPC), the Card Status Updates (CSUs), and optional proprietary authentication data (PAD). These data elements are used by the card to perform Issuer Authentication for CCD transactions.

Field 140 must be supported by full VSDC acquirers that use the expanded format of Field 134—Visa Discretionary Data. Acquirer systems cannot differentiate between the card types.

This field is not used by issuers.

Positions:			
	1	2	3
length	ARPC cryptogram	card status updates (CSU)	proprietary authentication data (PAD)
Byte 1	Bytes 2–5	Bytes 6–9	Bytes 10–17

Byte 1, Length subfield: A one-byte field that contains the total number of bytes in the field. The maximum value is **16** bytes.

Position 1, Authorization Response Cryptogram: This 4-byte subfield contains the authorization response cryptogram used to authenticate the issuer.

Position 2, Card Status Updates (CSU): This 4-byte subfield contains indicators that are used by issuers to update card elements without using Issuer Script Processing. The CSU is sent by the issuer or created by V.I.P. when the issuer chooses to have V.I.P. perform Issuer Authentication. V.I.P. uses different CSU default values, depending on whether the transaction is approved or declined.

The following table shows the CSU Indicators.

Table 4-150 Position 2: CSU Indicators

Position	Description	Value
Byte 1		
1	PAD is present	1 = Yes 0 = No
2–4	Reserved	Reserved for future use.
5–8	PIN Try Counter	A binary number that indicates the value the card is to assign to the PIN Try Counter
Byte 2		

Table 4-150 Position 2: CSU Indicators (continued)

Position	Description	Value
1	Issuer Approve Online Transaction	1 = Yes 0 = No
2	Card Block	1 = Yes 0 = No
3	Application Block	1 = Yes 0 = No
4	Update PIN Try Counter	1 = Yes 0 = No
5	Set Go Online on Next Transaction	1 = Yes 0 = No
6	CSU Created By Proxy for the Issuer	1 = Yes 0 = No
7–8	Update Counters	00 = Do Not Update Offline Counters 01 = Set Offline Counters to Upper Offline Limits 10 = Reset Offline Counters to Zero 11 = Add Transaction to Offline Counter
Byte 3		
1–8	Reserved	Reserved for future use.
Byte 4		
1–8	Reserved for issuers	Issuer-determined.

The following table shows the Position 2 default settings when generated by V.I.P.

Table 4-151 Position 2: Default Settings Generated by V.I.P.

Response Type	Default CSU Bit Settings By Byte	Description
Approval	Byte 1 = 0000 0000 Byte 2 = 1000 0110 Byte 3 = 0000 0000 Byte 4 = 0000 0000	Byte 2 bit 6 indicates that the CSU was created by a proxy for the issuer. The update counter bits may be processed or ignored depending on how the card is personalized.
Decline	Byte 1 = 0000 0000 Byte 2 = 0000 0100 Byte 3 = 0000 0000 Byte 4 = 0000 0000	Byte 2 bit 6 indicates that the response was created by a proxy for the issuer.

Position 3, Proprietary Authentication Data (PAD): This optional 8-byte subfield, which is used for sending proprietary information to the card, can only be carried in responses from issuers that use field 55. The subfield is used in the VisaNet Issuer Authentication Service when bit 1 of CSU byte 1 is equal to **1**.

This field maps to Field 55, Tag 91—Issuer Authentication Data.

4.186.3 Usage

This field is used in full VSDC transactions. V.I.P. populates field 140 under the following conditions:

- The issuer subscribes to the VisaNet Issuer Authentication Service.
- The acquirer uses expanded third bitmap instead of field 55.
- The transaction was identified as a CCD-compliant transaction.
- The transaction is eligible for Issuer Authentication.
- Issuer Authentication Data was not in the issuer response or the ARPC Cryptogram portion of Issuer Authentication from the issuer was equal to binary zeros.

An invalidly formatted value will result in field 140 being dropped from the response back to the acquirer.

If issuer authentication was performed, field 140 is sent to expanded third bitmap acquirers in the following messages:

- 0110 authorization and account verification responses, 0110 cash disbursements and ATM balance inquiry responses
- 0120 STIP advices.

4.186.4 Field Edits

None.

4.186.5 Reject Codes

None.

4.187 Field 140—Format 3, Generic EMV Transport Usage

4.187.1 Attributes

variable length
1 byte binary +
16 hexadecimal digits to 32 hexadecimal digits; 9 bytes minimum to 17 bytes maximum

4.187.2 Description

This field is carried in VSDC transactions and contains data that is set by the issuer. The content of this field is not used by VisaNet for processing.

Field 140 must be supported by full VSDC acquirers that use the expanded format (Format 2) of Field 134—Visa Discretionary Data. Acquirer systems cannot differentiate between the card types.

Positions: 1–16	
length	Generic EMV Transport Data
Byte 1	Bytes 2–17

Byte 1, Length Subfield: A one-byte field that contains the total number of bytes in the field. The minimum value is **8** bytes and the maximum value is **16** bytes.

Bytes 2–17, Generic EMV Transport Data: The content of this field will not be edited by V.I.P. The field will be forwarded as submitted in the message.

This field maps to Field 55, Tag 91—Issuer Authentication Data.

4.187.3 Usage

This field is used in full VSDC transactions, and is sent to third bitmap acquirers that use expanded formats. V.I.P. will forward the content of the field as submitted by the issuer under the following conditions:

- The transaction was identified as a Generic EMV Transport transaction.
- Field 55 from the issuer contained tag '91'.

An invalidly formatted value will result in field 140 being dropped from the response back to the acquirer. Field 140 is sent to third bitmap acquirers that use the expanded third bitmap format in the following messages:

- 0110 authorization and account verification responses, 0110 cash disbursements and ATM balance inquiry responses
- 0120 STIP advices.

4.187.4 Field Edits

None.

4.187.5 Reject Codes

None.

4.188 Field 142—Issuer Script

4.188.1 Attributes

variable length
1 byte +
510 hexadecimal digits; maximum 256 bytes

NOTE

While the maximum number of bytes for this field is 256 bytes, EMV specifies that networks must support a minimum of 128 bytes of Issuer Script. With the length byte, acquirers must support a minimum of 129 bytes in field 142. Issuers may send more than 129 bytes in field 142 only when the issuer knows that longer issuer scripts are supported on the entire transaction path.

4.188.2 Description

This field originates from the issuer and contains Issuer Script commands with changes that the issuer communicates to the card. It allows dynamic changes to the content of the card without reissuing the card. The issuer sends Tag 71 or Tag 72 in the response but not both.

Tag 71 is used when the issuer sends Issuer Script commands to the card in the response to be applied to the card *before* the final GENERATE AC command.

Tag 72 is used when the issuer sends Issuer Script commands to the card in the response to be applied to the card *after* the final GENERATE AC command. Visa recommends the use of Tag 72 but will accept Tag 71.

This field is not used by VisaNet for processing.

The format of the field is a special form of a composite data element that uses three subfields after the length subfield as shown in the following table.

Positions:			
1	2	3–255	
Length	Tag	Length	Value
	71 or 72	L (Σ data, including Tag for Script ID, followed by the Issuer Script TLV data elements)	<div><div>TagLengthValue</div><div>TLV₁</div><div>TagLengthValue</div><div>TLV_N</div></div>
Byte 1	Byte 2	Bytes 3–x	Bytes x–256

Length Subfield: This is a one-byte binary subfield that contains the number of bytes in this field after the length subfield.

Position 1, Tag: This is a one-byte binary identifier given to each dataset. The identifier is hexadecimal **71** or **72**.

Position 2, Length: The number of bytes used to specify the length is determined by the first bit of the first byte. When this first bit is **0**, the length is in the remaining seven bits of this byte. When the first bit is **1**, the remaining seven bits indicate the number of subsequent bytes that are used to encode the length.

See Appendix H, VSDC Fields—Additional Information.

Positions 3–256, Issuer Script TLV Data Elements: This subfields contains issuer script data elements that are in TLV format

See the *EMV Integrated Circuit Card Specifications for Payment System*.

This field maps to Field 55, Tag 71 and Tag 72—Issuer Script.

4.188.3 Usage

Field 142 is optional in the following full VSDC transactions:

- 0110 authorization, account verification, cash disbursement, and ATM balance inquiry and PIN Change/Unblock request responses (except in PIN Change/Unblock approvals, where the field is mandatory).

NOTE

*This field is **not** present in 0120 advices.*

VSDC PIN Change/Unblock Requests: This field *must* be present in 0110 responses when the issuer approves a PIN Change/Unblock request. If the request is declined, this field may be present in the response but is not required. When present, the field is passed to the acquirer.

4.188.4 Field Edits

If field 142 is present, the length cannot exceed the 510-hexadecimal-digit maximum.

4.188.5 Reject Codes

0371 = Invalid length

0490 = Field 142 is missing in an approved PIN Change/Unblock response.

4.189 Field 143—Issuer Script Results

4.189.1 Attributes

variable length
1 byte binary +
40 hexadecimal digits; maximum 21 bytes

4.189.2 Description

This field is carried in VSDC transactions. During online processing, the issuer has the option to send commands to the card in the authorization response. These commands instruct the card to update the card parameters. The card records the success or failure of the updates in the Issuer Script Results field. The field contains a length indicator followed by 5 bytes to indicate the results of script processing.

The content of this field is not used by V.I.P. See the *Visa Smart Debit Smart Credit (VSDC) System Technical Manual*.

This field maps to Field 55, Tag 9F5B—Issuer Script Results.

Positions:				
1–4		5–8	9–40	
length	script processing results	script sequence number	script identifier	reserved for future use
Byte 1	Byte 2, bits 1–4	Byte 2, bits 5–8	Bytes 3–6	Bytes 7–21

4.189.3 Usage

If an issuer script was present in the original response, field 143 is required in full VSDC transactions in 0400 requests and 0420 advices if available from the device.

PIN Change/Unblock Service Requests: This field must be present in 0400 reversal requests for update failures only.

4.189.4 Field Edits

If this field is present, its length cannot exceed **20** bytes.

4.189.5 Reject Codes

0372 = Invalid length
0491 = Field 143 missing in reversal

4.190 Field 144—Cryptogram Transaction Type

4.190.1 Attributes

fixed length
2N, 4 bit BCD (unsigned packed); 1 byte

4.190.2 Description

This field is carried in VSDC transactions and indicates the type of financial transaction provided by the terminal. It usually corresponds to the first two digits of the Processing Code (field 3). Field 144 is carried in the message to ensure that the issuer and the card are using the same value to compute the cryptogram.

This field maps to Field 55, Tag 9C—Cryptogram Transaction Type.

4.190.3 Usage

VSDC: For full VSDC transactions, this field is required in:

- 0100 authorization and account verification requests
- 0100 cash disbursements and balance inquiries

It is optional in the following messages:

- 0120 STIP advices
- 0120 confirmation advices
- 0120 preauthorization completion advices

4.190.4 Field Edits

If this field is present, it must contain a BCD value (packed unsigned numbers); otherwise, the field is removed from the message.

4.190.5 Reject Codes

None.

4.191 Field 145—Terminal Country Code

4.191.1 Attributes

fixed length
3N, 4 bit BCD; 2 bytes

4.191.2 Description

This field is carried in VSDC transactions and identifies the country where the merchant terminal is located. A leading zero is required to pad the first unused half-byte of this field. The zero is filler and is not part of the code.

This field maps to Field 55, Tag 9F1A—Terminal Country Code.

4.191.3 Usage

For full VSDC transactions, this field is required in:

- 0100 authorization and account verification requests
- 0100 cash disbursements and balance inquiries

It is optional in the following messages:

- 0120 STIP advices
- 0120 confirmation advices
- 0120 preauthorization completion advices

4.191.4 Field Edits

If this field is present, it must contain a BCD value (packed unsigned numbers); otherwise, the field is removed from the message.

4.191.5 Reject Codes

None.

4.192 Field 146—Terminal Transaction Date

4.192.1 Attributes

fixed length
6N, 4 bit BCD; 3 bytes

4.192.2 Description

This field is carried in VSDC transactions and contains the local date at the terminal on which the transaction was authorized. This field is used in the calculation of the cryptogram. The format is yymmdd, where:

yy = **00–99**

mm = **01–12**

dd = **01–31**

This field maps to Field 55, Tag 9A—Terminal Transaction Date.

4.192.3 Usage

VSDC: For full VSDC transactions, this field is required in:

- 0100 authorization and account verification requests
- 0100 cash disbursements and balance inquiries

It is optional in the following messages:

- 0120 STIP advices
- 0120 confirmation advices
- 0120 preauthorization completion advices

4.192.4 Field Edits

If this field is present, it must contain a BCD value (packed unsigned numbers); otherwise, the field is removed from the message.

4.192.5 Reject Codes

None.

4.193 Field 147—Cryptogram Amount

4.193.1 Attributes

fixed length
12N, 4 bit BCD (unsigned packed); 6 bytes

4.193.2 Description

This field contains the transaction amount used by the chip when calculating the cryptogram. It must contain numeric right-justified data with leading zeros.

If the transaction is a purchase with cashback, this field contains the purchase amount plus the cashback amount. For VSDC cashback transactions, the message must also contain field 149 Cryptogram Cashback Amount.

This field maps to Field 55, Tag 9F02—Amount, Authorized.

4.193.3 Usage

VSDC: For full VSDC transactions, this field is required in:

- 0100 authorization and account verification requests
- 0100 cash disbursements and balance inquiries

It is optional in the following messages:

- 0120 STIP advices
- 0120 confirmation advices
- 0120 preauthorization completion advices
- 0100 account verifications with the amount equal to zero
- 0100 balance inquiries with the amount equal to zero

NOTE

If this field is not present, the issuer should assume zeros when performing cryptogram validation.

Contactless Magnetic Stripe: This field is supported in 0100 authorization requests and 0120 STIP advices.

PIN Change/Unblock Requests: If this field is not present, issuers should assume zeroes when performing cryptogram validation.

4.193.4 Field Edits

If present, this field must contain a BCD value (packed unsigned numbers); otherwise, V.I.P. removes it from the message.

4.193.5 Reject Codes

None.

4.194 Field 148—Cryptogram Currency Code

4.194.1 Attributes

fixed length
3N, 4 bit BCD; 2 bytes

4.194.2 Description

This field is carried in VSDC transactions and contains the currency code used by the chip when calculating the cryptogram. Codes are defined in ISO 4217 and are listed in the appendix titled “Country and Currency Codes”. A leading zero is required to pad the first unused half-byte of this field. The zero is filler and is not part of the code.

This field maps to Field 55, Tag 5F2A—Transaction Currency Code.

4.194.3 Usage

VSDC: For full VSDC transactions, this field is required in:

- 0100 authorization and account verification requests
- 0100 cash disbursements and balance inquiries

It is optional in the following messages:

- 0120 STIP advices
- 0120 confirmation advices
- 0120 preauthorization completion advices

4.194.4 Field Edits

If this field is present, it must contain a BCD value (packed unsigned numbers); otherwise, the field is removed from the message.

4.194.5 Reject Codes

None.

4.195 Field 149—Cryptogram Cashback Amount

4.195.1 Attributes

fixed length
12N, 4 bit BCD (unsigned packed); 6 bytes

4.195.2 Description

This field is carried in VSDC transactions and contains the cashback amount that the chip uses when calculating the cryptogram. If the transaction does not include cashback, this field can not be sent or be sent **zero** filled.

This field maps to Field 55, Tag 9F03—Amount, Other.

4.195.3 Usage

VSDC: If a cashback amount is present, field 149 is required for full VSDC transactions in:

- 0100 authorization and account verification requests

It is optional in the following messages:

- 0120 STIP advices
- 0120 confirmation advices
- 0120 preauthorization completion advices

4.195.4 Field Edits

If this field is present, it must contain a BCD value (packed unsigned numbers); otherwise, the field is removed from the message.

4.195.5 Reject Codes

None.

4.196 Field 152—Secondary PIN Block

4.196.1 Attributes

fixed length
64 N, bit string; 8 bytes

4.196.2 Description

This field contains a new PIN to replace a PIN. It is encrypted and formatted as a block of 16 hexadecimal digits. (A new PIN is chosen to replace the current PIN when the cardholder does not remember the current PIN, wants a new PIN, or current PIN is compromised.)

In an acquirer-initiated request, this field format must conform to the PIN Block Format Code in Field 53—Security-Related Control Information. In a request received by the Issuer processor, the format conforms to the PIN Block Format of the Issuer processor, as previously specified to Visa. This new PIN is never logged, even if it is in an encrypted form.

PIN Change/Unblock is part of the PIN Management Service.

This field maps to Field 55, Tag C0—Secondary PIN Block.

4.196.3 Usage

Field 152 must be present in 0100 requests when the customer chooses to replace its current PIN at an ATM; that is, field 3 processing code is **70** (PIN Change/Unblock). This field must *not* be present if the field 3 processing code is **72** (PIN Unblock). This field is not used in reversal requests or responses.

If this field is present, Field 52—Personal Identification Number (PIN) Data, and Field 53—Security-Related Control Information, must also be present. This field should not be used other than a PIN Management request.

STIP and Switch Advices: Field 152 is not present in 0120 advices.

4.196.4 Field Edits

Field 152 is required if the processing code in field 3 is **70** (PIN Change/Unblock). If there is an error, the request message is not rejected; instead, the response code in field 39 of the 0110 response is set to **81**.

4.196.5 Reject Codes

0489 = Field missing in a PIN Change request

0717 = Field present in a PIN Unblock request

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