

Interface Specification

PostBridge™®

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UNIVERSAL
PAYMENTS™

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Scope

This document defines the interface between a Postilion system and a third party (Issuer or Acquirer), using the PostBridge Interface.

The document defines the content of and rules according to which messages are transmitted between a Postilion system and a third party application. Message content is defined in terms of the data elements (or fields) which compose messages. Message field definitions are based on the ISO 8583 standard (1987) for bank card originated messages.

Messages must be constructed according to:

- the Postilion implementation of the ISO 8583 standard (bitmap format) or
- an XML message format derived from the Postilion implementation of the ISO 8583 standard.

Rules for message exchange are defined in terms of the flows or sequences of messages transmitted between a Postilion system and a third party application. Message flows are based on the ISO 8583 standard (1987).

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Message types

The following message classes are defined:

- Authorization message class (1);
- Financial message class (2);
- Issuer File Update Advice message class (3);
- Reversal message class (4);
- Reconciliation message class (5);
- Administration message class (6);
- Network management message class (8); and
- Notification message class (9).

An authorization is an approval or guarantee of funds given by the card issuer to the acquirer. Authorization messages are not intended to permit the application of the approved transaction amount to the cardholder's account for billing. It is typically only used to update the open-to-buy limit of the cardholder. Another way of putting this would be to say that the cardholder's available balance changes, but their ledger balance remains unchanged.

A financial transaction permits the application of the approved transaction amount to the cardholder's account for billing. In other words, the cardholder's ledger balance is affected.

An Issuer File Update Advice is used to request an Issuer file update function.

A reversal is used by the acquirer to partially or completely nullify the effects of a previous financial or authorization transaction.

A reconciliation transaction is used to provide financial totals between Postillion and the card issuer host application.

An administration transaction is used for hot-card notifications and to send messages to an issuing institution for administrative purposes e.g. request new check book.

A network management transaction is used to synchronize cryptographic keys between Postilion and the third party.

A notification message is used to notify a third party, called a Control Node, of a switched transaction that took place between a source and sink node interface.

MAC Support

When a message is sent from one system to another in an EFT network, it may be important to ensure that the message is not tampered with. This is achieved with message authentication.

Message authentication operates by sharing an operational Message Authentication Key (KWA) between two systems. Depending upon the requirements of each system this key can be defined statically or exchanged dynamically under a Key Encrypting Key (KEK).

If message authentication is required, each party uses the Message Authentication Key (KWA) and the message data to derive a four byte code called the Message Authentication Code (MAC). This MAC is then stored in the message before transmission. The receiving party takes the message and calculates the MAC using the same KWA. If the codes match, then the message is intact and the parties can be sure that only systems in the same security zone could have communicated the message. If the codes do not match, an error is logged.

The MAC generation algorithm is based on the DES CBC mode and is specified in the ANSI X9.9 standard.

Messages supported

The **PostBridge** Interface supports MACing on all message types except *Network Management* (0800) messages. The *PostBridge MAC Configuration Console* can be used to configure the set of message types which should be MACed.

MAC Code

The four byte MAC code is based upon the MAC key and message data.

MAC Key

The MAC key is a single length cryptographic key called a MAC Working Key (MWK). This can be either a static or dynamic key. In the case of a static key there will be one key which will be used for all MAC functions. In the case of dynamic there will be two keys both of which will be used for MAC functions (Key 1 and Key 2). At any one stage only one key will be used to generate MAC codes but both keys could be used to authenticate MAC codes. The one key used to generate the MAC codes is called the active key; the other key will be called the inactive key. During the key exchange process the active / inactive keys will switch. I.e. the active key will become the inactive key and the inactive key will become the active key (See below for more information).

When the active key generates a MAC code for a message it places this MAC code in Mac Extended (field 128). It also puts its key number in this field. I.e. if key 2 is currently the active key it will be used to generate all MAC codes, and it will place its number (2) in field 128 along with the MAC code.

When authenticating the MAC code the system will first retrieve the key number from MAC Extended. It will then use the key number to decide which key to use when authenticating the code. I.e. if the key number in MAC Extended is '2' the system will use key 2 to authenticate the code.

Message Data

The message data consists of a combination of fields from the message. The values in these fields will be concatenated together and the value resulting from this will be used along with the MAC key to generate a MAC code. The **PostBridge** interface allows for any combination of fields to be used per message type. The combination of fields per message type can be configured in the *PostBridge MAC Configuration Console*.

Dynamic Key Exchange

The **PostBridge** Interface supports both static MAC Working Keys (MWK) and the dynamic exchange of MWK's.

Static MWK's

Using this scheme, the **PostBridge** interface will use one MWK which will be statically defined on the **Postilion** System using the Hardware Security Module Configuration Console. This value of this key must be manually loaded and maintained. All MAC codes will be generated using this key. The **PostBridge** interface will use static MWK's per default.

Dynamic MWK's

In this scheme the **PostBridge** interface will use two MWK's (Key 1 and Key 2). At any particular time one of these keys will be marked as the Active Key and one as the Inactive key. The Active key will be used to generate all MAC codes on outgoing messages. Each of these outgoing messages will contain an identifier which will indicate which key (1 or 2) was used to generate its MAC value. Depending on the identifier in the message either key 1 or 2 will be used to authenticate the MAC. E.g. if the message contains the identifier '1' it indicates that key 1 was used to calculate its MAC and key 1 will be used to authenticate the MAC.

The values of keys 1 and 2 are dynamic and will be changed periodically by the **PostBridge** interface. Please refer to MAC Key Exchange Management section for more information on the key exchange process.

Support for dynamic MWK's in the **PostBridge** interface can be enabled using the *PostBridge MAC Configuration Console*.

Exception Processing

Various exceptions related to MACing can occur on the PostBridge interface. They will be processed as follows:

Exception Condition	Processing
The PostBridge interface received a message from the remote entity containing an invalid MAC Code.	The interface will respond to the remote entity with a Format Error Response message and an error event will be logged in the NT event log.
The PostBridge interface received a message from the remote entity containing a MAC code, but MACing has not been enabled for that particular message type on the Postilion system.	The interface will respond to the remote entity with a Format Error Response message and an error event will be logged in the NT event log.
The PostBridge interface received a message from the remote entity which did not contain a MAC code, but MACing is enabled for that particular message type on the Postilion system.	The interface will respond to the remote entity with a Format Error Response message and an error event will be logged in the NT event log.

MAC Key Management

The **PostBridge** Mac Working Key (MWK) exchange process is based upon the Master/Session Key exchange process but uses two keys rather than one. One key can be viewed as a new or active key, while the other will be an old or inactive key. The active key will always be the key that has most recently been exchanged, while the inactive key will always have the value of the previous active key. The MAC code will always be generated using the active key, but the code will be authenticated using either the active or inactive key depending on which key was used to originally generate the code.

Using this scheme the **PostBridge** interface can process transactions throughout the key exchange process and messages that still contain a MAC code generated by the previous key can still be correctly processed. (This could occur under various exception conditions. For example a message sent to the remote before key exchange but arriving after the key exchange request due to a communications problem will still contain a MAC code generated by an "old" key).

The actual key exchange process will only differ slightly from the normal Master/Session Key exchange process. In the normal process there is only one key and this key's value is periodically generated and exchanged. In this scheme there are two keys and while their values are also periodically generated and exchanged the keys alternate between periods.

For example: In the normal process you have key A, and every 24 hours key A's value is newly generated and exchanged. In this scheme you have key B and C. At the end of the first 24 hours key B's value is exchanged. After another 24 hours key C's value is exchange. After another 24 hours key B's value is again exchanged. This process continues ad infinitum.

The names of the keys are not important. During processing the keys will be referred to as Key 1 and Key 2. The actual keys referred to must be configured on the system. On the **Postilion** system this can be done using the *PostBridge Configuration Console*.

The detail of the key exchange process varies between Acquirer and Issuer systems.

Acquirer

The key exchange process uses the concept of an active and inactive key. The active key is the key that has most recently been exchanged; the inactive key is the key that was active before that key exchange.

The acquirer will always initiate the key exchange process by sending a *Network Management Request* (0800) message to the issuer. This message will indicate that a key exchange is required, and which key should be exchanged. The acquirer will always exchange the **inactive** key. The *MAC Extended* (field 128) will contain the key number of the current inactive key (1 or 2).

The issuer will generate a new value for the specified key and send this value back in the *Network Management Response* (0810). Upon receipt of this message the acquirer will apply the new value to the inactive key. If this value could not be successfully applied or the acquirer did not receive the response within a certain interval the acquirer will resend the original request. This will continue until the value can be successfully applied to the inactive key.

Once this value has been successfully applied the inactive and active keys are switched. I.e. the current active key is marked as inactive, and the current inactive key is marked as active.

Issuer

The issuer does not concern itself over which key is active and which key is inactive. The issuer will receive a *Network Management Request* (0800) for a key exchange from the acquirer. This message will contain the number of the key that should be exchanged (1 or 2). The issuer will generate a new value for this key and respond back to the remote with this value.

Example

For this example assume that the 2 keys defined on the acquirer system are ACQUIRER_KEY_A and ACQUIRER_KEY_B. On the issuer system the 2 keys defined are ISSUER_KEY_A and ISSUER_KEY_B. ACQUIRER_KEY_A and ISSUER_KEY_A have the same values, as do ACQUIRER_KEY_B and ISSUER_KEY_B.

On the acquirer system key 1 is configured as ACQUIRER_KEY_A and key 2 is configured as ACQUIRER_KEY_B. On the issuer system key 1 is configured as ISSUER_KEY_A and key 2 is configured as ISSUER_KEY_B.

Acquirer Processing

	Action	Active	Inactive
(1)	-	Key 1	Key 2
(2)	Key exchange request sent to remote for Key 2	Key 1	Key 2
(3)	Receive key exchange response	Key 1	Key 2
(4)	Apply new key value to key 2	Key 2	Key 1
(5)	-	Key 2	Key 1

(1) As we start our example we assume that Key 1 is currently active and Key 2 is currently inactive

(2) The Key exchange timer expires and a key exchange request is sent to the remote (issuer). As the inactive key is always exchanged the request for Key 2.

(3) The Key exchange response is received with the new value for key 2.

(4) The new value for key 2 is successfully applied and the active and inactive keys are switched.

(5) 24 hours later the process repeats with key 1 inactive and key 2 active.

Issuer Processing

The issuer processing for key exchange messages is simple. The issuer will receive a key exchange request and as part of this request the affected key will be given (1 or 2). It will then generate a new value for the relevant key and respond back to the remote entity with the new value.

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Information transmitted between a third party system and the PostBridge interface must comply with the format expected by the interface. The interface expects information to be in either Bitmap or XML format. A system communicating with the PostBridge interface must construct messages according to either of these two formats.

Messages sent to the PostBridge interface are typically transmitted across a physical communication medium such as a network cable. Information transmitted in this manner is usually treated by a network application as an array of bytes. A system communicating with the PostBridge interface must therefore be able to process an array of bytes received, as well as to pack information into an array of bytes for transmission across a physical communication medium.

Typically the following functionality must be provided by such a system.

- Unpack and validate incoming messages.
- Extract field values from unpacked messages.
- Set and validate field values for outgoing messages.
- Pack outgoing messages.

Bitmap Message Format

A system that communicates with the PostBridge interface must construct messages according to the Postilion implementation of the ISO 8583 standard. Messages constructed as such have three main components:

- Message type identifier
- One or two bitmaps
- Series of data elements

Message type id	Bitmap(s)	Data elements
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Message type identifier

The message type identifier is a 4-digit numeric field with the following sub-fields:

- the first 2 digits are the [Message class](#)[Message class](#) and
- the last 2 digits are the [Message function](#)[Message function](#).

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An example of a message type identifier for a financial request transaction sent to the PostBridge interface is: '0200'.

Message class

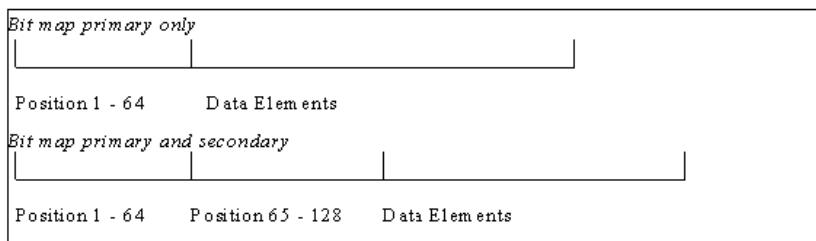
00 reserved for ISO use
01 authorization
02 financial
03 file action
04 reversal/chargeback
05 reconciliation
06 administrative
07 reserved for ISO use
08 network management
09 to 99 reserved

Message function

00 request
01 request repeat
02 completion
03 completion repeat
10 request response
12 completion response
20 advice
21 advice repeat
30 advice response

Bitmap(s)

The second message component is made up of one or two 8-byte bitmaps. Each bit signifies the presence (1) or the absence (0) in the message of the data element associated with the particular bit.



The primary bitmap (bits 1 - 64) is always present and the most frequently used data elements are indexed from these bit positions. Less frequently used data elements are indexed from the secondary bitmap (bits 65 - 128). The presence of the secondary bitmap is indicated by setting bit 1 of the primary bitmap.

For example, consider the following bitmap fragment:

11110010 00111100

From this we can see that a second bitmap is present - the first, most significant bit of the first byte is set to 1. Field 2 (the PAN) will be present in the message, because the second bit is set to 1. Field 3 (the Processing Code) will be present, because the third bit is set to 1.

Data elements

The third message component is made up of a series of data elements (fields). Some data elements are of fixed length, while some are variable in length. In the case of a variable length data element, the actual length of the data element is provided by a length indicator. The length indicator is either 2 or 3 numeric digits, depending on the definition of the field. For example, the *Primary account number* (PAN) can have a length of up to 28 digits. A PAN with value 5412193376721126 (i.e. length of **16** digits) will have a length indicator of 16. The value of the PAN in a message to the **PostBridge** interface will be **165412193376721126**.

A data element has restrictions in terms of the type of content that it can contain. For example, the *Processing code* (field 3) can contain numeric data only, while the *Card acceptor name location* (field 43) can contain alphanumeric data only.

A number of Postilion specific data elements have been defined, such as *Echo data* (field 59), and the *Postilion private field* (field 127). The *Postilion private field* (field 127) is the last field of the message, and contains a number of sub-fields. It has a 6 digit length indicator, and consists of an 8-byte bitmap followed immediately by the sub-fields. The presence (1) or absence (0) of each sub-field is indicated by the bitmap. The bitmap will always be present if any sub-fields are present.

TCP/ IP Header

When using the TCP/IP network communications protocol, a 2-byte header is prefixed to all messages sent to/from Postilion. The header is used as an indicator of the length of the TCP/IP stream. The first byte contains the quotient of the length of the message (excluding this header) and 256. The second byte contains the remainder of this division.

Implementation Guidelines

What follows are guidelines for developing an application communicating with the PostBridge interface by means of the Bitmap message format. There are many possible ways of implementing such an application, each have their own advantages and disadvantages.

The data types used to store the *message type identifier*, *bitmaps* and *data elements* message components must be determined. These components are typically treated as a stream of binary digits when received from a network link. It therefore makes sense to store each of these components as an array of bytes. Throughout the following explanation we will assume that each of these components is stored as a byte array.

Compose Message to PostBridge

When constructing a message to the PostBridge interface, the following three components:

- the *message type identifier*,
- one or both of the *bitmap* fields, and
- the *data elements* component,

must be concatenated together into a single byte array. The following code shows how this can be done (the '+' sign is used to represent the *byte array concatenation* operator):

```
msg_to_postbridge = msg_type_identifier + bitmap_1
if (first position of bitmap_1 == '1')
{
    msg_to_postbridge = msg_to_postbridge + bitmap_2
}
for (all data elements with set values)
{
    msg_to_postbridge = msg_to_postbridge + set_field
}
```

Unpack a Message from PostBridge

In order to unpack a message received from the PostBridge interface it is necessary to check that every field present in the message conforms to the relevant fields' content specifications i.e. each field has pre-defined specifications for the length, format and type of packing that field content must have. If the field conforms to the specification, it can be unpacked; else an exception should be raised.

The byte array that is received from a network device is unpacked by referring to the bitmap field that indicates which fields are present in the message. Fields are unpacked sequentially, starting at the first field in the byte array. The length indicator associated with a field, that precedes the field content in the byte array, indicates whether a field is a fixed length field or a variable length field. A check should be made as to whether the length indicator received in the byte array for a specific field, corresponds to the one defined by the ISO 8583 standard. If this is the case, the number of bytes equal to the length of the field can be extracted from the byte array, and these bytes can then be checked against the format and packing specifications for the field in question.

The format and packing specifications are determined by the ISO 8583 standard. The standard specifies that the format of the content of message fields must conform to the format class which is pre-defined for each message field. Examples of ISO 8583 format classes are 'numeric', 'alphanumeric', 'binary' etc.

The packing specification specifies how a message field is packed (or encoded) into a byte array. Examples of packing specifications are the *Hexadecimal* or *Base64* packing methods (these methods are typically used for the encoding of binary data into the ASCII text representation).

The following code shows how a byte array received from a network device could be processed:

Implementation

```
for (all fields in message from postbridge as indicated in bitmap component(s))
{
    if(isLengthIndicatorValid(msg_from_postbridge, offset, field_num))
    {
        field_length = getLength(msg_from_postbridge, offset, field_num)

        if(isPackingValid(msg_from_postbridge, offset, field_num, field_length) &&
           isFormatValid(msg_from_postbridge, offset, field_num, field_length))
        {
            message_fields[field_num++] = getField(msg_from_postbridge, offset, field_length)
            offset += field_length
        }
        else
        {
            throw exception
        }
    }
    else
    {
        throw exception
    }
}
```

The 'msg_from_postbridge' variable holds a byte array with the message as received from the network device. The 'offset' variable holds the index in the byte array where the next message field to be processed starts. The 'field_num' variable holds the number of the field being processed as specified by the *ISO 8583* standard.

The code iterates through all the fields in the message. The code checks the length, format and packing of each field. The length indicator is firstly checked for validity. If the indicator is valid, the field length is extracted from the byte array, else an exception is thrown. Now that the field length is known, the format and packing of the field can be checked. If both of these are valid, the field is extracted and stored in an array, and the offset variable is incremented by the field length. If either the format or packing of the field is invalid, an exception is thrown.

XML Message Format

The PostBridge interface supports the processing of ISO 8583 messages in XML format. Messages sent to the interface in XML format should be formatted according to the following DTD/ XSD:

- [Iso8583PostXml_DTD](#)
- [Iso8583PostXml_XSD](#)

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Binary fields i.e. fields 52, 53, 127.29 and 127.32, must be encoded in hexadecimal text format. All other fields must be formatted as ASCII text.

In order to construct an XML formatted message to the PostBridge interface, message fields are populated by means of providing content to the relevant XML element e.g. a typical 0200 message would look as follows:

```
<?xml version="1.0" encoding="UTF-8"?>
<Iso8583PostXml>
  <MsgType>0200</MsgType>
  <Fields>
    <Field_002>4839123456709012</Field_002>
    <Field_003>000000</Field_003>
    <Field_004>000000001500</Field_004>
    <Field_007>0604074705</Field_007>
    <Field_011>804058</Field_011>
    <Field_012>074808</Field_012>
    <Field_013>0604</Field_013>
    <Field_014>0812</Field_014>
    <Field_015>0905</Field_015>
    <Field_022>901</Field_022>
    <Field_025>02</Field_025>
    <Field_026>05</Field_026>
    <Field_028>000000500</Field_028>
    <Field_030>000000500</Field_030>
    <Field_032>483912</Field_032>
    <Field_035>4839123456709012=08125876305082011</Field_035>
    <Field_037>D000A0030000</Field_037>
    <Field_040>507</Field_040>
    <Field_041>FOFUGUT1</Field_041>
    <Field_042>19112111911112</Field_042>
    <Field_043>Postillion Cafeteria Rondebosch ZA</Field_043>
    <Field_049>710</Field_049> <Field_056>1510</Field_056>
    <Field_059>0000000072</Field_059>
    <Field_123>211401213041013</Field_123>
    <Field_127_002>0007713856</Field_127_002>
    <Field_127_009>013040604040604016501100330000</Field_127_009>
    <Field_127_012>My Terminal Business</Field_127_012>
    <Field_127_020>20100604</Field_127_020>
  </Fields>
</Iso8583PostXml>
```

Section 3: Message Flows

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Source node interface

This section describes message flows between a remote entity and **Postilion** using the **PostBridge** source node interface. It explains which message types are used and how messages are exchanged.

The processing of authorization and financial transactions under normal conditions is described. In addition, the following exception conditions are covered:

- lost request
- lost response
- connection to **Postilion** down
- transaction not completed as authorized

Whenever the remote entity sends a message to **Postilion**, it should start a timer. If the timer expires before the response to the message is received, the message can be retransmitted with the message type indicator showing that it is a repeat transmission. If the message is a request and no response is received after a number of retransmissions, the remote entity should decline the transaction and send an acquirer reversal advice (0420) message. All advice messages must be retransmitted until acknowledged by **Postilion**.

Messages to PostBridge

Message Type ID	Description
0100/0101	Authorization request (repeat) Sent to initiate inquiry transactions, such as balance inquiries. The message can be repeated a number of times. If no response is received within a certain time, the acquirer should decline the transaction.
0120/0121	Authorization advice (repeat) Sent to inform of an authorization transaction (e.g. stand-in authorization) which has completed at the point of service. The message can be repeated a number of times.
0200/0201	Financial request (repeat) Sent to initiate inquiry, debit, credit, payment and transfer transactions. The message can be repeated a number of times. If no response is received within a certain time, the acquirer should decline the transaction.
0202/0203	Financial completion request (repeat) Sent to complete inquiry, debit, credit, payment and transfer transactions (if dual message on-line draft capture is used). A completion must be preceded by a 0200 (or 0201).
0220/0221	Financial Transaction Advice (repeat) Sent to advise Postilion of a Financial transaction that has taken place. This can be for a transaction which was authorized by the remote entity, or for a transaction that was authorized by a preceding 0100 message.
0320/0321	Acquirer File Update Advice (repeat) Sent to request an Acquirer file update function.

Message Flows

Message Type ID	Description
0332	Issuer File Update Advice Response Sent to respond to a prior 0322 or 0323.
0400/0401	Reversal request (repeat) Sent to fully or partially reverse a previous authorization or funds transfer. Can be received from a Source Node Interface. Sent to a Sink Node Interface.
0420/0421	Reversal advice (repeat) Sent to inform the issuer of a complete or partial reversal of a previous authorization or financial transaction.
0500/0501	Acquirer reconciliation request (repeat) Sent to request the confirmation of totals (number and value). The message can be repeated a number of times. If no response is received within a certain time, the acquirer should decline the transaction.
0520/0521	Acquirer reconciliation advice (repeat) Sent to initiate batch cut-over and request the confirmation of totals (number and value). The totals contained in the message are those maintained by the acquirer.
0532	Card issuer reconciliation advice response Sent in response to a card issuer reconciliation advice. It indicates whether or not the totals accumulated by the acquirer matches the totals received from Postilion.
0600/0601	Administration request (repeat) Sent to request an administrative function such as flagging a card as 'hot' or sending a message to the bank.
0620/0621	Administration advice (repeat) Sent to advise the issuer of administrative functions that must be performed such as flagging a card as 'hot' or sending a message to the bank.
0800/0801	Network Management request (repeat) Sent to synchronize cryptographic keys between Postilion and the third party.

Messages from PostBridge

Message Type ID	Description
0110	Authorization request response Sent in response to an authorization request (inquiry). In the case of an approval it contains the requested information. If declined, it contains the declined action to be taken.
0130	Authorization advice response Sent in response to an authorization advice. It indicates if the Postilion accepts or rejects the transfer of financial liability.
0210	Financial request response Sent in response to a financial request. It can indicate a full approval, partial approval or the declined action to be taken.
0212	Financial completion response Sent in response to a 0202 (financial completion request). Applicable when the dual message-pair protocol is used.
0230	Financial Transaction advice response Sent in response to a Financial Transaction advice.
0322/0323	Issuer file update advice (repeat) Sent to request an Issuer file update function.
0330	Acquirer File Update Advice Response Used to respond to a prior 0320 or 0321.
0410	Reversal request response Sent in response to a prior 0400 or 0401.
0430	Reversal advice response Sent in response to a reversal advice.
0510	Acquirer reconciliation request response Sent in response to an acquirer reconciliation request. It contains the totals maintained by Postilion for the acquirer.
0522/0523	Card issuer reconciliation advice (repeat) Sent to initiate batch cut-over and request the confirmation of totals (number and value). The totals contained in the message are those maintained by Postilion.
0530	Acquirer reconciliation advice response Sent in response to an acquirer reconciliation advice. It indicates whether or not the totals accumulated by Postilion matches the totals received from the acquirer.
0610	Administration response Sent in response to an administration request. It indicates whether or not the administrative function was performed successfully or not.
0630	Administration advice response

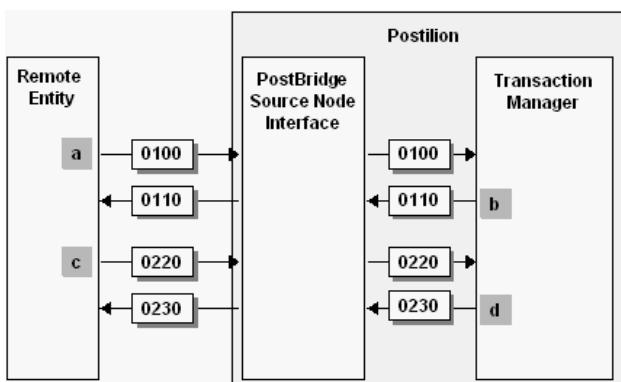
Message Flows

Message Type ID	Description
	Sent in response to an administration advice. It indicates whether or not the administrative function was performed successfully or not.
0810	Network Management request response Sent in response to a network management request.

Authorization transactions

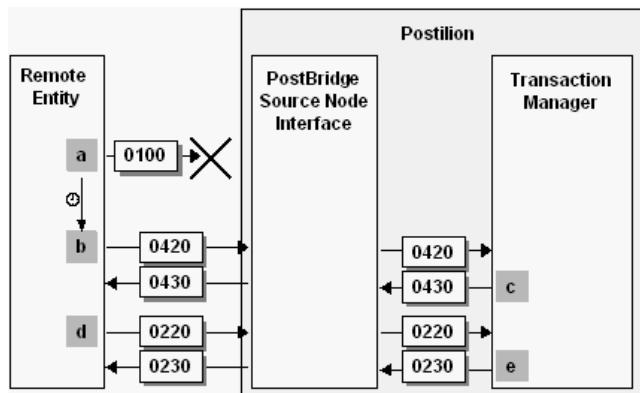
Normal Condition

This is the normal pre-authorization scenario where an authorization, requesting reservation of funds (accurate or estimate) is followed by the corresponding financial advice indicating the actual amount.



- a. The remote entity sends a 0100 (authorization request) to **Postilion** to request reservation of funds.
- b. **Postilion** approves or declines the request by sending a 0110 (authorization request response) to the remote entity with the appropriate action code.
- c. The transaction completes for the same or different amount. The remote entity forwards a (new) financial transaction by sending a 0220 (financial advice) indicating the amount for which authorization was obtained, the actual amount and the fact that the advice was previously authorized. The data identifying the original 0100 is sent in the *original data* field.
- d. **Postilion** captures the financial transaction and responds to the remote entity with a 0230 (financial advice response).

Lost Request



a. The remote entity sends a 0100 (authorization request) to **Postilion** to request reservation of funds and starts a timer. The message is lost on the network.

b. The timer expires and the remote entity performs stand-in authorization. This might result in a voice call to the card issuer requesting approval for the transaction. The remote entity forwards a (new) reversal transaction by sending a 0420 (reversal) indicating a time-out condition and an actual amount of zero. The original 0100 is identified by the *original data* field.

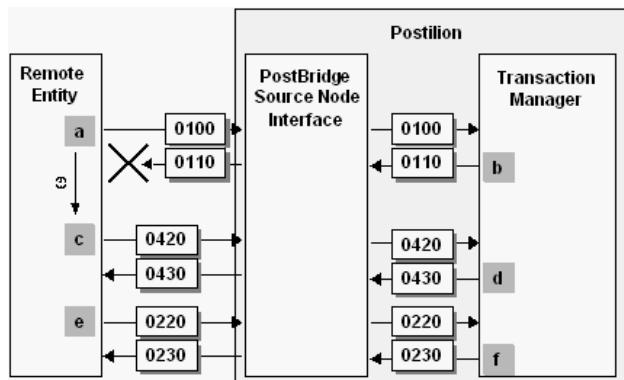
c. **Postilion** received the reversal but can not match it to any 0100. It therefore assumes that it never processed the 0100 and therefore no additional processing is required. **Postilion** responds with a 0430 (reversal response).

*The following steps are only applicable if the stand-in authorization resulted in funds transfer. The remote entity sends the transaction to **Postilion** once the connection to **Postilion** is re-established.*

d. The remote entity forwards a (new) financial transaction by sending a 0220 (financial advice) indicating the reason for the advice and the actual amount.

e. **Postilion** captures the financial transaction and responds to the remote entity with a 0230 (financial advice response).

Lost Reply



a. The remote entity sends a 0100 (authorization request) to **Postilion** to request reservation of funds.

b. **Postilion** approves or declines the request by sending a 0110 to the remote entity with the appropriate action code. The message is lost on the network.

c. The timer expires and the remote entity performs stand-in authorization. This might result in a voice call to the card issuer requesting approval. The remote entity forwards a (new) reversal transaction by sending a 0420 (reversal) indicating a time-out condition and an actual amount of zero. The data identifying the original 0100 is sent in the *original data* field.

d. **Postilion** received the reversal and matches it to the related 0100. It performs the necessary processing to negate the effect of the 0100 before responding with a 0430 (reversal response).

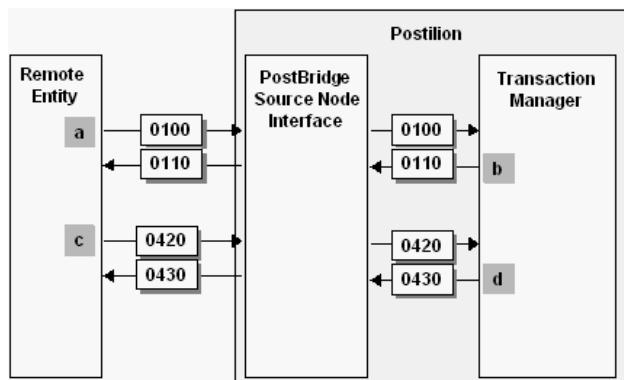
*The following steps are only applicable if the stand-in resulted in funds transfer. The remote entity sends the transaction once the connection to **Postilion** is re-established.*

e. The remote entity forwards a (new) financial transaction by sending a 0220 indicating the reason for the advice and the actual amount.

f. **Postilion** captures the financial transaction and responds to the remote entity with a 0230 (financial advice response).

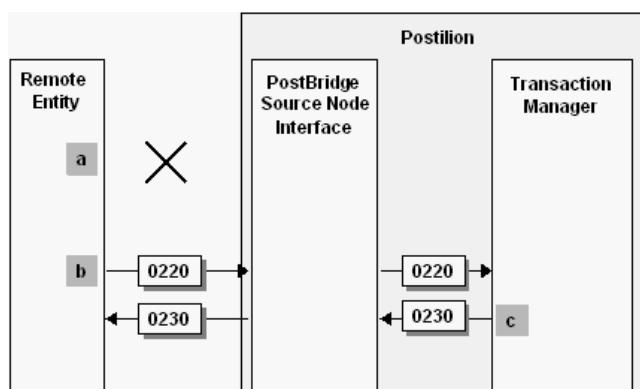
Not Completed

This happens when an authorization requesting reservation of funds does not result in a cardholder transaction, because the cardholder decided to cancel the transaction.



- a. The remote entity sends a 0100 (authorization request) to **Postilion** to request reservation of funds.
- b. **Postilion** approves or declines the request by sending a 0110 (authorization request response) to the remote entity with the appropriate action code.
- c. The actual transaction does not take place (e.g. is cancelled by the cardholder). The remote entity forwards a (new) reversal transaction by sending a 0420 (reversal advice) indicating the reason for the reversal and the actual amount. The data identifying the original 0100 is sent in the *original data* field.
- d. **Postilion** received the reversal and matches it to the related 0100. It performs the necessary processing to negate the effect of the 0100 before responding with a 0430 (reversal response).

Postilion Down



Message Flows

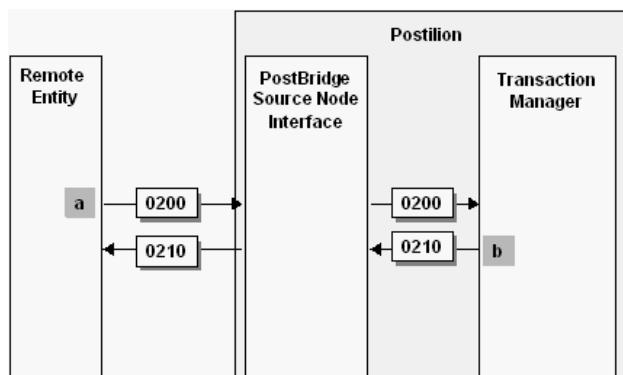
- a. The remote entity attempts to send a 0100 (authorization request) to **Postilion** to request reservation of funds, but the connection to **Postilion** is down. The remote entity performs stand-in authorization. This might result in a voice call to the card issuer requesting approval for the transaction.

*The following steps are only applicable if the stand-in authorization resulted in funds transfer. The remote entity sends the transaction to **Postilion** once the connection to **Postilion** is re-established.*

- b. The remote entity forwards a (new) financial transaction by sending a 0220 (financial advice) indicating the reason for the advice and the actual amount.
- c. **Postilion** captures the financial transaction and responds to the remote entity with a 0230 (financial advice response).

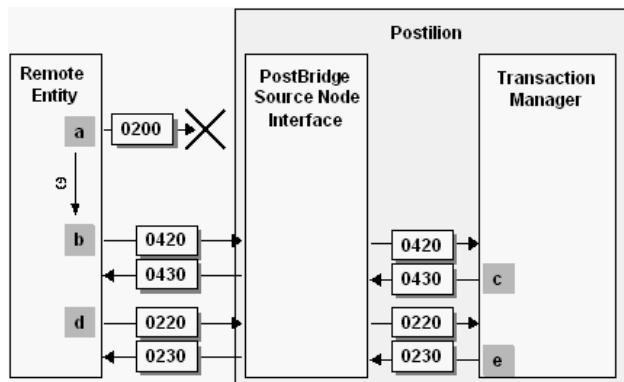
Financial transactions – single message pair

Normal Condition



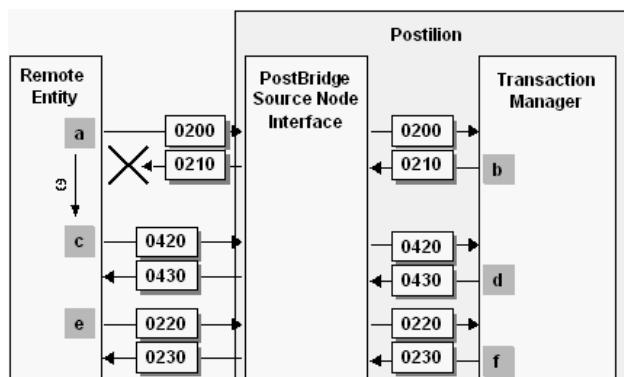
- a. The remote entity sends a 0200 (financial request) to **Postilion** to request authorization for a financial transaction.
- b. **Postilion** captures the transaction and approves or declines the request by sending a 0210 (financial request response) to the remote entity with the appropriate action code.

Lost Request



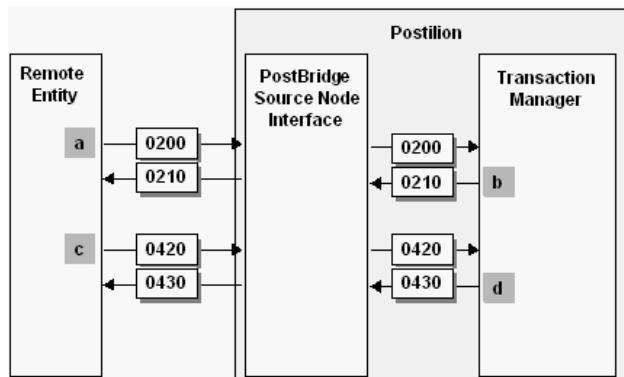
- a. The remote entity sends a 0200 (financial request) to **Postilion** to request authorization for a financial transaction and starts a timer. The message is lost on the network.
 - b. The timer expires and the remote entity performs stand-in authorization. The remote entity forwards a (new) reversal transaction by sending a 0420 (reversal) indicating a time-out condition and an actual amount of zero. The data identifying the original 0200 is sent in the original data field.
 - c. **Postilion** received the reversal but can not match it to any 0200. It therefore assumes that it never processed the 0200 and therefore no additional processing is required. **Postilion** responds with a 0430 (reversal response).
- The following steps are only applicable if the stand-in authorization resulted in funds transfer. The remote entity sends the transaction to **Postilion** once the connection to **Postilion** is re-established.*
- d. The remote entity forwards a (new) financial transaction by sending a 0220 (financial advice) indicating the reason for the advice and the actual amount.
 - e. **Postilion** captures the financial transaction for cardholder billing purposes and responds to the remote entity with a 0230 (financial advice response).

Lost Reply



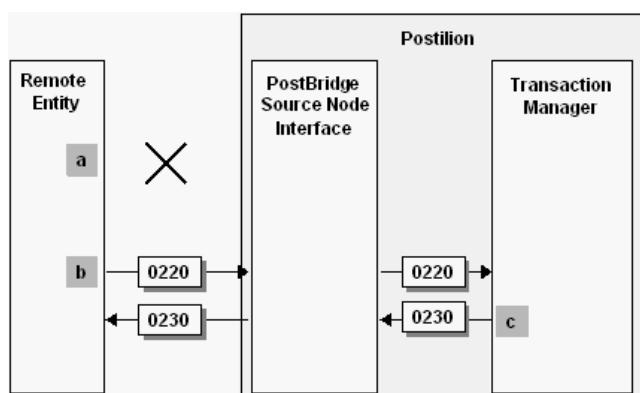
- a. The remote entity sends a 0200 (financial request) to **Postilion** to request authorization for a financial transaction and starts a timer.
- b. **Postilion** captures the transaction and approves or declines the request by sending a 0210 (financial request response) to the remote entity with the appropriate action code. The message is lost on the network.
- c. The timer expires and the remote entity performs stand-in authorization. The remote entity forwards a (new) reversal transaction by sending a 0420 (reversal) indicating a time-out condition and an actual amount of zero. The data identifying the original 0200 is sent in the original data field.
- d. **Postilion** received the reversal and matches it to the related 0200. It performs the necessary processing to negate the effect of the 0200 on the cardholder account before responding with a 0430 (reversal response).
- The following steps are only applicable if the stand-in authorization resulted in funds transfer. The transaction is sent once the connection to **Postilion** is re-established.*
- e. The remote entity forwards a (new) financial transaction by sending a 0220 indicating the reason for the advice and the actual amount.
- f. **Postilion** captures the financial transaction for cardholder billing purposes and responds to the remote entity with a 0230 (financial advice response).

Not Completed



- a. The remote entity sends a 0200 (financial request) to **Postilion** to request authorization for a financial transaction.
- b. **Postilion** captures the transaction and approves or declines the request by sending a 0210 (financial request response) to the remote entity with the appropriate action code.
- c. The transaction does not complete as authorized. The remote entity forwards a (new) reversal transaction by sending a 0420 (reversal advice) indicating the reason for the reversal and the actual amount. The data identifying the original 0200 is sent in the *original data* field.
- d. **Postilion** captures the reversal transaction and responds to the remote entity with a 0430 (reversal advice response).

Postilion Down



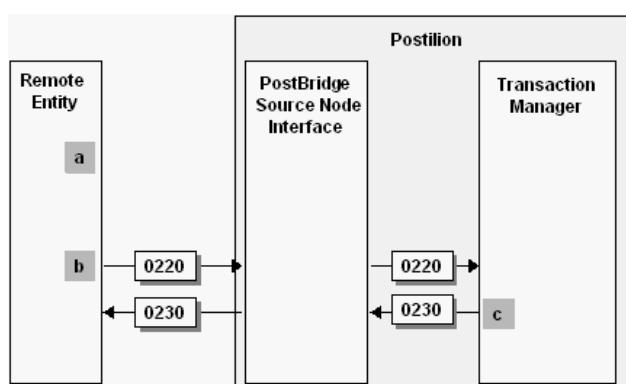
- a. The remote entity attempts to send a 0200 (financial request) to **Postilion** to request authorization for a financial transaction, but the connection to **Postilion** is down. The remote entity performs stand-in authorization. This might result in a voice call to the card issuer requesting approval for the transaction.

Message Flows

*The following steps are only applicable if the stand-in authorization resulted in funds transfer. The remote entity sends the transaction to **Postilion** once the connection to **Postilion** is re-established.*

- b. The remote entity forwards a (new) financial transaction by sending a 0220 (financial advice) indicating the reason for the advice and the actual amount.
- c. **Postilion** captures the financial transaction for cardholder billing purposes and responds to the remote entity with a 0230 (financial advice response).

Below Floor Limits



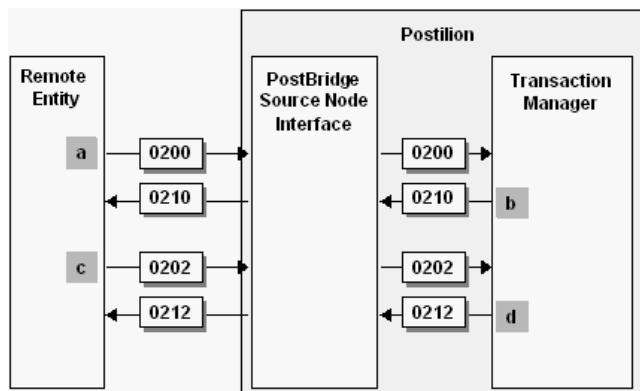
The transaction amount is below floor limits and the remote entity performs stand-in authorization.

*The following steps are only applicable if the stand-in authorization resulted in funds transfer. The remote entity sends the transaction to **Postilion** once the connection to **Postilion** is re-established.*

- b. The remote entity forwards a (new) financial transaction by sending a 0220 (financial advice) indicating the reason for the advice and the actual amount.
- c. **Postilion** captures the financial transaction and responds to the remote entity with a 0230 (financial advice response).

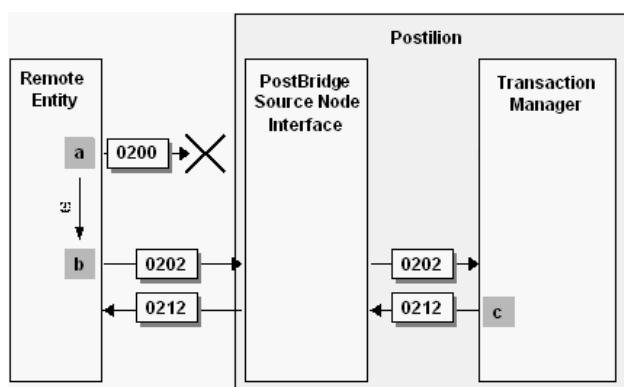
Financial transactions – dual message pair

Normal Condition



- The remote entity sends a 0200 (financial request) to **Postilion** to request authorization for a financial transaction.
- Postilion** captures the transaction and approves or declines the request by sending a 0210 (financial request response) to the remote entity with the appropriate action code.
- The remote entity sends a 0202 (financial completion request) to **Postilion** to complete the transaction
- Postilion** secures the 0202 and responds immediately with a 0212 (financial completion response) to the remote entity.

Lost Request

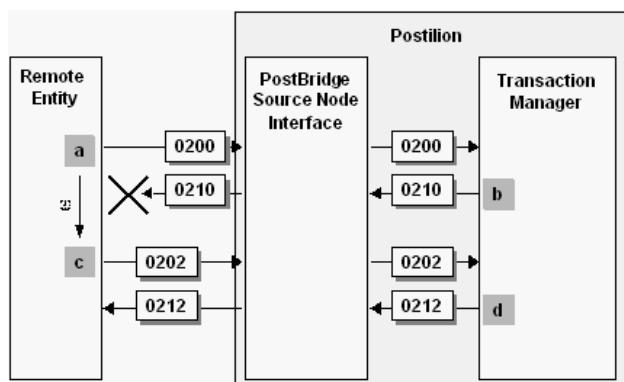


- The remote entity sends a 0200 (financial request) to **Postilion** to request authorization for a financial transaction.

Message Flows

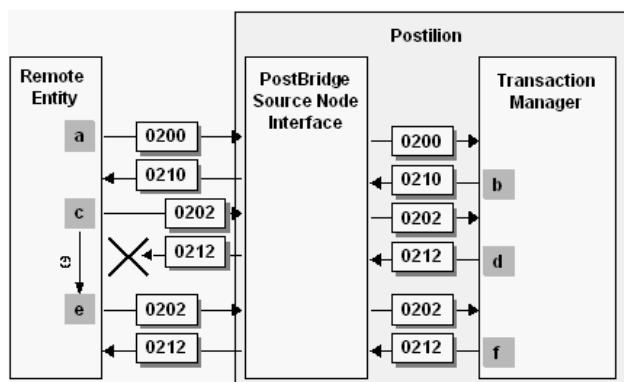
- b. The remote entity times out, and sends a 0202 (financial completion) to **Postilion**. The completion indicates the timeout condition for the transaction.
- c. **Postilion** responds immediately with a 0212 (financial completion response) without securing the transaction.

Lost Reply



- a. The remote entity sends a 0200 (financial request) to **Postilion** to request authorization for a financial transaction.
- b. **Postilion** obtains authorization (from the sink node or stand-in) and returns a 0210 (financial response) to the remote entity
- c. The remote entity times out, and sends a 0202 (financial completion) to **Postilion**. The completion indicates the timeout condition for the transaction.
- d. **Postilion** responds immediately with a 0212 (financial completion response) without securing the transaction.

Lost Completion



Message Flows

- a. The remote entity sends a 0200 (financial request) to **Postilion** to request authorization for a financial transaction.
- b. **Postilion** obtains authorization (from the sink node or stand-in) and returns a 0210 (financial response) to the remote entity
- c. The remote entity sends a 0202 (financial completion request) to **Postilion** to complete the transaction
- d. **Postilion** secures the 0202 and responds immediately with a 0212 (financial completion response) to the remote entity.
- e. The remote entity times out, and re-transmits the 0202 (financial completion) to **Postilion**.
- f. **Postilion** recognizes the duplicate and responds with a 0212 (financial completion response) to the remote entity

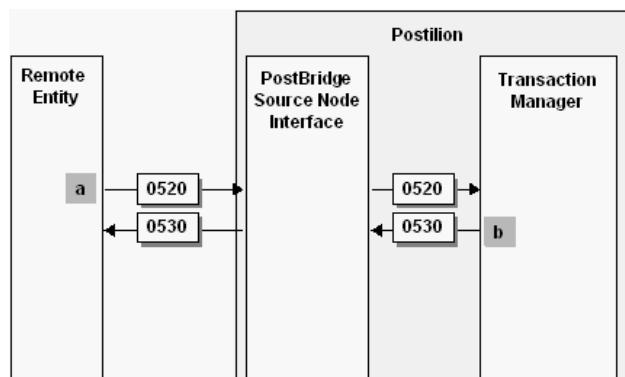
Reconciliation

Reconciliation transactions are used to assist in the reconciliation of the remote entity with **Postilion**. The remote entity should maintain a set of totals for a given reconciliation period (batch). During this period **Postilion** will maintain a set of totals for the remote entity (see note below). At any stage during the reconciliation period, the remote entity can query the totals maintained by **Postilion** with a query transaction.

To advance to a new reconciliation period (i.e. perform batch cut-over), the remote entity can perform a batch cut-over transaction. To do this, the remote entity sends its totals for the period in a 0520 message. **Postilion** will match these totals to the totals it maintained. It will respond to the remote entity indicating the outcome of this comparison before advancing to a new batch. Alternatively, **Postilion** can send a 0522 (card issuer reconciliation advice) message to the remote entity. The 0522 message contains the totals maintained by **Postilion** for a reconciliation period. The remote entity should cut-over its batch and respond with a 0532 (card issuer reconciliation advice response) message indicating the outcome of a comparison between the totals maintained locally and the totals provided in the 0522 message.

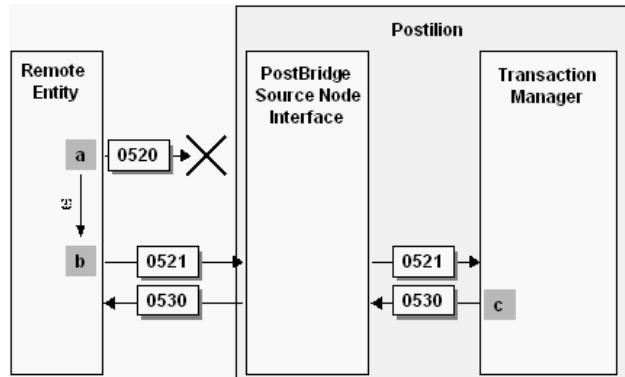
Note: **Postilion** must be configured during the installation process to maintain batch totals for the reconciliation messages to contain meaningful data. If **Postilion** does not maintain totals, the reconciliation messages will contain totals depicting zero financial worth.

Acquirer Batch-cutover – Normal Condition



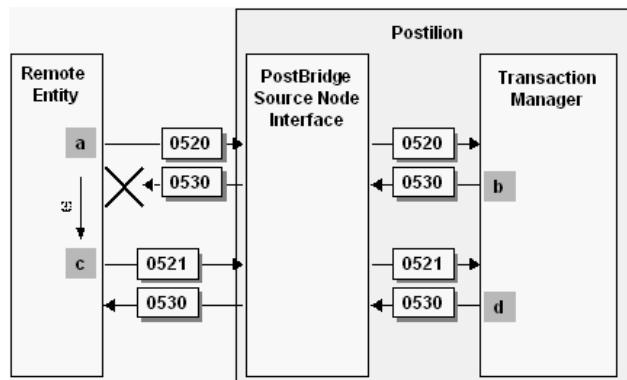
- a. The remote entity sends a 0520 (reconciliation advice) to **Postilion** to initiate batch cut-over. The totals that the remote entity maintained for this period (batch) are forwarded in the message.
- b. **Postilion** approves or declines the advice by sending a 0530 (reconciliation advice response) to the remote entity indicating whether or not the reconciliation was successful (i.e. in balance). The totals maintained **by Postilion** for the remote entity is returned in this message.

Acquirer Batch-cutover – Lost Request



- a. The remote entity sends a 0520 (reconciliation advice) to **Postilion** to initiate batch cut-over and starts a timer. The totals that the remote entity maintained for this period (batch) are forwarded in the message. The message is lost on the network.
- b. The timer expires. The remote entity re-transmits the remote entity reconciliation advice with a repeat indicator (the message type is 0521).
- c. **Postilion** approves or declines the advice by sending a 0530 (reconciliation advice response) to the remote entity indicating whether or not the reconciliation was successful (i.e. in balance). The totals that **Postilion** maintained for the remote entity are returned in this message.

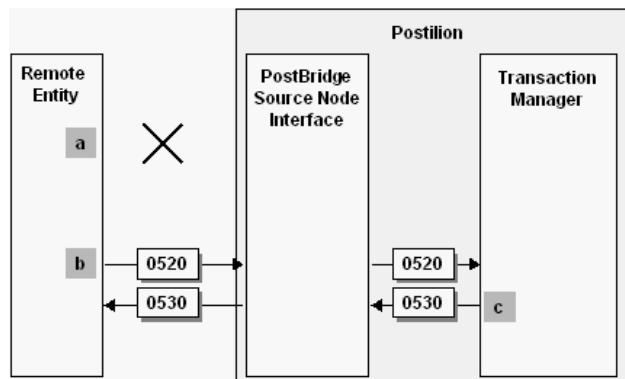
Acquirer Batch-cutover – Lost Reply



- a. The remote entity sends a 0520 (reconciliation advice) to **Postilion** to initiate batch cut-over and starts a timer. The totals that the remote entity maintained for this period (batch) are forwarded in the message.
- b. **Postilion** approves or declines the advice by sending a 0530 (reconciliation advice response) to the remote entity indicating whether or not the reconciliation was successful (i.e. in balance). The totals maintained by **Postilion** for the remote entity is returned in this message. The message is lost on the network.
- c. The timer expires. The remote entity re-transmits the remote entity reconciliation advice with the repeat indicator (the message type is 0521).
- d. **Postilion** recognizes the 0520 as a duplicate and returns a 0530 indicating whether or not the reconciliation (previous) was successful (i.e. in balance). The totals that **Postilion** maintained for the remote entity are returned in this message.

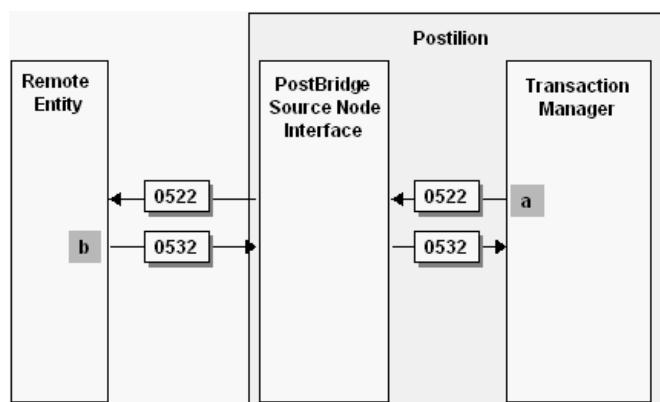
Acquirer Batch-cutover – Postilion Down

This is the situation where Postilion is not available, typically due to a break in communications.



- The remote entity attempts to send a 0520 (reconciliation advice) to **Postilion** to initiate batch cut-over, but the connection to **Postilion** is down. The remote entity waits for the connection to be re-established, and does not allow any new transactions on the remote entity.
- The connection to **Postilion** is re-established. The remote entity sends a 0520 (reconciliation advice) to **Postilion** to initiate batch cut-over. The totals that the remote entity maintained for this period (batch) are forwarded in the message.
- Postilion** approves or declines the advice by sending a 0530 (reconciliation advice response) to the remote entity indicating whether or not the reconciliation was successful (i.e. in balance). The totals maintained by **Postilion** maintained for the remote entity is returned in this message.

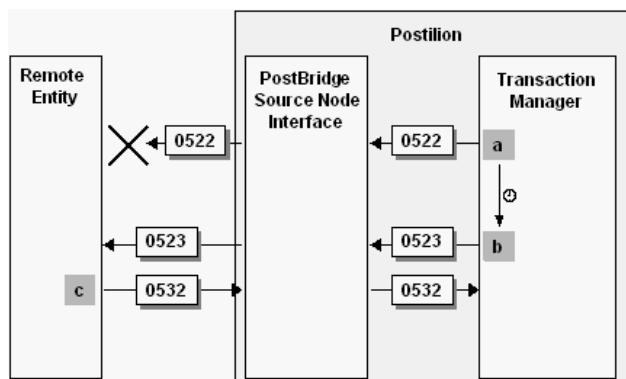
Issuer Batch-cutover – Normal Condition



Message Flows

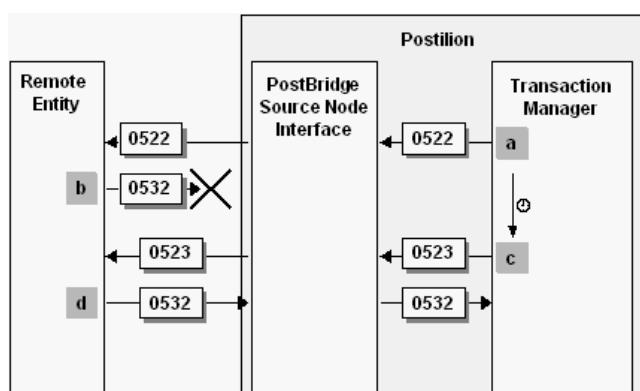
- a. **Postilion** sends a 0522 (reconciliation advice) to the remote entity to initiate batch cut-over. The totals that **Postilion** maintained for this period (batch) are forwarded in the message.
- b. The remote entity approves or declines the advice by sending a 0532 (reconciliation advice response) to **Postilion** indicating whether or not the reconciliation was successful (i.e. in balance). The totals that the remote entity maintained are returned in this message.

Issuer Batch-cutover – Lost Request



- a. **Postilion** sends a 0522 (reconciliation advice) to the remote entity to initiate batch cut-over and starts a timer. The totals that **Postilion** maintained for this period (batch) are forwarded in the message. The message is lost on the network.
- b. The timer expires. **Postilion** re-transmits the issuer reconciliation advice with a repeat indicator (the message type is 0523).
- c. The remote entity approves or declines the advice by sending a 0532 (reconciliation advice response) to **Postilion** indicating whether or not the reconciliation was successful (i.e. in balance). The totals that the remote entity maintained are returned in this message.

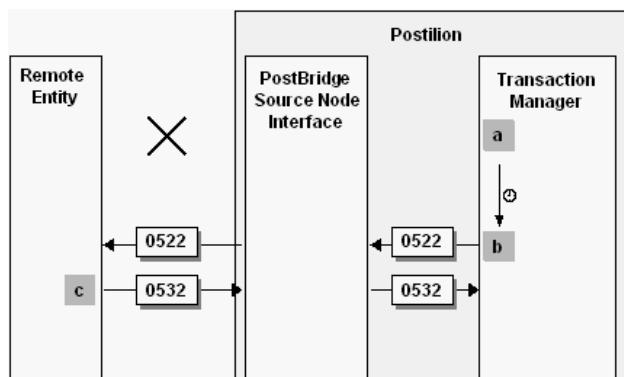
Issuer Batch-cutover – Lost Reply



- a. **Postilion** sends a 0522 (reconciliation advice) to the remote entity to initiate batch cut-over and starts a timer. The totals that **Postilion** maintained for this period (batch) are forwarded in the message.
- b. The remote entity approves or declines the advice by sending a 0532 (reconciliation advice response) to **Postilion** indicating whether or not the reconciliation was successful (i.e. in balance). The totals that the remote entity maintained are returned in this message. The message is lost on the network.
- c. The timer expires. **Postilion** re-transmits the issuer reconciliation advice with a repeat indicator (the message type is 0523).
- d. The remote entity recognizes the 0522 as a duplicate and returns a 0532 indicating whether or not the reconciliation (previous) was successful (i.e. in balance). The totals that the remote entity maintained are returned in this message.

Issuer Batch-cutover – Acquirer Down

This is the situation where the remote entity is not available, typically due to a break in communication.



- a. **Postilion** attempts to send a 0522 (reconciliation advice) to the remote entity to initiate batch cut-over, but the connection to the remote entity is down. **Postilion** waits for the connection to be re-established.
- b. The connection to the remote entity is re-established. **Postilion** sends a 0522 (reconciliation advice) to the remote entity to initiate batch cut-over. The totals that **Postilion** maintained for this period (batch) are forwarded in the message.
- c. The remote entity approves or declines the advice by sending a 0532 (reconciliation advice response) to **Postilion** indicating whether or not the reconciliation was successful (i.e. in balance). The totals that the remote entity maintained are returned in this message.

Administration

Administration transactions are used to request or inform the issuer of administrative functions that should be performed such as flagging a card as 'hot' or sending a message to the bank.

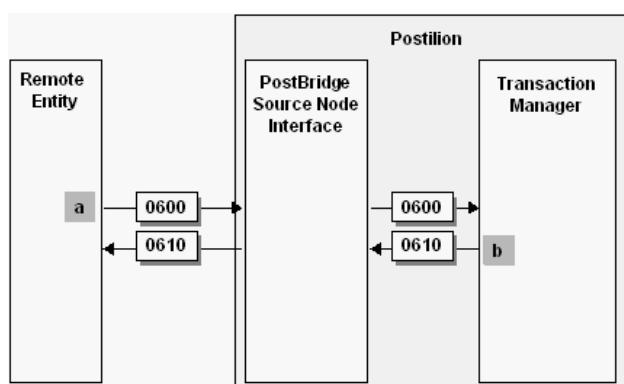
Hot card notification (hold) transactions are initiated by ISO8583 0600/0620 messages sent to **Postilion**. The **Postilion** proprietary transaction type of '90' is defined for this transaction. The message reason code should specify the reason a hold was placed on the card.

Message Flows

Message to bank transactions are also initiated by ISO8583 0600/0620 messages sent to **Postilion**. The **Postilion** proprietary transaction type of '91' is defined for this transaction. The message reason code should specify the type of message the cardholder wants to forward to the issuer. Note that in this case, the message reason code field is treated as a free-format field that the user can use for any user specific code.

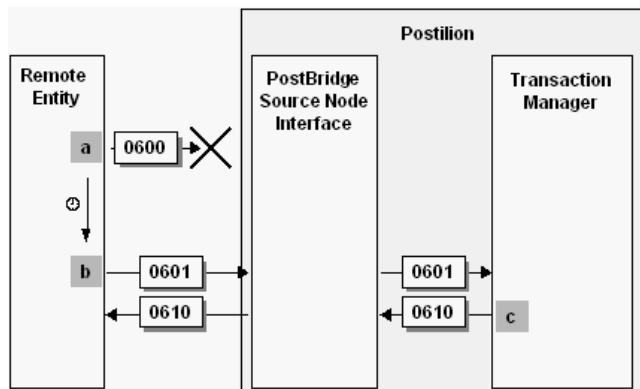
Whenever a remote entity sends an administrative request (0600) to **Postilion**, it should start a timer. If the timer expires before the response to the message is received, the message can be retransmitted with a repeat indicator. If no response is received after a number of re transmissions, the remote entity should decline the transaction. Administration advice messages should be retransmitted until acknowledged by **Postilion**.

Normal Condition



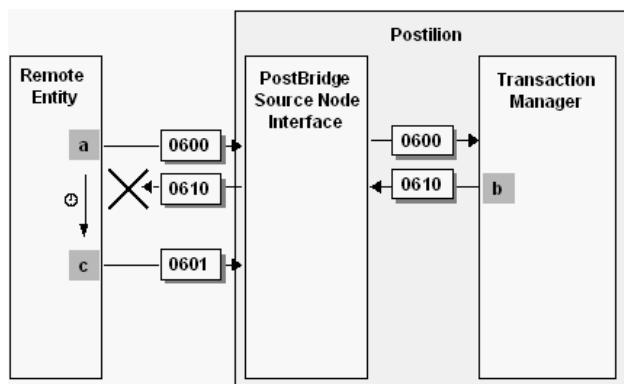
- a. The remote entity sends a 0600 (administration request) to **Postilion** to request an administrative function.
- b. **Postilion** processes the administrative function (flags a card as 'hot' or logs a message to bank) and sends a 0610 (administration request response) to the **remote entity** with the appropriate action code.

Lost Request



- a. The remote entity sends a 0600 (administration request) to **Postilion** to request an administrative function and starts a timer. The message is lost on the network.
- b. The timer expires. The remote entity optionally declines the transaction or re-transmits the administration request with a repeat indicator.
- c. **Postilion** processes the administrative function (flags a card as 'hot' or logs a message to bank) and sends a 0610 (administration request response) to the remote entity with the appropriate action code.

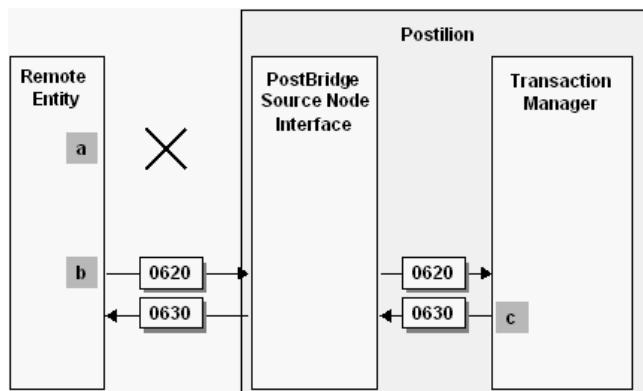
Lost Reply



- a. The remote entity sends a 0600 (administration request) to **Postilion** to request an administrative function and starts a timer.
- b. **Postilion** processes the administrative function (flags a card as 'hot' or logs a message to bank) and sends a 0610 (administration request response) to the remote entity with the appropriate action code. The message is lost on the network.

- c. The timer expires and the remote entity optionally re-transmits the administration request (with repeat indicator) or declines the transaction.

Postilion Down



- a. The remote entity attempts to send a 0600 (administration request) to **Postilion** to request an administrative function, but the connection to **Postilion** is down. The remote entity performs stand-in authorization, adding the administration request to the store and forward queue and waits for the connection to be re-established.
- b. The remote entity forwards the administrative function to **Postilion** by sending a 0620 (administration advice) indicating the reason for the advice.
- c. **Postilion** processes the administrative function (flags a card as 'hot' or logs a message to bank) and sends a 0630 (administration advice response) to the remote entity with the appropriate action code.

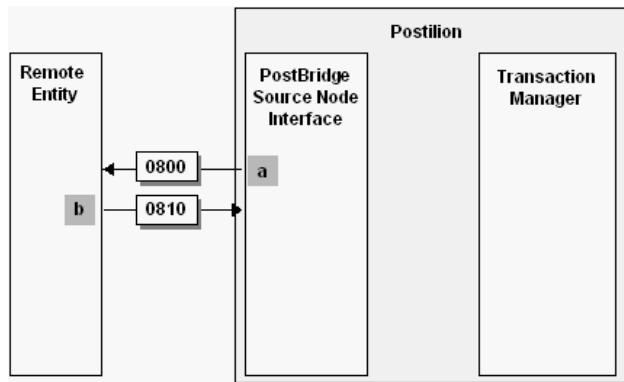
Sign On / Sign Off

Sign on messages are sent to the remote entity serve to notify the remote entity that you are ready to process transactions. The remote entity will respond back to the Sign on message acknowledging that it received your sign on request and indicating whether it is ready to initiate transaction processing as well. Once a sign on / sign on response has been successfully exchanged the system is ready to process transactions.

Sign off messages are the inverse of this. A sign off message is sent to the remote to indicate that you cannot process transactions anymore.

If the **PostBridge** Source Node interface is not signed on to the remote system it should not receive any transactions from that system. If it does receive a transaction from the remote it will ignore it and log an error event. Responses to transactions will however still be processed correctly as this response might have originated from the remote system before sign off was initiated.

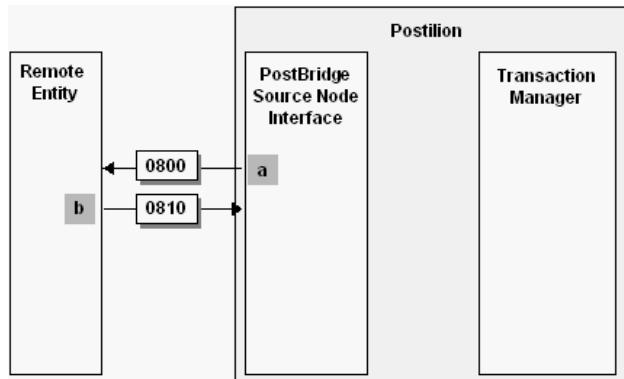
Sign On - Postilion Originated



a. **Postilion** sends a 0800 network management request to the remote *with Network Management Information Code* (field 70) set to *Sign On* ('001').

b. The remote entity responds to the network management request (0800) with a network management request response (0810).

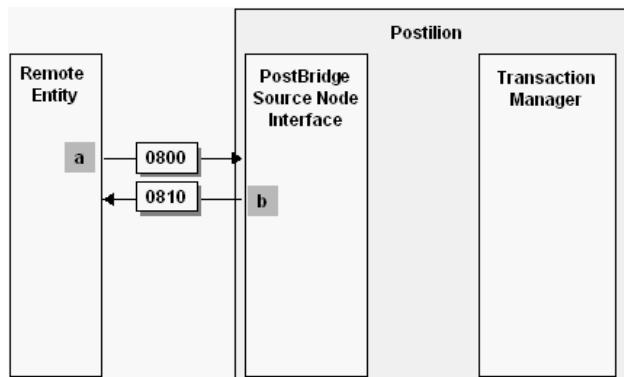
Sign Off - Postilion Originated



a. **Postilion** sends a 0800 network management request to the remote *with Network Management Information Code* (field 70) set to *Sign Off* ('002').

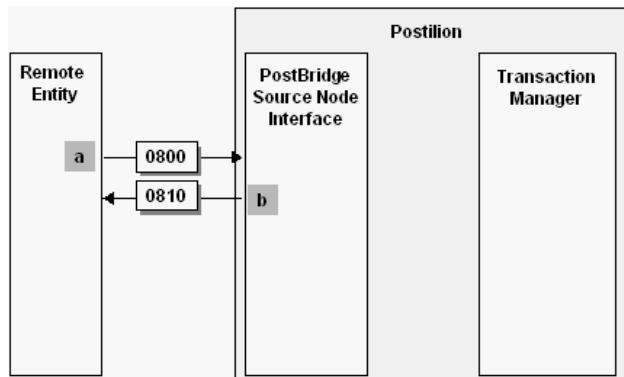
b. The remote entity responds to the network management request (0800) with a network management request response (0810).

Sign On - Remote Originated



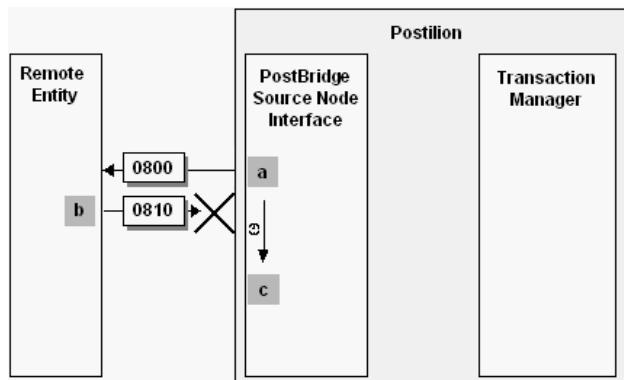
- The remote entity sends a 0800 network management request to **Postilion** with Network Management Information Code (field 70) set to *Sign On* ('001').
- Postilion** responds to network management request (0800) with a network management request response (0810).

Sign Off - Remote Originated



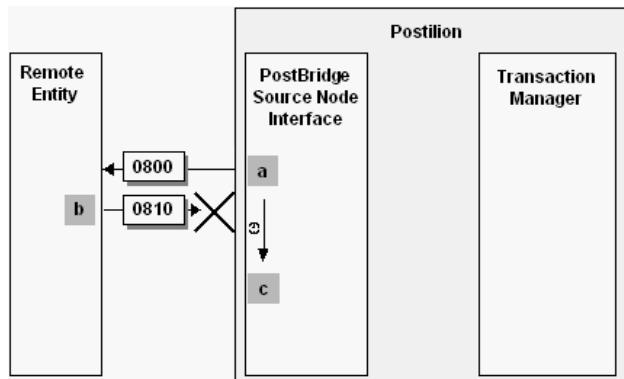
- The remote entity sends a 0800 network management request to **Postilion** with Network Management Information Code (field 70) set to *Sign Off* ('002').
- Postilion** responds to network management request (0800) with a network management request response (0810).

Sign On - Postilion Originated Lost Reply



- a. **Postilion** sends a 0800 network management request to the remote with *Network Management Information Code* (field 70) set to *Sign On* ('001').
- b. The remote entity responds to the network management request (0800) with a network management request response (0810). The response is lost on the network.
- c. Depending on the configuration of the system **Postilion** will either disconnect and reconnect after a short interval, or will send another sign on request (step a).

Sign Off - Postilion Originated Lost Reply



- a. **Postilion** sends a 0800 network management request to the remote with *Network Management Information Code* (field 70) set to *Sign Off* ('002').
- b. The remote entity responds to the network management request (0800) with a network management request response (0810). The response is lost on the network.
- c. The **Postilion** System is already signed off and does nothing if it does not receive a response.

Key Management

Key management transactions are used to exchange the PIN encryption working (session) key and MAC working (session) keys¹ of the remote entity with **Postilion**.

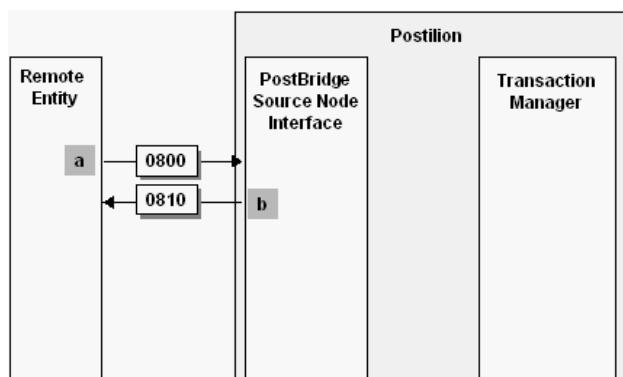
The master/session key management scheme is used. The basic principle involved in sharing session keys using a master key are that one of the two parties generates a new session key that is encrypted using the master key before sending it to the other party. The recipient can decrypt the session key because they share a master (or initial) key. The same master key must therefore be loaded statically on both the **Postilion** and remote host systems prior to key management transactions taking place.

The remote entity should initiate a key management transaction at least once a day (typically after reconciliation). It should always perform a key management transaction on initialization or power up.

To initiate a key management transaction, the remote entity sends a 0800 (network management request) message to **Postilion**, indicating that it requires a new key. On receipt of this message, **Postilion** generates a new session key, encrypts it under the master key and sends this encrypted value to the remote entity. Since the remote entity has the master key, it can decrypt the value and extract the session key.

PIN Working Key Exchange - Normal Condition

This message flow is only defined for **Postilion PostBridge** Interchanges that are configured to perform PIN processing.



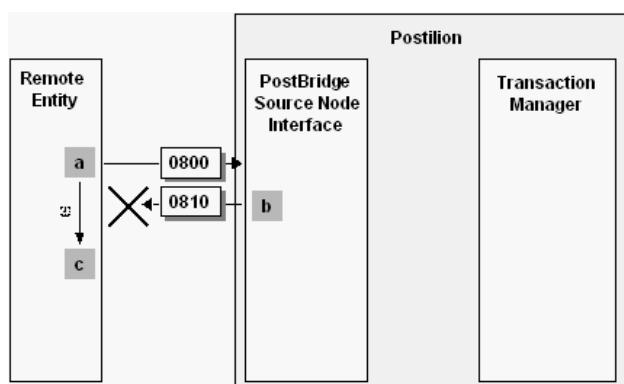
- a. The remote entity sends a 0800 (network management request) to **Postilion** to request a new PIN working key. The *Network Management Code* (field 70) should contain a value of '101' to identify the message as a PIN Working Key Exchange.
- b. **Postilion** generates a new PIN working key and returns it encrypted under the master key in a 0810 (network management request response) to the remote entity with the appropriate action code.

¹ While MACing makes use of 2 session keys only one session key will be exchanged at a time. This allows the master/session key management scheme to still be used. Refer to the [MAC Key Management](#) section for more information.

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PIN Working Key exchange - Lost Reply

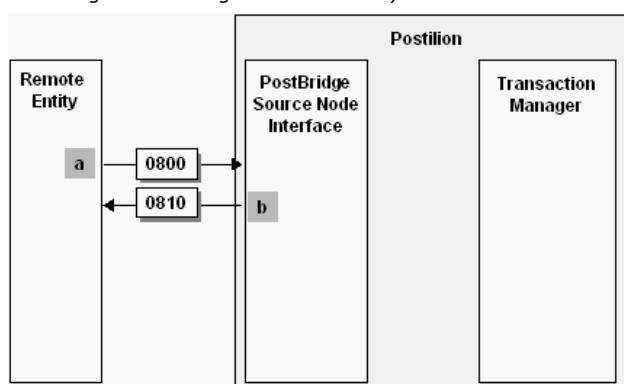
This message flow is only defined for Postilion PostBridge Interchanges that are configured to perform PIN processing.



- The remote entity sends a 0800 (network management request) to **Postilion** to request a new PIN working key. The *Network Management Code* (field 70) should contain a value of '101' to identify the message as a PIN Working Key Exchange.
- Postilion** generates a new PIN working key and returns it encrypted under the master key in a 0810 (network management request response) to the remote entity with the appropriate action code. The message is lost on the network.
- The timer expires and the remote entity declines the transaction. The remote entity can not perform any transactions until the keys are synchronized.

MAC Working Key exchange - Normal Condition

This message flow is only defined for Postilion PostBridge Interchanges that are configured to support message MAC'ing and dynamic MAC key exchange. (This is configured in the Postilion PostBridge MAC Configuration Console.)

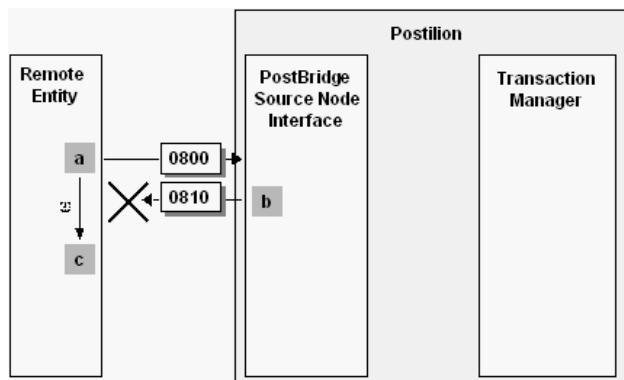


Message Flows

- a. The remote entity sends a 0800 (network management request) to **Postilion** to request a new MAC working key. The *Network Management Code* (field 70) should contain a value of '160' to indicate that this is a MAC working key exchange message. The *MAC Extended* (field 128) will contain a key number indicating which key should be exchanged.
- b. **Postilion** generates a new MAC working key and returns it encrypted under the master key in a 0810 (network management request response) to the remote entity with the appropriate action code

MAC Working Key exchange - Lost Reply

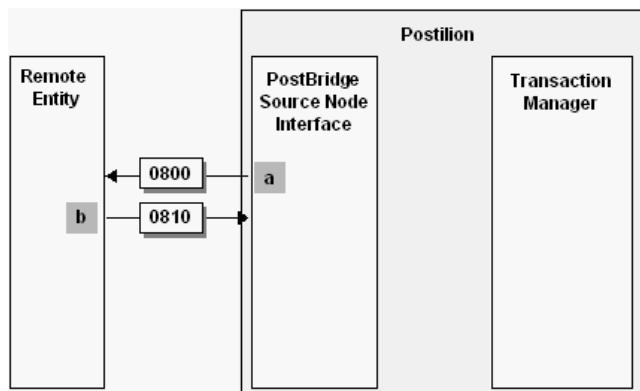
This message flow is only defined for Postilion PostBridge Interchanges that are configured to support message MAC'ing and dynamic MAC key exchange. (This is configured in the Postilion PostBridge MAC Configuration Console.)



- a. The remote entity sends a 0800 (network management request) to **Postilion** to request a new MAC working key. The *Network Management Code* (field 70) of this message should contain a value of '160' to indicate that this is a MAC working key exchange message. The *MAC Extended* (field 128) will contain a key number indicating which key should be exchanged.
- b. **Postilion** generates a new MAC working key and returns it encrypted under the master key in a 0810 (network management request response) to the remote entity with the appropriate action code. The message is lost on the network.
- c. The remote entity times out. The remote entity resends the 0800 to request a new key.

Echo test

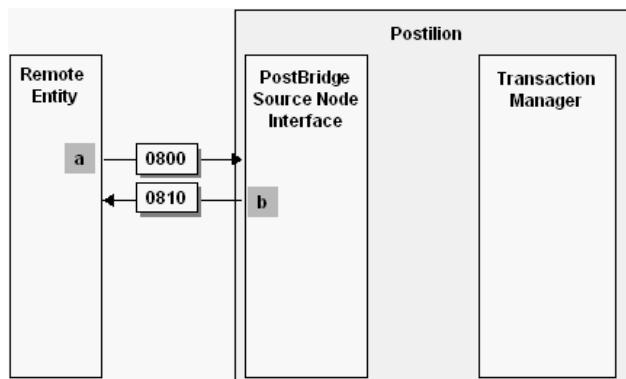
Postilion Originated



a. **Postilion** sends a 0800 (echo test request) to the remote entity with *Network Management Information Code* (field 70) set to *Echo Test* ('301')

b. The remote entity responds to the echo test network management request (0800) with a network management request response (0810).

Remotely Originated

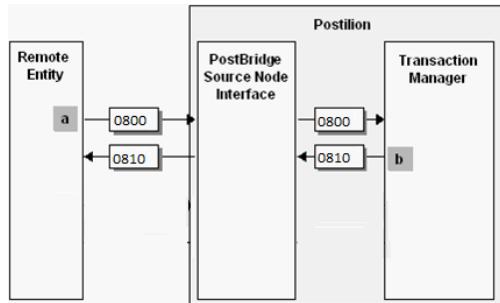


a. The remote entity sends a 0800 (echo test request) to Postilion with Network Management Information Code (field 70) set to Echo Test ('301')

b. Postilion responds to the echo test network management request (0800) with a network management request response (0810).

Network Management

Remotely Originated



- PostBridge supports sending network management messages generated by a downstream entity to an upstream entity.

These messages may not contain any of the following Network Management Information Codes: 001 (Sign on), 002 (Sign off), 301 (Echo test), 101 (Key Change), '130' (EMV Download), '132' (Status Request), '133' (EMV Completion), 160 (MAC Key Exchange), 161 (Passthrough Key Exchange), 162 (Passthrough MAC Key Exchange).

And the Switch Key (Field 127.2) must be present in the message from a downstream entity.

- Postilion responds to this network management request (0800) with a network management request response (0810).

MAC enabled transactions

When a message is sent from one system to another in an EFT network, it may be important to ensure that the message is not tampered with. This is achieved with message authentication.

Message authentication operates by sharing an operational Message Authentication Key (KWA) between two systems. Depending upon the requirements of each system this key can be defined statically or exchanged dynamically under a Key Encrypting Key (KEK).

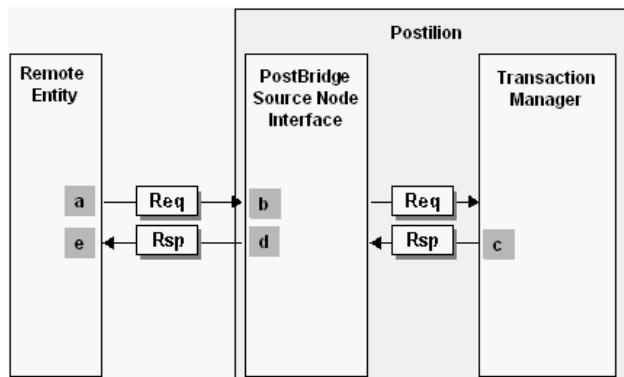
If message authentication is required, each party uses the Message Authentication Key (KWA) and the message data to derive a four byte code called the Message Authentication Code (MAC). This MAC is then stored in the message before transmission. The receiving party takes the message and calculates the MAC using the same KWA. If the codes match, then the message is intact and the parties can be sure that only systems in the same security zone could have communicated the message. If the codes do not match, an error is logged.

The MAC generation algorithm is based on the DES CBC mode and is specified in the ANSI X9.9 standard.

Any message type on the **Postilion** system can be configured to use a MAC using the *PostBridge MAC Configuration Console*.

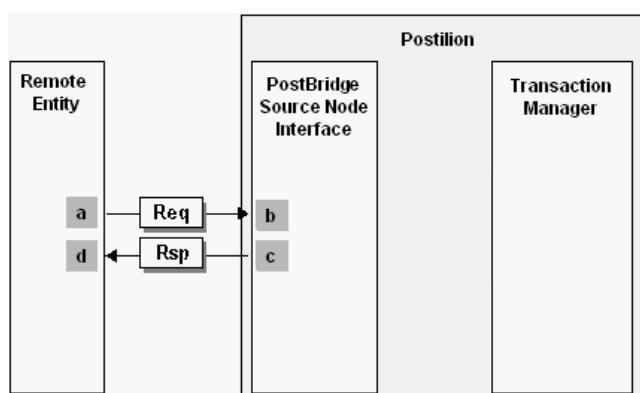
If dynamic key exchange is enabled MACing will make use of two keys. The MAC Extended (field 128) will contain the number of the key (1 or 2) to indicate which key was used to generate the code and which key should be used to authenticate the code.

Normal Condition



- The remote entity sends a request to **Postilion** containing a MAC Code.
- The **PostBridge** Interface successfully validates the MAC value before passing on the message to the **Transaction Manager**.
- The **Transaction Manager** processes the request and sends a response to the remote entity.
- The **PostBridge** Interface generates a MAC code for the message and places it in *MAC Extended* (field 128) before passing the message to the remote entity.
- The remote entity successfully validates the MAC value and processes the response as normal.

Invalid MAC in Request

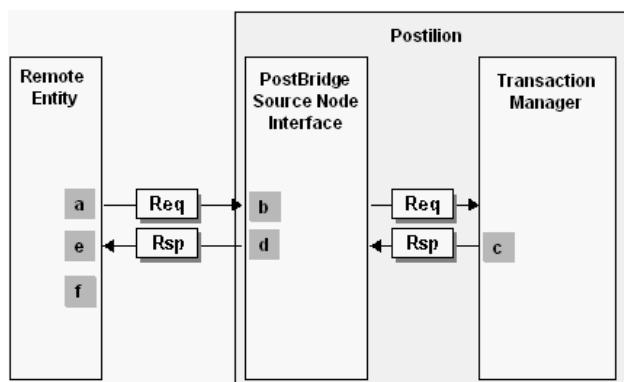


- The remote entity sends a request to **Postilion** which does not contain a MAC Code.
- While processing the request the **PostBridge** Interface finds a MAC error. (This can be any one of the exception conditions listed in the [MAC Support](#) Section.) The interface does not pass the message to **Transaction Manager**.

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- c. The **PostBridge** Interface responds to the remote entity with a Format Error Response message. The Format Error Response message is a normal response message containing minimal data and a *Response Code* of '30' (*Format Error*). If configured, this message can also contain a MAC Code.
- d. The remote entity receives the Format Error Response message and initiates whatever exception processing is required.

Invalid MAC in Response



- The remote entity sends a request to Postilion containing a MAC Code.
- The PostBridge Interface successfully validates the MAC value before passing on the message to the Transaction Manager.
- The Transaction Manager processes the request and sends a response to the remote entity.
- The PostBridge Interface generates a MAC code for the message and places it in Mac Extended (field 128) before passing the message to the remote entity.
- The remote entity finds that the MAC code in the response message is invalid and initiates whatever MAC exception processing is required on its own system.
- The remote entity initiates a reversal of the original request message. Please refer to the 'Lost Reply' section of each message type for more information on the reversal process.

Sink node interface

This section describes message flows between the **Postilion** and a remote entity using the **PostBridge** sink node interface. It explains which message types are used and how messages are exchanged.

The processing of transactions under normal conditions is described for requests, reversals and (stand-in) advices. In addition, the following exception conditions are covered:

- lost request
- lost response
- lost completion
- remote entity down
- transaction not completed as authorized

Whenever **Postilion** sends a message to the remote entity, it starts a timer. If the timer expires before the response to the message is received, the message is optionally retransmitted with the

Message Flows

message type indicator showing that it is a repeat transmission. If the message is a request and no response is received after a number of transmissions, **Postilion** (optionally) performs stand-in authorization. Advice messages are retransmitted until acknowledged by the remote entity.

Message Flows

Messages from PostBridge

Message Type ID	Description
0100/0101	Authorization request (repeat) Sent when the transaction can not complete at the point of service until the response message is received indicating the action to be taken. The use of this message does not imply that the cardholder is present (e.g. mail order).
0120/0121	Authorization advice (repeat) Sent to inform the card issuer of an authorization transaction (e.g. stand-in authorization) that has completed at the point of service.
0200/0201	Financial request (repeat) Sent when the transaction can not complete at the point of service until the response message is received indicating the action to be taken. The use of this message does not imply that the cardholder is present (e.g. mail order).
0202/0203	Financial completion request (repeat) Sent to complete inquiry, debit, credit, payment and transfer transactions (if dual message on-line draft capture is used). A completion will always be preceded by a 0200 (or 0201).
0220/0221	Financial Transaction Advice (repeat) Sent to advise the remote entity of a Financial Transaction that has taken place. This can be for a transaction which was authorized by the remote entity, for a Transaction authorized by Postilion, or for a transaction that was authorized by a preceding 0100 message.
0320/0321	Acquirer File Update Advice (repeat) Sent to advise an Acquirer file update function. Can be received from a Source Node Interface. Sent to a Sink Node Interface.
0332	Issuer File Update Advice Response Sent in response to a prior 0322 or 0323.
0400/0401	Reversal request (repeat) Sent to fully or partially reverse a previous authorization or funds transfer. Can be received from a Source Node Interface. Sent to a Sink Node Interface.
0420/0421	Reversal advice (repeat) Sent to inform the issuer of a complete or partial reversal of a previous authorization or financial transaction.
0512	Card issuer reconciliation request response Sent in response to a card issuer reconciliation request. It contains the totals maintained by Postilion for the issuer.
0532	Card issuer reconciliation advice response Sent in response to a card issuer reconciliation advice. It indicates whether or not the totals accumulated by Postilion match the totals received from the host.
0520/0521	Acquirer reconciliation advice (repeat)

Message Flows

Message Type ID	Description
	Sent to initiate batch cut-over and to request the confirmation of totals (number and value). The totals contained in the message are those maintained by Postilion.
0600/0601	Administration request (repeat) Sent to request an administrative function such as flagging a card as 'hot' or sending a message to the bank.
0620/0621	Administration advice (repeat) Sent to advise the issuer of administrative functions that must be performed such as flagging a card as 'hot' or sending a message to the bank.
0800/0801	Network Management request (repeat) Sent to synchronize cryptographic keys between Postilion and the third party.
9120/9121	Authorization notification (repeat) Sent by Postilion to notify a third party, called a Control Node, of an authorization that took place.
9220/9221	Transaction notification (repeat) Sent by Postilion to notify a third party, called a Control Node, of a transaction that took place.
9320/9321	Acquirer File Update Notification (repeat) Sent by Postilion to notify a third party, called a Control Node, of an acquirer file update that took place.
9420/9421	Reversal notification (repeat) Sent by Postilion to notify a third party, called a Control Node, of a reversal that took place.
9620/9621	Administration notification (repeat) Sent by Postilion to notify a third party, called a Control Node, of an administration transaction that took place.

Messages to PostBridge

Message Type ID	Description
0110	Authorization request response Sent in response to an authorization request. It can indicate a full approval, partial approval or the declined action to be taken.
0130	Authorization advice response Sent in response to an authorization advice. It indicates if the card issuer accepts or rejects the transfer of financial liability.
0210	Financial request response Sent in response to a financial request. It can indicate a full approval, partial approval or the declined action to be taken.
0212	Financial completion response Sent in response to a 0202 (financial completion request). Applicable when the dual message-pair protocol is used.
0230	Financial Transaction advice response Sent in response to a Financial Transaction advice.
0322/0323	Issuer file update advice (repeat) Sent to request an Issuer file update function.
0330	Acquirer File Update Advice Response Used to respond to a prior 0320 or 0321.
0410	Reversal request response Sent in response to a prior 0400 or 0401.
0430	Reversal advice response Sent in response to a reversal advice. Note that the card issuer must always accept the reversal.
0502/0503	Card issuer reconciliation request (repeat) Sent to request the confirmation of totals (number and value). The message can be repeated a number of times. If no response is received within a certain time, the issuer should decline the transaction.
0522/0523	Card issuer reconciliation advice (repeat) Sent to initiate batch cut-over and to request the confirmation of totals (number and value). The totals contained in the message are those maintained by the issuer.
0530	Acquirer reconciliation advice response Sent in response to an acquirer reconciliation advice. It indicates whether or not the totals accumulated by the host (if any) match the totals received from Postilion.
0610	Administration response Sent in response to an administration request. It indicates whether or not the administrative function was performed successfully or not.

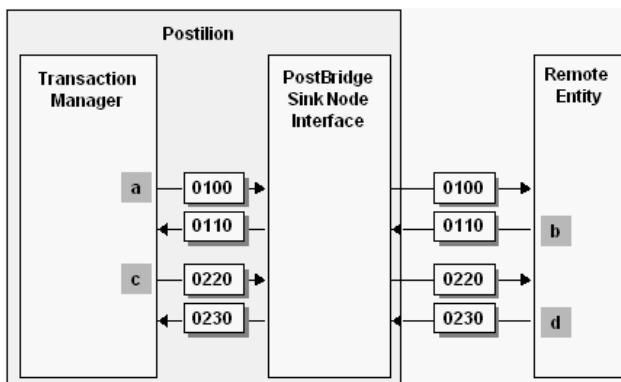
Message Flows

Message Type ID	Description
0630	Administration advice response Sent in response to an administration advice. It indicates whether or not the administrative function was performed successfully or not.
0810	Network Management request response Sent in response to a network management request.
9130	Authorization notification response Sent in response to an authorization notification.
9230	Transaction notification response Sent in response to a transaction notification.
9430	Reversal notification response Sent in response to a reversal notification.
9630	Administration notification response Sent in response to an administration notification.
9330	Acquirer File Update Notification Response Used to respond to a prior 9320.

Authorization transactions

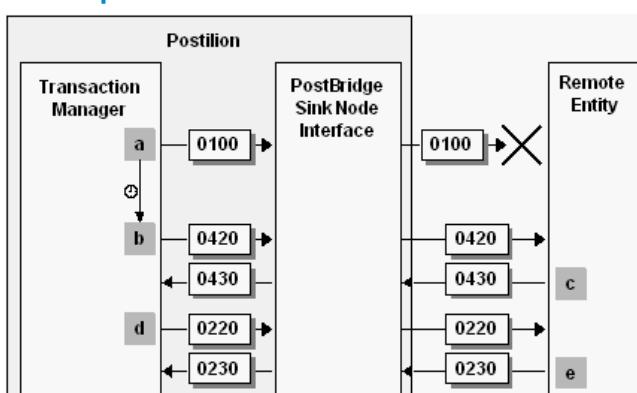
Normal Condition

This is the normal pre-authorization scenario where an authorization requesting reservation of funds is followed by the corresponding financial advice indicating the actual amount.



- a. **Postilion** sends a 0100 (authorization request) to the remote entity to request reservation of funds.
- b. If the amount can be authorized, the remote entity adapts the cardholder's available balance. The remote entity approves or declines the request by sending a 0110 (authorization request response) to **Postilion** with the appropriate action code.
- c. The transaction completes for the same or different amount. **Postilion** forwards a (new) financial transaction by sending a 0220 (financial advice) indicating that the advice was previously authorized, the amount for which authorization was obtained and the actual amount. The data identifying the original 0100 is sent in the *original data* field.
- d. The remote entity captures the financial transaction for cardholder billing purposes and responds to **Postilion** with a 0230 (financial advice response).

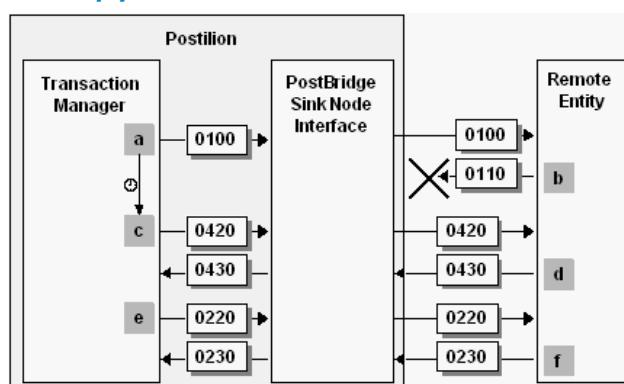
Lost Request



Message Flows

- a. **Postilion** sends a 0100 (authorization request) to the remote entity to request reservation of funds and starts a timer. The message is lost on the network.
 - b. The timer expires and **Postilion** performs stand-in authorization. This might result in a voice call to the remote entity requesting approval for the transaction. **Postilion** forwards a (new) reversal transaction by sending a 0420 (reversal) indicating a time-out condition and an actual amount of zero. The data identifying the original 0100 is sent in the *original data* field.
 - c. The remote entity received the reversal but can not match it to any 0100. It therefore assumes that it never processed the 0100 and therefore no additional processing is required. The remote entity responds with a 0430 (reversal response).
- The following steps are only applicable if the stand-in authorization resulted in funds transfer. The transaction is moved to the store and forward queue for the remote entity and will be forwarded to the remote entity once a connection to the remote entity is re-established.*
- d. **Postilion** forwards a (new) financial transaction by sending a 0220 (financial advice) indicating the reason for the advice.
 - e. The remote entity captures the financial transaction for cardholder billing purposes and responds to **Postilion** with a 0230 (financial advice response).

Lost Reply



- a. **Postilion** sends a 0100 (authorization request) to the remote entity to request reservation of funds and starts a timer.
 - b. If the amount can be authorized, the remote entity adapts the cardholder's available balance. The remote entity approves or declines the request by sending a 0110 to **Postilion** with the appropriate action code. The message is lost on the network.
 - c. The timer expires and **Postilion** performs stand-in authorization. This might result in a voice call to the remote entity requesting approval for the transaction. **Postilion** forwards a (new) reversal transaction by sending a 0420 indicating a time-out condition and an actual amount of zero. The data identifying the original 0100 is sent in the *original data* field.
 - d. The remote entity received the reversal and matches it to the related 0100. It adapts the cardholder's available balance to negate the effect of the 0100 before responding with a 0430 (reversal response).
- The following steps are only applicable if the stand-in authorization resulted in funds transfer. The transaction is moved to the store and forward queue for the remote entity and will be forwarded to the remote entity once a connection to the remote entity is re-established.*

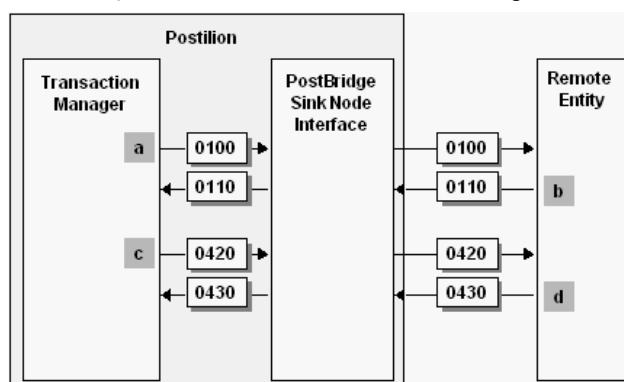
Message Flows

e. **Postilion** forwards a (new) financial transaction by sending a 0220 (financial advice) indicating the reason for the advice.

f. The remote entity captures the financial transaction for cardholder billing purposes and responds to **Postilion** with a 0230 (financial advice response).

Not Completed

This happens when an authorization requesting reservation of funds does not result in a cardholder transaction, because the cardholder decided not to go ahead with the transaction.



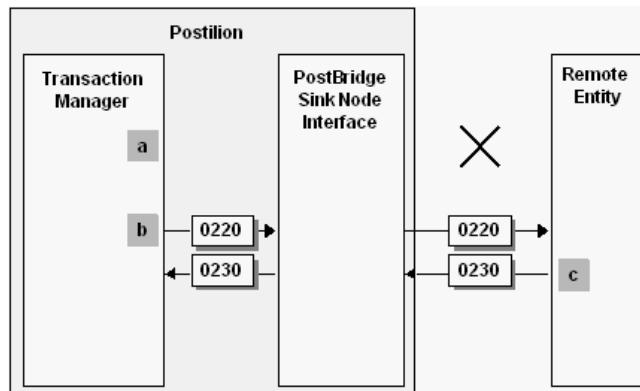
a. **Postilion** sends a 0100 (authorization request) to the remote entity to request reservation of funds.

b. If the amount can be authorized, the remote entity adapts the cardholder's available balance. The remote entity approves or declines the request by sending a 0110 (authorization request response) to **Postilion** with the appropriate action code.

c. The actual transaction does not take place (e.g. is cancelled by the cardholder). **Postilion** forwards a (new) reversal transaction by sending a 0420 (reversal advice) indicating the reason for the reversal and the actual amount. The data identifying the original 0100 is sent in the *original data* field.

d. The remote entity received the reversal and matches it to the related 0100. It performs the necessary processing to negate the effect of the 0100 on the cardholder's available balance before responding with a 0430 (reversal response).

Remote Entity Down



a. **Postilion** attempts to send a 0100 (authorization request) to the remote entity to request reservation of funds, but the connection to the remote entity is down. **Postilion** performs stand-in authorization. This might result in a voice call to the remote entity requesting approval for the transaction.

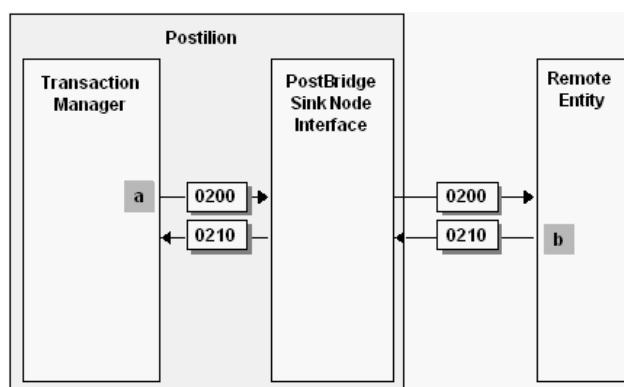
The following steps are only applicable if the stand-in authorization resulted in funds transfer. The transaction is moved to the store and forward queue for the remote entity and will be forwarded to the remote entity once a connection to the remote entity is re-established.

b. **Postilion** forwards a (new) financial transaction by sending a 0220 (financial advice) indicating the reason for the advice and the actual amount.

c. The remote entity captures the financial transaction for cardholder billing purposes and responds to **Postilion** with a 0230 (financial advice response).

Financial transactions – single message pair

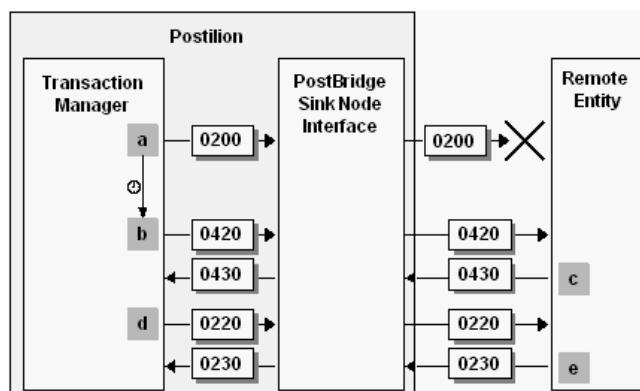
Normal Condition



a. **Postilion** sends a 0200 (financial request) to the remote entity to request authorization for a financial transaction.

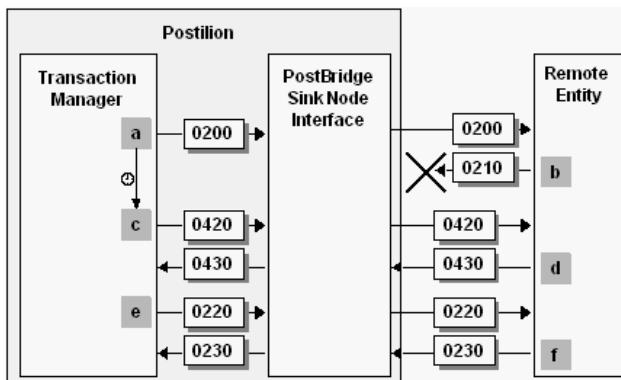
- b. The remote entity captures the transaction for cardholder billing purposes and approves or declines the request by sending a 0210 (financial request response) to **Postilion** with the appropriate action code.

Lost Request



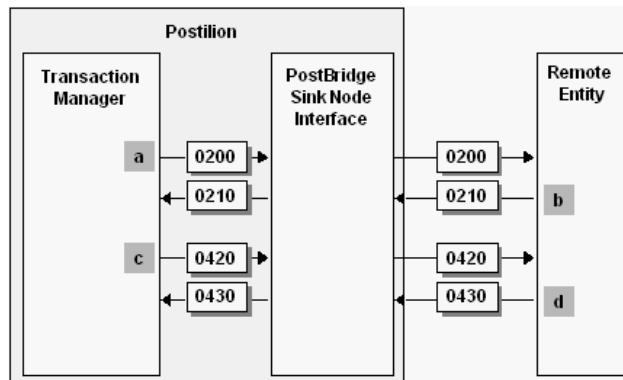
- a. **Postilion** sends a 0200 (financial request) to the remote entity to request authorization for a financial transaction and starts a timer. The message is lost on the network.
- b. The timer expires and **Postilion** performs stand-in authorization. **Postilion** forwards a (new) reversal transaction by sending a 0420 (reversal) indicating a time-out condition and an actual amount of zero. The data identifying the original 0200 is sent in the *original data* field.
- c. The remote entity received the reversal but can not match it to any 0200. It therefore assumes that it never processed the 0200 and therefore no additional processing is required. The remote entity responds with a 0430 (reversal response).
- The following steps are only applicable if the stand-in authorization resulted in funds transfer. The transaction is moved to the store and forward queue for the remote entity and will be forwarded to the remote entity once a connection to the remote entity is re-established.*
- d. **Postilion** forwards a (new) financial transaction by sending a 0220 (financial advice) indicating the reason for the advice.
- e. The remote entity captures the financial transaction for cardholder billing purposes and responds to **Postilion** with a 0230 (financial advice response).

Lost Reply



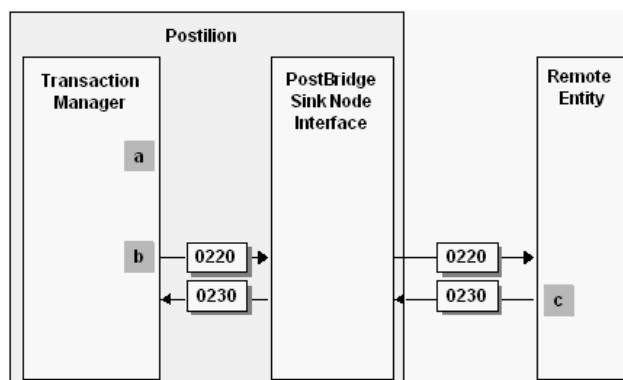
- a. **Postilion** sends a 0200 (financial request) to the remote entity to request authorization for a financial transaction and starts a timer.
- b. The remote entity captures the financial transaction for cardholder billing purposes and approves or declines the request by sending a 0210 (financial request response) to **Postilion** with the appropriate action code. The message is lost on the network.
- c. The timer expires and **Postilion** performs stand-in authorization. **Postilion** forwards a (new) reversal transaction by sending a 0420 (reversal) indicating a time-out condition and a zero final amount. The data identifying the original 0200 is sent in the *original data* field.
- d. The remote entity received the reversal and matches it to the related 0200. It performs the necessary processing to negate the effect of the 0200 on the cardholder account before responding with a 0430 (reversal response).
- The following steps are only applicable if the stand-in authorization resulted in funds transfer. The transaction is moved to the store and forward queue for the remote entity and will be forwarded to the remote entity once a connection to the remote entity is re-established.*
- e. **Postilion** forwards a (new) financial transaction by sending a 0220 (financial advice) indicating the reason for the advice.
- f. The remote entity captures the financial transaction for cardholder billing purposes and responds to **Postilion** with a 0230 (financial advice response).

Not Completed



- Postilion** sends a 0200 (financial request) to the remote entity to request authorization for a financial transaction.
- The remote entity captures the financial transaction for cardholder billing purposes and approves or declines the request by sending a 0210 (financial request response) to **Postilion** with the appropriate action code.
- The transaction does not complete as authorized. The **Postilion** forwards a (new) reversal transaction by sending a 0420 (reversal advice) indicating the reason for the reversal and the actual amount. The data identifying the original 0200 is sent in the *original data* field.
- The remote entity captures the reversal transaction for cardholder billing purposes and responds to **Postilion** with a 0430 (reversal advice response).

Below Floor Limits



- The transaction amount is below the local authorization limits and **Postilion** performs stand-in authorization.

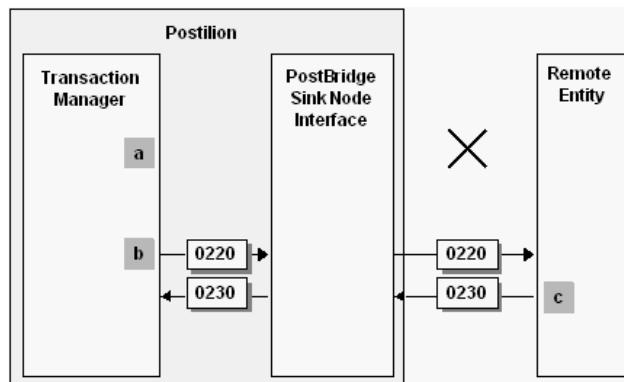
The following steps are only applicable if the stand-in authorization resulted in funds transfer. The transaction is moved to the store and forward queue for the remote entity and will be forwarded to the remote entity once a connection to the remote entity is re-established.

- Postilion** forwards a (new) financial transaction by sending a 0220 (financial advice) indicating the reason for the advice.

Message Flows

- c. The remote entity captures the financial transaction for cardholder billing purposes and responds to **Postilion** with a 0230 (financial advice response).

Remote Entity Down



- a. **Postilion** attempts to send a 0220 (financial request) to the remote entity to request authorization for a financial transaction, but the connection to the remote entity is down. **Postilion** performs stand-in authorization. This might result in a voice call to the remote entity requesting approval for the transaction.

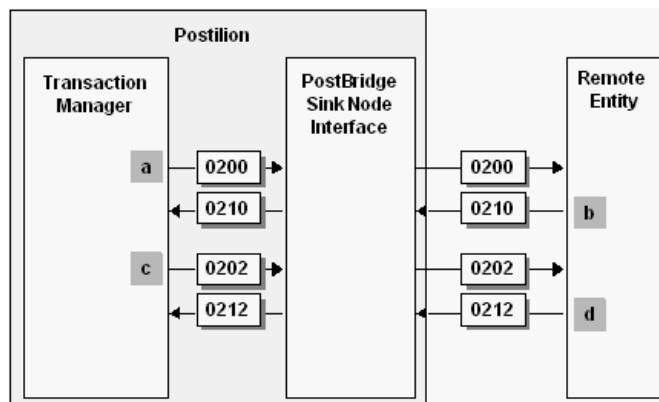
The following steps are only applicable if the stand-in authorization resulted in funds transfer. The transaction is moved to the store and forward queue for the remote entity and will be forwarded to the remote entity once a connection to the remote entity is re-established.

- b. **Postilion** forwards a (new) financial transaction by sending a 0220 (financial advice) indicating the reason for the advice and the actual amount.

- c. The remote entity captures the financial transaction for cardholder billing purposes and responds to **Postilion** with a 0230 (financial advice response).

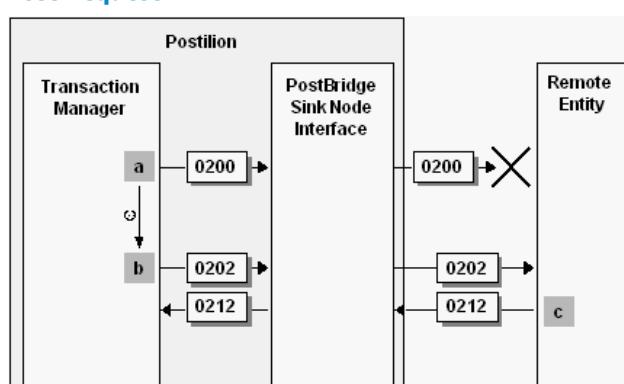
Financial transactions – dual message pair

Normal Condition



- Postilion** sends a 0200 (financial request) to the remote entity to request authorization for a financial transaction.
- The remote entity captures the transaction and approves or declines the request by sending a 0210 (financial request response) to **Postilion** with the appropriate action code.
- Postilion** sends a 0202 (financial completion request) to the remote entity to complete the transaction, irrespective of whether or not the transaction completed as authorized.
- The remote entity responds to the 0202 (financial completion request) with a 0212 (financial completion response) to **Postilion**.

Lost Request

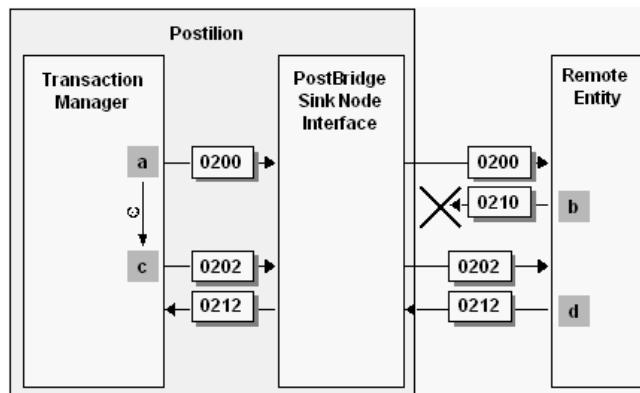


- Postilion** sends a 0200 (financial request) to the remote entity to request authorization for a financial transaction.
- Postilion** times out, and sends a 0202 (financial completion) to the remote entity. The completion indicates the timeout condition for the transaction (therefore reversing the transaction)

Message Flows

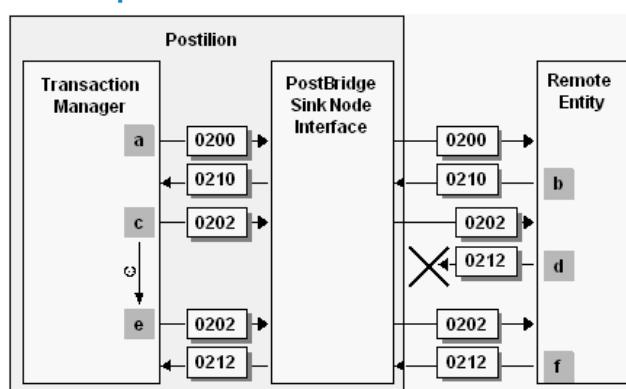
- c. The remote entity responds to the 0202 (financial completion) with a 0212 (financial completion response) to **Postilion**.

Lost Reply



- a. **Postilion** sends a 0200 (financial request) to the remote entity to request authorization for a financial transaction.
- b. The remote entity authorizes the transaction and returns a 0210 (financial response) to **Postilion**, but the response message is lost on the network.
- c. **Postilion** times out, and sends a 0202 (financial completion) to the remote entity. The completion indicates the timeout condition for the transaction (therefore reversing the transaction)
- d. The remote entity responds to the 0202 (financial completion) with a 0212 (financial completion response) to **Postilion**.

Lost Completion



- a. **Postilion** sends a 0200 (financial request) to the remote entity to request authorization for a financial transaction.
- b. The remote entity authorizes the transaction and returns a 0210 (financial response) to **Postilion**.
- c. **Postilion** sends a 0202 (financial completion) to the remote entity.
- d. The remote entity responds to the 0202 (financial completion) with a 0212 (financial completion response) to **Postilion**.

Message Flows

- c. **Postilion** sends a 0202 (financial completion request) to the remote entity to complete the transaction.
- d. The remote entity responds to the 0202 (financial completion request) with a 0212 (financial completion response) to **Postilion**.
- e. **Postilion** times out, and re-transmits the 0202 (financial completion) to the remote entity.
- f. The remote entity recognizes the duplicate and responds with a 0212 (financial completion response) to **Postilion**.

Reconciliation

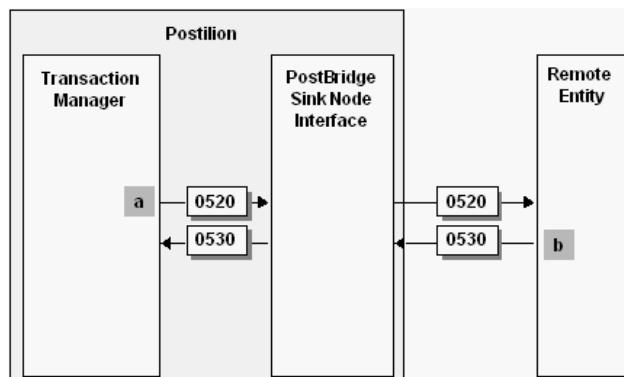
Reconciliation transactions are used to assist in the reconciliation of the remote entity with **Postilion**.

The remote entity may maintain a set of totals for a given reconciliation period (batch). During this period **Postilion** will maintain a set of totals for the remote entity (see note below). At a given (configurable) time of day, **Postilion** will advance to a new reconciliation period (i.e. perform batch cut-over). **Postilion** can be configured to send a reconciliation message, containing the totals it maintained, to the remote entity when this happens. If this is the case, the remote entity could match these totals to the totals it maintains.

Alternatively, the remote entity can send a 0522 (card issuer reconciliation advice) message to **Postilion**. The 0522 message contains the totals maintained by the remote entity for a reconciliation period. **Postilion** will cut-over its batch and respond with a 0532 (card issuer reconciliation advice response) message indicating the outcome of a comparison between the totals maintained locally and the totals provided in the 0522 message.

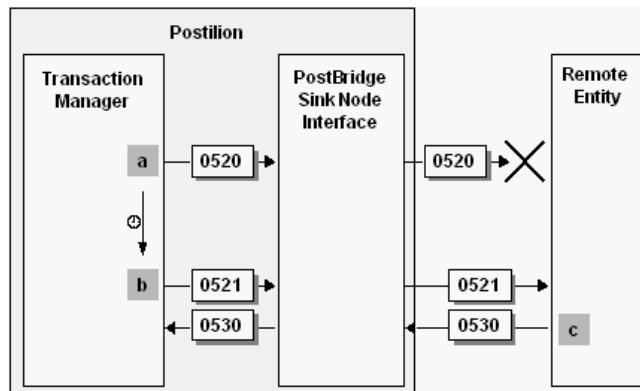
Note: **Postilion** must be configured during the installation process to maintain batch totals for the reconciliation messages to contain meaningful data. If **Postilion** does not maintain totals, the reconciliation messages will contain totals depicting zero financial worth.

Acquirer Batch Cut-over - Normal Condition



- a. **Postilion** sends a 0520 (reconciliation advice) to the remote entity to initiate batch cut-over. The totals that **Postilion** maintained for this period (batch) are forwarded in the message.
- b. The remote entity approves or declines the advice by sending a 0530 (reconciliation advice response) to **Postilion** indicating whether or not the reconciliation was successful (i.e. in balance). The totals that the remote entity maintained for the terminal are returned in this message.

Acquirer Batch Cut-over - Lost Request

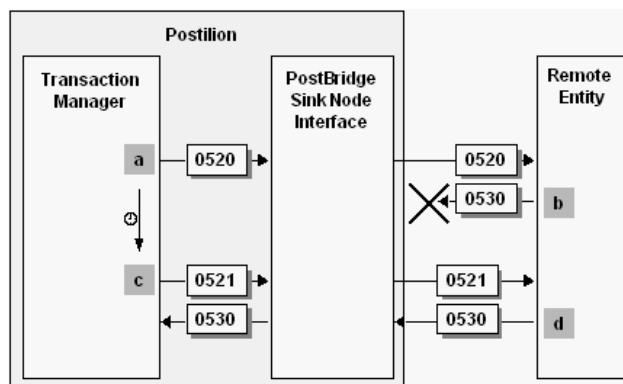


a. **Postilion** sends a 0520 (reconciliation advice) to the remote entity to initiate batch cut-over and starts a timer. The totals maintained by **Postilion** for this period (batch) are forwarded in the message. The message is lost on the network.

b. The timer expires. **Postilion** re-transmits the acquirer reconciliation advice with the repeat indicator (the message type is 0521).

c. The remote entity approves or declines the advice by sending a 0530 (reconciliation advice response) to **Postilion** indicating whether or not the reconciliation was successful (i.e. in balance). The totals that the remote entity maintained for the terminal are returned in this message.

Acquirer Batch Cut-over - Lost Reply



a. **Postilion** sends a 0520 (reconciliation advice) to the remote entity to initiate batch cut-over. The totals that **Postilion** maintained for this period (batch) are forwarded in the message.

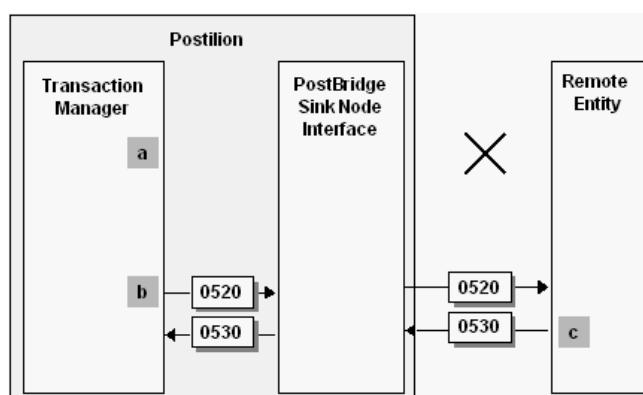
b. The remote entity approves or declines the advice by sending a 0530 (reconciliation advice response) to **Postilion** indicating whether or not the reconciliation was successful (i.e. in balance). The totals that the remote entity maintained for the terminal are returned in this message. The message is lost on the network.

Message Flows

- c. The timer expires. **Postilion** re-transmits the acquirer reconciliation advice with the repeat indicator (the message type is 0520).
- d. The remote entity recognizes the 0520 as a duplicate and returns a 0530 indicating whether or not the reconciliation (previous) was successful (i.e. in balance). The totals that the remote entity maintained for the terminal are returned in this message.

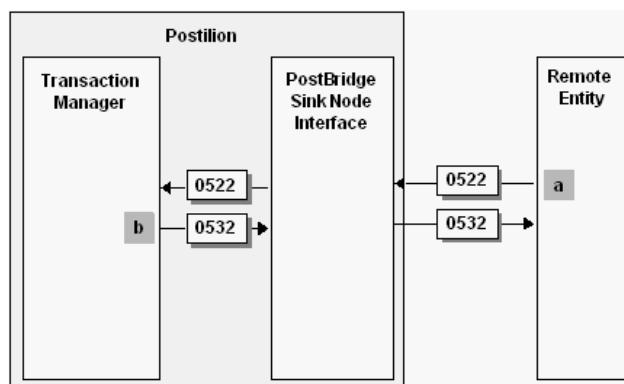
Acquirer Batch Cut-over - Remote Entity Down

This is the situation where the remote entity is not available, typically due to a break in communications.



- a. **Postilion** attempts to send a 0520 (reconciliation advice) to the remote entity to initiate batch cut-over, but the connection to the remote entity is down.
- b. The connection to the remote entity is re-established. **Postilion** sends a 0520 (reconciliation advice) to the remote entity to initiate batch cut-over. The totals that **Postilion** maintained for this period (batch) are forwarded in the message.
- c. The remote entity approves or declines the advice by sending a 0530 (reconciliation advice response) to **Postilion** indicating whether or not the reconciliation was successful (i.e. in balance). The totals that the remote entity maintained for the terminal are returned in this message.

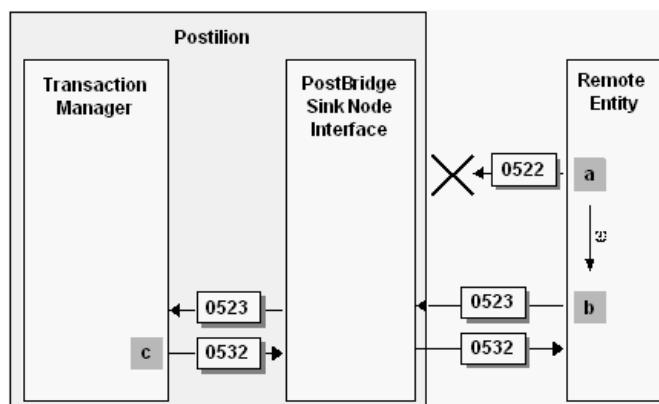
Issuer Batch Cut-over - Normal Condition



Message Flows

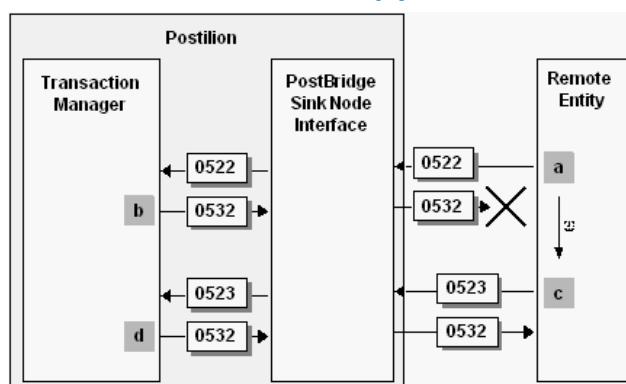
- The remote entity sends a 0522 (reconciliation advice) to **Postilion** to initiate batch cut-over. The totals that the remote entity maintained for this period (batch) are forwarded in the message.
- Postilion** approves or declines the advice by sending a 0532 (reconciliation advice response) to the remote entity indicating whether or not the reconciliation was successful (i.e. in balance). The totals that **Postilion** maintained for the terminal are returned in this message.

Issuer batch cut-over - lost request



- The remote entity sends a 0522 (reconciliation advice) to **Postilion** to initiate batch cut-over and starts a timer. The totals that the remote entity maintained for this period (batch) are forwarded in the message. The message is lost on the network.
- The timer expires. The remote entity re-transmits the issuer reconciliation advice with the repeat indicator (the message type is 0523).
- Postilion** approves or declines the advice by sending a 0532 (reconciliation advice response) to the remote entity indicating whether or not the reconciliation was successful (i.e. in balance). The totals that **Postilion** maintained for the terminal are returned in this message.

Issuer Batch Cut-over - Lost Reply

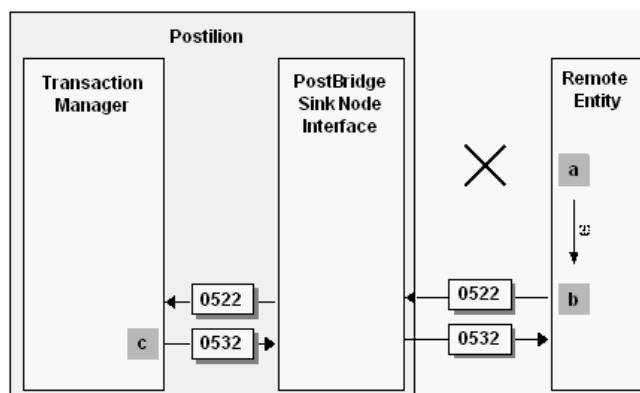


Message Flows

- a. The remote entity sends a 0522 (reconciliation advice) to **Postilion** to initiate batch cut-over. The totals that the remote entity maintained for this period (batch) are forwarded in the message.
- b. **Postilion** approves or declines the advice by sending a 0532 (reconciliation advice response) to the remote entity indicating whether or not the reconciliation was successful (i.e. in balance). The totals that **Postilion** maintained for the terminal are returned in this message. The message is lost on the network.
- c. The timer expires. The remote entity re-transmits the issuer reconciliation advice with the repeat indicator (the message type is 0523).
- d. **Postilion** recognizes the 0523 as a duplicate and returns a 0532 indicating whether or not the reconciliation (previous) was successful (i.e. in balance). The totals that **Postilion** maintained for the terminal are returned in this message.

Issuer Batch Cut-over - Postilion Down

This is the situation where Postilion is not available, typically due to a break in communications.



- a. The remote entity attempts to send a 0522 (reconciliation advice) to **Postilion** to initiate batch cut-over, but the connection to **Postilion** is down.
- b. The connection to **Postilion** is re-established. The remote entity sends a 0522 (reconciliation advice) to **Postilion** to initiate batch cut-over. The totals that the remote entity maintained for this period (batch) are forwarded in the message.
- c. **Postilion** approves or declines the advice by sending a 0532 (reconciliation advice response) to the remote entity indicating whether or not the reconciliation was successful (i.e. in balance). The totals that **Postilion** maintained for the terminal are returned in this message.

Administration

Administration transactions are used to request or inform the issuer of administrative functions that should be performed such as flagging a card as 'hot' or sending a message to the bank.

Hot card notification (hold) transactions are initiated by ISO8583 0600/0620 messages sent by **Postilion**. The **Postilion** proprietary transaction type of '90' is defined for this transaction. The message reason code should specify the reason a hold was placed on the card.

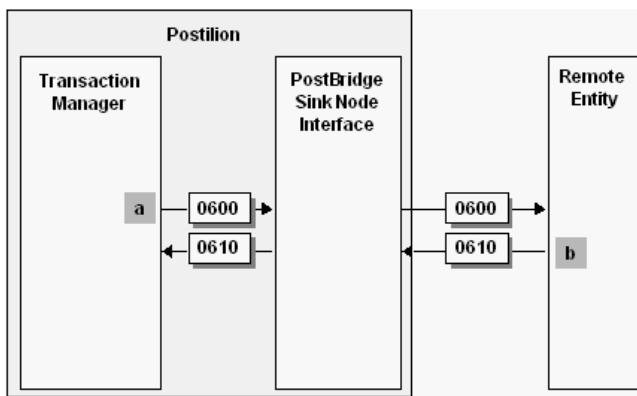
Message to bank transactions are also initiated by ISO8583 0600/0620 messages sent by **Postilion**. The **Postilion** proprietary transaction type of '91' is defined for this transaction. The message reason code should specify the type of message the cardholder wants to forward to the issuer. Note

Message Flows

that in this case, the message reason code field is treated as a free-format field that the user can use for any user specific code.

Whenever **Postilion** sends an administrative request (0600) to the remote entity, it starts a timer. If the timer expires before the response to the message is received, the message is optionally retransmitted with a repeat indicator. If the message is a request and no response is received after a number of transmissions, **Postilion** (optionally) performs stand-in authorization. Non-interactive messages are retransmitted until acknowledged by the remote entity.

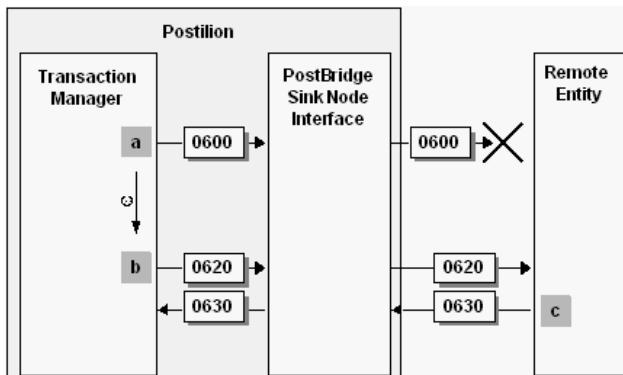
Normal Condition



a. **Postilion** sends a 0600 (administration request) to the remote entity to request an administrative function.

b. The remote entity processes the administrative function and sends a 0610 (administration request response) to **Postilion** with the appropriate action code.

Lost Request



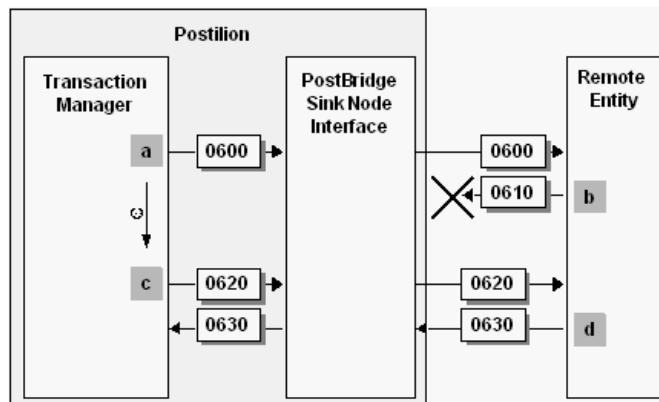
a. **Postilion** sends a 0600 (administration request) to the remote entity to request an administrative function and starts a timer. The message is lost on the network.

b. The timer expires and **Postilion** performs stand-in authorization. **Postilion** forwards the administrative function to the remote entity by sending a 0620 (administration advice) indicating the reason for the advice.

Message Flows

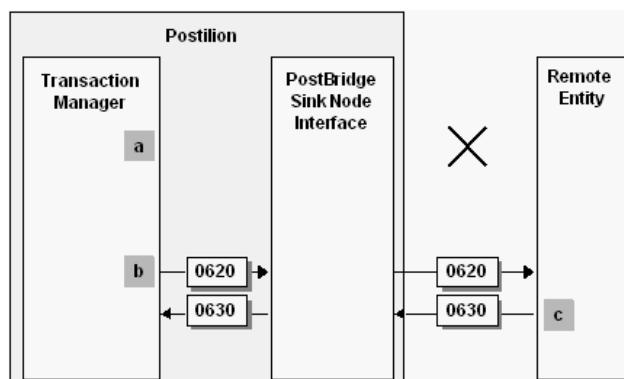
- c. The remote entity processes the administrative function and sends a 0630 (administration advice) to **Postilion** with the appropriate action code.

Lost Reply



- a. **Postilion** sends a 0600 (administration request) to the remote entity to request an administrative function and starts a timer.
- b. The remote entity processes the administrative function and sends a 0610 (administration response) to **Postilion** with the appropriate action code. The message is lost on the network.
- c. The timer expires and **Postilion** performs stand-in authorization. **Postilion** forwards the administrative function to the remote entity by sending a 0620 (administration advice) indicating the reason for the advice.
- d. The remote entity matches the 0620 (administrative advice) to the previous 0600 (administrative request), determines whether the administrative function has been performed and responds with a 0630 (administration advice response).

Remote Entity Down



- a. **Postilion** attempts to send a 0600 (administration request) to the remote entity to request an administrative function, but the connection to the remote entity is down. **Postilion** performs stand-

in authorization. The administrative function is added to the store and forward queue and **Postilion** waits until the connection is re-established.

- b. **Postilion** forwards the administrative function to the remote entity by sending a 0620 (administration advice) indicating the reason for the advice.
- c. The remote entity processes the administrative function and sends a 0630 (administration advice response) to **Postilion** with the appropriate action code.

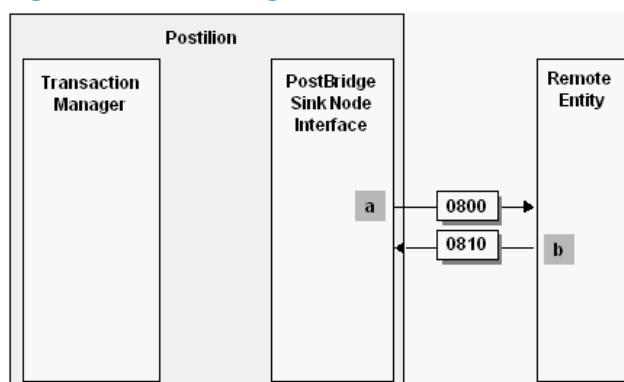
Sign On / Sign Off

Sign on messages are sent to the remote entity serve to notify the remote entity that you are ready to process transactions. The remote entity will respond back to the Sign on message acknowledging that it received your sign on request and indicating whether it is ready to initiate transaction processing as well. Once a sign on / sign on response has been successfully exchanged the system is ready to process transactions.

Sign off messages are the inverse of this. A sign off message is sent to the remote to indicate that you cannot process transactions anymore.

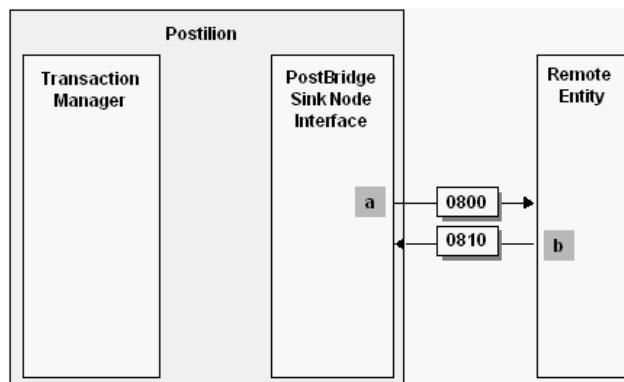
If the **PostBridge** Sink Node interface is not signed on to the remote system it should not receive any transactions from that system. If it does receive a transaction from the remote it will ignore it and log an error event. Responses to transactions will however still be processed correctly as this response might have originated from the remote system before sign off was initiated

Sign On - Postilion Originated



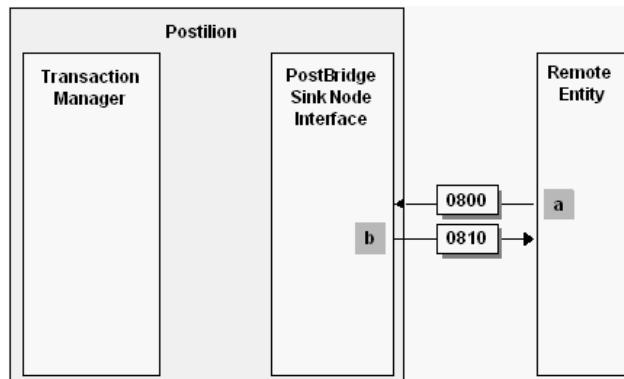
- a. **Postilion** sends a 0800 network management request to the remote with *Network Management Information Code* (field 70) set to *Sign On* ('001').
- b. The remote responds to the network management request (0800) with a network management request response (0810).

Sign Off - Postilion Originated



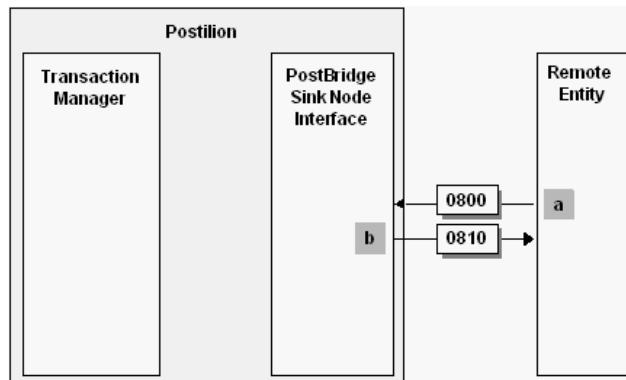
- a. **Postilion** sends a 0800 network management request to the remote with *Network Management Information Code* (field 70) set to *Sign Off* ('002').
- b. The remote responds to the network management request (0800) with a network management request response (0810).

Sign On - Remote Originated



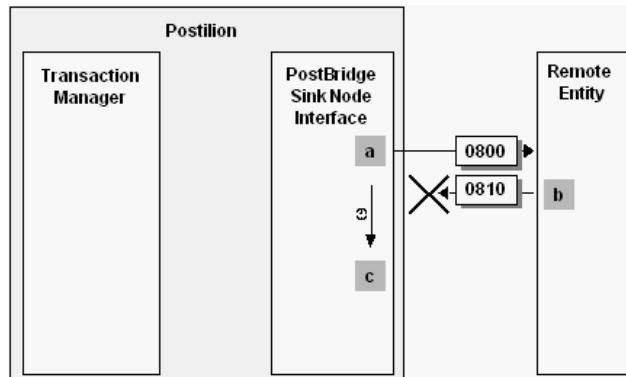
- a. The remote entity sends a 0800 network management request to **Postilion** with *Network Management Information Code* (field 70) set to *Sign On* ('001').
- b. **Postilion** responds to the network management request (0800) with a network management request response (0810).

Sign Off - Remote Originated



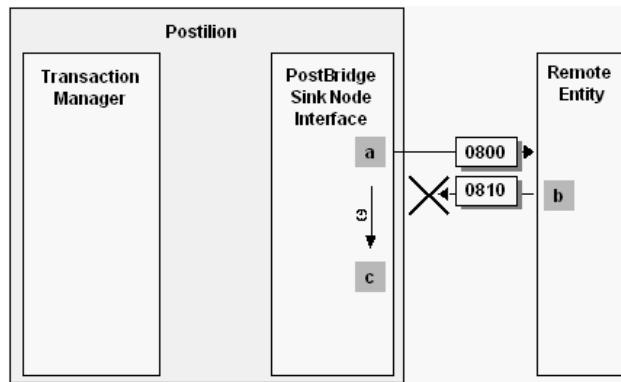
- a. The remote entity sends a 0800 network management request to **Postilion** with *Network Management Information Code* (field 70) set to *Sign Off* ('002').
- b. **Postilion** responds to the network management request (0800) with a network management request response (0810).

Sign On - Postilion Originated Lost Reply



- a. **Postilion** sends a 0800 network management request to the remote with *Network Management Information Code* (field 70) set to *Sign On* ('001').
- b. The remote responds to the network management request (0800) with a network management request response (0810). The message is lost on the network.
- c. Depending on the configuration of the system **Postilion** will either disconnect and reconnect after a short interval, or will send another sign on request (step a).

Sign Off - Postilion Originated Lost Reply



- a. **Postilion** sends a 0800 network management request to the remote with *Network Management Information Code* (field 70) set to *Sign Off* ('002').
- b. The remote responds to the network management request (0800) with a network management request response (0810). The message is lost on the network.
- c. The **Postilion** System is already signed off and does nothing if it does not receive a response.

Key management

Key management transactions are used to exchange the PIN encryption working (session) key and MAC working (session) keys² of the issuer with **Postilion**.

The master/session key management scheme is used. The basic principle involved in sharing session keys using a master key are that one of the two parties generates a new session key that is encrypted using the master key before sending it to the other party. The recipient can decrypt the session key because they share a master (or initial) key. The same master key must therefore be loaded statically on both the **Postilion** and remote entity systems prior to key management transactions taking place.

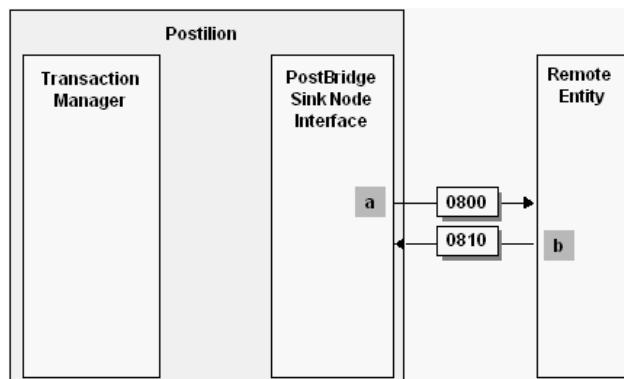
To initiate a key management transaction, **Postilion** sends a 0800 (network management request) message to the issuer, indicating that it requires a new session key. On receipt of this message, the issuer should generate a new session key, encrypt it under the master key and return this encrypted value to **Postilion**. Since **Postilion** has the master key, it can decrypt the value and extract the session key.

² While MACing makes use of 2 session keys only one session key will be exchanged at a time. This allows the master/session key management scheme to still be used. Refer to the [MAC Key Management](#) section for more information.

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PIN Working Key Exchange - Normal Condition

This message flow is only defined for Postilion PostBridge Interchanges that are configured to perform PIN processing.

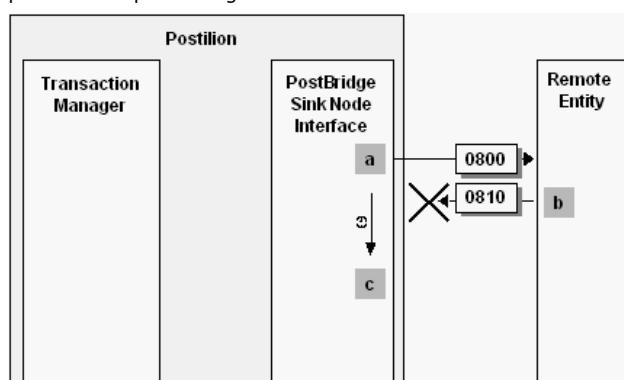


a. **Postilion** sends a 0800 (network management request) to the issuer to request a new PIN working key. The *Network Management Code* (field 70) should contain a value of '101' to identify the message as a PIN Working Key Exchange. This message will be initiated upon start-up of the node or by a timer which will expire 24 hours after each successful PIN working key exchange or 60 seconds after each failed PIN working key exchange.

b. The issuer generates a new PIN working key and returns it encrypted under the master key in a 0810 (network management request response) to **Postilion** with the appropriate action code.

PIN Working Key Exchange - Lost Reply

This message flow is only defined for Postilion PostBridge Interchanges that are configured to perform PIN processing.



a. **Postilion** sends a 0800 (network management request) to the issuer to request a new PIN working key. The *Network Management Code* (field 70) should contain a value of '101' to identify the message as a PIN Working Key Exchange. This message will be initiated upon start-up of the node or by a timer which will expire 24 hours after each successful PIN working key exchange or 60 seconds after each failed PIN working key exchange.

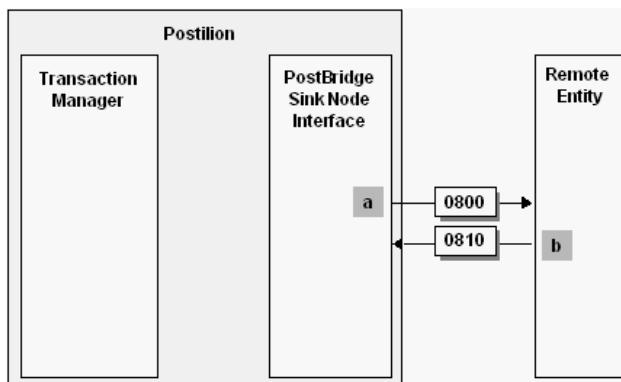
Message Flows

b. The issuer generates a new PIN working key and returns it encrypted under the master key in a 0810 (network management request response) to **Postilion** with the appropriate action code. The message is lost on the network.

c. When **Postilion** does not receive the response within a certain amount of time a timer expires and **Postilion** declines the transaction. Another timer is started which will initiate the key exchange process again after 60 seconds (step a). This process will continue until the PIN working key has been successfully synchronized. **Postilion** will not perform any transactions until the keys are synchronized.

MAC Working Key Exchange - Normal Condition

This message flow is only defined for Postilion PostBridge Interchanges that are configured to support message MAC'ing and dynamic MAC key exchange. (This is configured in the Postilion PostBridge MAC Configuration Console.)

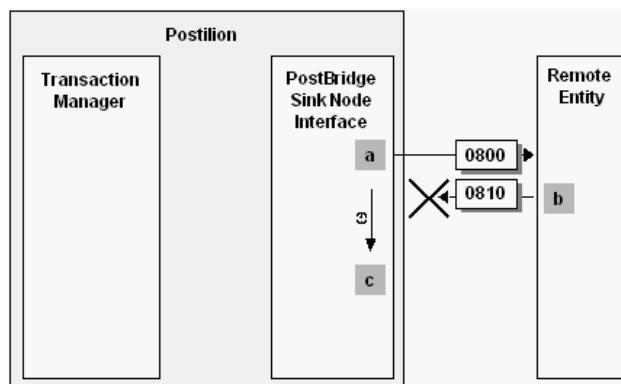


a. **Postilion** sends a 0800 (network management request) to the issuer to request a new MAC working key. The *Network Management Code* (field 70) will contain a value of '160' to indicate that the message is a MAC working key exchange. The *MAC Extended* (field 128) will contain a key number indicating which key should be exchanged. This message will be initiated upon start-up of the node or by a timer which will expire 24 hours after each successful MAC working key exchange or 60 seconds after each failed MAC working key exchange.

b. The issuer generates a new MAC working key and returns it encrypted under the master key in a 0810 (network management request response) to **Postilion** with the appropriate action code.

MAC Working Key Exchange - Lost Reply

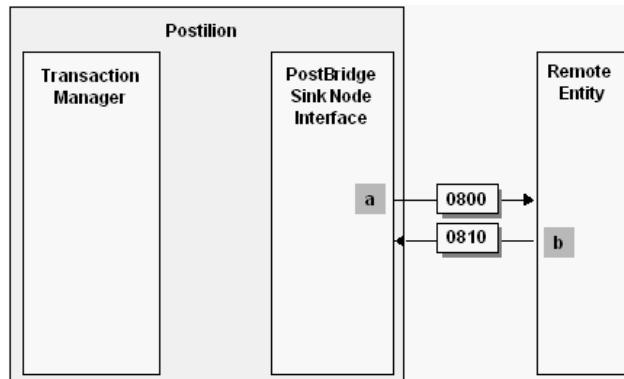
This message flow is only defined for Postilion PostBridge Interchanges that are configured to support message MAC'ing and dynamic MAC key exchange. (This is configured in the Postilion PostBridge MAC Configuration Console.)



- a. **Postilion** sends a 0800 (network management request) to the issuer to request a new MAC working key. The *Network Management Code* (field 70) will contain a value of '160' to indicate that the message is a MAC working key exchange. The *MAC Extended* (field 128) will contain a key number indicating which key should be exchanged. This message will be initiated upon start-up of the node or by a timer which will expire 24 hours after each successful MAC working key exchange or 60 seconds after each failed MAC working key exchange.
- b. The issuer generates a new MAC working key and returns it encrypted under the master key in a 0810 (network management request response) to **Postilion** with the appropriate action code. The message is lost on the network.
- c. **Postilion** does not receive the response within a certain time interval. A timer is started in order to initiate the key exchange process again after 60 seconds (step a). This process will continue for five cycles. During this time **Postilion** will not perform any transactions. If **Postilion** does not receive a response to the fifth key exchange request it will disconnect from the remote. **Postilion** can be reconnected by issuing an 'OPEN' command from the *Postilion Monitor*, after which **Postilion** will connect the remote entity and initiate the key exchange process again. (step a).

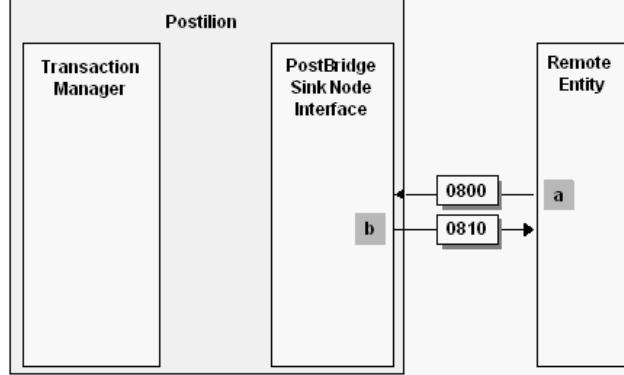
Echo test

Postilion Originated



- a. **Postilion** sends a 0800 (echo test request) to the issuer with *Network Management Information Code* (field 70) set to *Echo Test* ('301').
- b. The issuer responds to the echo test network management request (0800) with a network management request response (0810).

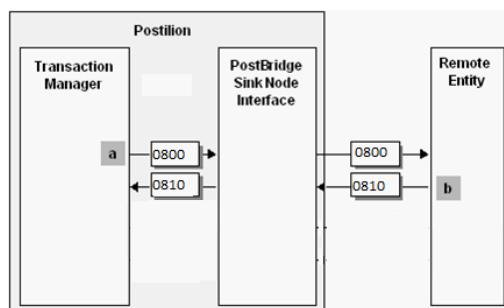
Remotely Originated



- a. The issuer sends a 0800 (echo test request) to **Postilion** with *Network Management Information Code* (field 70) set to *Echo Test* ('301').
- b. **Postilion** responds to the echo test network management request (0800) with a network management request response (0810).

Network Management

PostBridge supports sending network management messages generated by a downstream entity to an upstream entity. These messages may not contain any of the following Network Management Information Codes: 001 (Sign on), 002 (Sign off), 301 (Echo test), 101 (Key Change), '130' (EMV Download), '132' (Status Request), '133' (EMV Completion), 160 (MAC Key Exchange), 161 (Passthrough Key Exchange), 162 (Passthrough MAC Key Exchange).



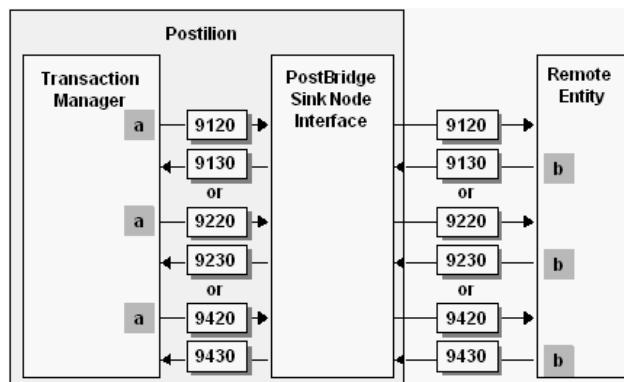
- a. Postilion sends a 0800 (Network Management Request) to the remote entity.
- b. The remote entity approves or declines the request by sending a 0810 to Postilion with the appropriate action code.

Notification

When a transaction is switched from a Source Node to a Sink Node it is often useful for a third Node (a Control Node) to be notified of these transactions. This requirement is identified by a configurable parameter in the Postilion configuration consoles. When such a transaction completes (irrespective of its approval or denial), Postilion forwards a notification advice transaction to the applicable Control Node.

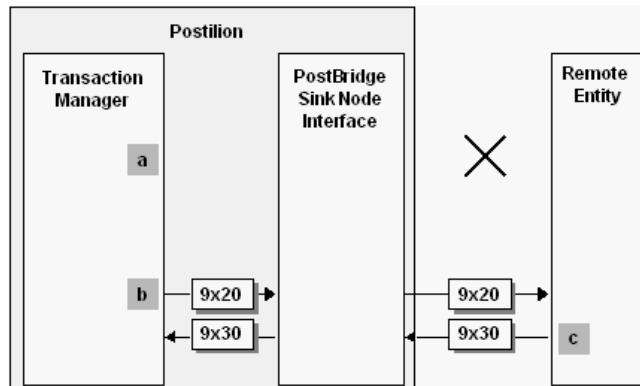
The notification advice can take the form of an authorization, transaction or reversal notification. These messages are non-interactive and are retransmitted until acknowledged by the remote entity.

Normal Condition



- Postilion** sends a 9x20 (notification advice) to the remote entity to inform the issuer of a switched transaction that took place between a source and sink node.
- The issuer processes the 9x20 (notification advice) and responds with a 9x30 (notification advice response).

Remote Entity Down



- Postilion** attempts to send a 9x20 (notification advice) to the remote entity to advise the issuer of a switched transaction that took place between a source and sink node, but the connection to the remote entity is down. The notification advice is added to the store and forward queue and **Postilion** waits until the connection is re-established.
- Postilion** forwards the notification advice to the remote entity by sending a 9x20 (notification advice).
- The issuer processes the 9x20 (notification advice) and responds with a 9x30 (notification advice response).

MAC enabled transactions

When a message is sent from one system to another in an EFT network, it may be important to ensure that the message is not tampered with. This is achieved with message authentication.

Message authentication operates by sharing an operational Message Authentication Key (KWA) between two systems. Depending upon the requirements of each system this key can be defined statically or exchanged dynamically under a Key Encrypting Key (KEK).

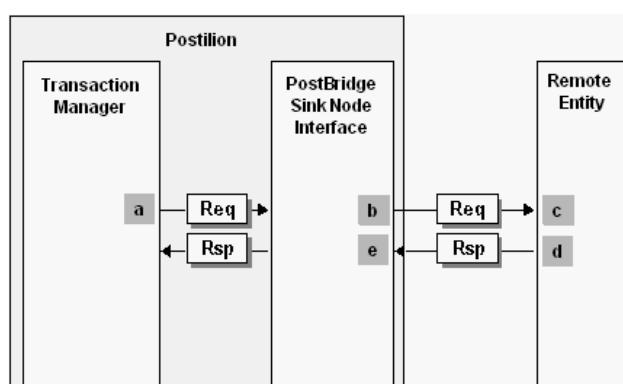
If message authentication is required, each party uses the Message Authentication Key (KWA) and the message data to derive a four byte code called the Message Authentication Code (MAC). This MAC is then stored in the message before transmission. The receiving party takes the message and calculates the MAC using the same KWA. If the codes match, then the message is intact and the parties can be sure that only systems in the same security zone could have communicated the message. If the codes do not match, an error is logged.

The MAC generation algorithm is based on the DES CBC mode and is specified in the ANSI X9.9 standard.

Any message type on the **Postilion** system can be configured to use a MAC using the *PostBridge Configuration Console*.

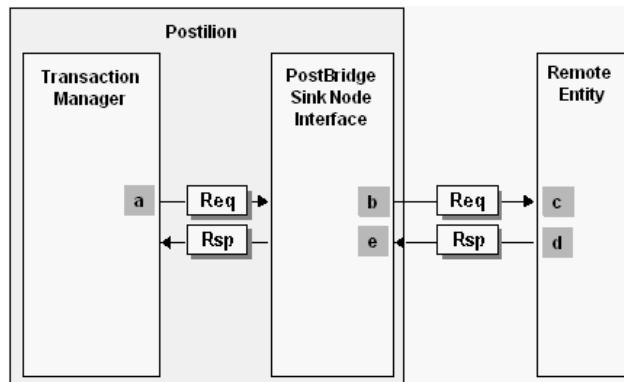
If dynamic key exchange is enabled MACing will make use of two keys. The MAC Extended (field 128) will contain the number of the key (1 or 2) to indicate which key was used to generate the code and which key should be used to authenticate the code.

Normal Condition



- a. The **Transaction Manager** sends a request to the remote entity.
- b. The PostBridge Interface generates a MAC Code for the message and places it in *MAC Extended* (field 128) before passing the message to the remote entity.
- c. The remote entity receives the request and successfully validates the MAC code.
- d. The remote entity generates a response message and generates a MAC Code which is placed into *MAC Extended* (field 128).
- e. The PostBridge Interface receives the response and successfully validates the MAC Code before passing the message to the **Transaction Manager** where it will be processed as normal.

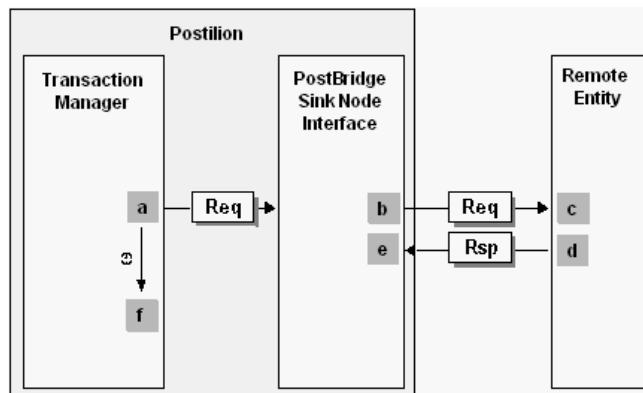
Invalid MAC in request



- a. The **Transaction Manager** sends a request to the remote entity.
- b. The PostBridge Interface generates a MAC Code for the message and places it in *MAC Extended* (field 128) before passing the message to the remote entity.
- c. The remote entity receives the request but finds that the MAC code is invalid. (This can be any one of the exception conditions listed in the [MAC Support](#) Section.) The remote entity initiates whatever MAC exception processing is required on its own system.
- d. The remote entity responds back to **Postilion** with a Format Error Response message. If configured, this message can contain a MAC Code.
- e. The **PostBridge** interface validates the MAC value and passes the message to *Transaction Manager* where it will be processed as normal.

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Invalid MAC in response



- a. The **Transaction Manager** sends a request to the remote entity.
- b. The PostBridge Interface generates a MAC Code for the message and places it in *MAC Extended* (field 128) before passing the message to the remote entity.
- c. The remote entity receives the request and successfully validates the MAC code.
- d. The remote entity generates a response message and generates a MAC Code which is placed into *MAC Extended* (field 128).
- e. The PostBridge Interface receives the response and finds that the MAC Code is invalid. (This can be any one of the exception conditions listed in the [MAC Support](#) Section.) The interface aborts processing of the message and logs an error event in the NT event log.
- f. When the **Transaction Manager** does not receive a response within a certain interval it will initiate a reversal for the original request. Please refer to the 'Lost Reply' section of each message type for more information on the reversal process.

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Section 4: Message Content

In this section:

<i>Messages to PostBridge.....</i>	82
<i>Messages from PostBridge.....</i>	149

Messages to PostBridge

Receive - Authorization Request (Repeat) (0100/0101)

Field	Description	Condition	Notes
2	Primary account number	Conditional	Should be present for a card initiated transaction (or a check verification transaction using the plastic card format) if Track 2 data is not present (i.e. manual PAN entry or mail order).
3	Processing code	Mandatory	
4	Amount, transaction	Mandatory	
5	Amount, settlement	Conditional	Should be present if the Transaction Manager does not perform currency conversion for the Node the message was received from and the transaction (i.e. local) currency differs from the settlement currency.
7	Transmission date and time	Mandatory	
9	Conversion rate, settlement	Conditional	Should be present if the Transaction Manager does not perform currency conversion for the Node the message was received from and the transaction (i.e. local) currency differs from the settlement currency.
11	System trace audit number	Mandatory	
12	Time, local transaction	Mandatory	
13	Date, local transaction	Mandatory	
14	Date, expiration	Conditional	Should be present for a card initiated transaction if track 2 data is not present (i.e. manual PAN entry or mail order), and expiry date checking is being performed by the Transaction Manager. If this field is not present, the Transaction Manager will extract the expiry date from the track 2 data if it is present. If both this field and the expiry date subfield of track 2 are present, the Transaction Manager will enforce that they have the same value.

Message Content

Field	Description	Condition	Notes
15	Date, settlement	Conditional	Should be present if the node to which the message is being sent is configured to use the external business date functionality. If this is the case the field should contain the settlement date of the batch to which this message's totals will be applied. If this field is not present or the node is not configured to make use of the external business date functionality then the transaction totals are applied to the batch for the current business day.
16	Date, conversion	Conditional	Should be present if the Transaction Manager does not perform currency conversion for the Node the message was received from and the transaction (i.e. local) currency differs from the settlement currency.
18	Merchant's type	Conditional	Should be present if a merchant was involved in the transaction.
22	POS entry mode	Mandatory	
23	Card sequence number	Conditional	Should be present for a card initiated transaction if Track 2 data is not present (i.e. manual PAN entry or mail order) and a card sequence number (issue number) was entered at the POS.
25	POS condition code	Mandatory	
26	POS PIN capture code	Conditional	Should be present if a PIN was entered.
27	Authorization ID response length	Conditional	Should be present if the authorization identification response (authorization code) in the response should be less than 6 characters.
28	Amount, transaction fee	Optional	
29	Amount, settlement fee	Conditional	Should be present if the Transaction Manager does not perform currency conversion for the Node the message was received from, field 28 is present and the transaction (i.e. local)

Message Content

Field	Description	Condition	Notes
			currency differs from the settlement currency.
30	Amount, transaction processing fee	Optional	
31	Amount, settle processing fee	Conditional	Should be present if the Transaction Manager does not perform currency conversion for the Node the message was received from, field 30 is present and the transaction currency differs from the settlement currency.
32	Acquiring institution ID code	Conditional	Should be present if the node from which the message was received has a settlement granularity of <i>acquirer</i> .
33	Forwarding institution ID code	Optional	
35	Track 2 data	Conditional	Should be included if available.
37	Retrieval reference number	Optional	
40	Service restriction code	Optional	
41	Card acceptor terminal ID	Mandatory	
42	Card acceptor ID code	Mandatory	
43	Card acceptor name location	Mandatory	
45	Track 1 data	Optional	
49	Currency code, transaction	Mandatory	
50	Currency code, settlement	Conditional	Should be present if the Transaction Manager does not perform currency conversion for the Node the message was received from and the transaction (i.e. local) currency differs from the settlement currency.
52	PIN data	Conditional	Should be present if a PIN was entered.
53	Security related control information	Conditional	Should be present if a PIN was entered and the DUKPT PIN encryption scheme is used.
54	Additional amounts	Conditional	Should contain the <i>cash amount</i> requested, if the transaction is a

Message Content

Field	Description	Condition	Notes
			purchase with cash back transaction. Must be in the transaction currency.
56	Message reason code	Optional	
57	Authorization life cycle	Optional	
59	Echo data	Optional	
67	Extended payment code	Conditional	Should be present for budget transactions.
90	Original data elements	Conditional	Should be present for a debit or credit adjustment transaction that was preceded by a request.
98	Payee	Conditional	Should be present for all payment transactions made to an institution defined payee.
100	Receiving institution ID code	Conditional	Should be present if no card data is available (e.g. check verification using the MICR format). If this field is present in any initial message, it will be used to route the transaction.
102	Account identification 1	Conditional	Should be included if available.
103	Account identification 2	Conditional	Should be included if available.
123	POS data code	Mandatory	
127.1	Bitmap	Conditional	Must be present if any Postilion private data sub-field is set.
127.4	POS data	Optional	
127.5	Service station data	Optional	
127.7	Check data	Conditional	Should be present for a check guarantee or a check verification transaction.
127.8	Retention data	Optional	
127.9	Additional node data	Optional	
127.10	CVV2	Optional	
127.12	Terminal owner	Conditional	Should be included if available.
127.13	POS geographic data	Conditional	Should be included if available.

Message Content

Field	Description	Condition	Notes
127.14	Sponsor bank	Conditional	Should be included if available.
127.15	Address verification data	Conditional	Should be present if address verification is required with a transaction (e.g. a mail order or airline transaction).
127.18	Validation data	Optional	
127.19	Bank details	Conditional	Should be present for third-party payments (inter-bank transfers).
127.20	Originator/Authorizer settlement date	Optional	
127.22	Structured data	Optional	
127.23	Payee name and address	Conditional	Should be present in payment transactions to Customer defined payees, where the payee's address details have been defined.
127.24	Payer account	Optional	
127.25	ICC data	Conditional	Should be present if the PAN entry mode subfield of the POS Entry Mode field (field 22) is set to <i>Integrated circuit card (ICC)</i> . CVV can be checked (05) or <i>Integrated circuit card (ICC)</i> . CVV may not be checked (95). Otherwise optional.
127.26	Original node	Conditional	Should be present if this is a linked transaction and the original message may have come from another source node.
127.27	Card verification result	Optional	
127.28	American express card identifier (CID)	Optional	
127.29	3D secure data	Optional	
127.30	3D secure result	Optional	
127.32	UCAF data	Optional	
127.33	Extended transaction type	Optional	
127.34	Account type qualifier	Optional	
127.35	Acquirer network ID	Optional	
127.36	Customer Id	Optional	

Message Content

Field	Description	Condition	Notes
127.38	Additional POS Data Code	Optional	
127.40	Transaction reference	Optional	Original reference subfields of field 127.40 should be present if the transaction is linked to the original transaction and field 127.11 - Original Key is not present.
127.41	Originating remote address	Optional	
127.48	Dynamic Currency Conversion (DCC) status code	Conditional	
127.59	Payment Token Identifier	Conditional	Should be included if available.
128	MAX extended	Conditional	Must be present if MAC'ing is enabled for the current message type.

Message Content

Receive - Authorization Request Response (0110)

Field	Description	Condition	Notes
2	PAN	Optional	
3	Processing code	Optional	
4	Amount, transaction	Optional	
5	Amount, settlement	Conditional	Should be present if the Transaction Manager does not perform currency conversion for the Node the message was received from and the transaction (i.e. local) currency differs from the settlement currency.
9	Conversion rate, settlement	Conditional	Should be present if the Transaction Manager does not perform currency conversion for the Node the message was received from and the transaction (i.e. local) currency differs from the settlement currency.
15	Date, settlement	Conditional	Should be present if the node to which the message is being sent is configured to use the external business date functionality. If this is the case the field should contain the settlement date of the batch to which this message's totals will be applied. If this field is not present or the node is not configured to make use of the external business date functionality then the transaction totals are applied to the batch for the current business day.
16	Date, conversion	Conditional	Should be present if the Transaction Manager does not perform currency conversion for the Node the message was received from and the transaction (i.e. local) currency differs from the settlement currency.
28	Amount, transaction fee	Conditional	Should be included if this fee amount has been removed/calculated/changed by the Host.
29	Amount, settlement fee	Conditional	Should be present if the Transaction Manager does not perform currency conversion for the Node the message was received from, field 28 is present and the transaction (i.e. local) currency differs from the settlement currency.
30	Amount, transaction processing fee	Conditional	Should be included if this fee amount has been removed/calculated/changed by the Host
31	Amount, settle processing fee	Conditional	Should be present if the Transaction Manager does not perform currency conversion for the Node the message was received from, field 30 is present and the transaction currency differs from the settlement currency.

Message Content

Field	Description	Condition	Notes
38	Authorization ID response	Conditional	Should be included if available.
39	Response code	Mandatory	
44	Additional response data	Optional	
48	Additional data	Conditional	Should be present for approved linked account inquiries.
50	Currency code, settlement	Conditional	Should be present if the Transaction Manager does not perform currency conversion for the Node the message was received from and the transaction (i.e. local) currency differs from the settlement currency.
54	Additional amounts	Conditional	If a goods and services with cash back transaction, should contain <i>amount cash approved</i> . The amount available is determined from <i>available balance</i> , <i>available credit</i> and <i>credit limit</i> (in that order) and the ledger balance from <i>ledger balance</i> . These balances are retained after being converted to the transaction currency.
58	Authorizing agent ID code	Conditional	Should be present when the institution that processed an authorization or financial transaction is not the same institution identified by the primary account number.
59	Echo data	Mandatory	
102	Account identification 1	Optional	
103	Account identification 2	Optional	
127.1	Bitmap	Conditional	Must be present if any Postilion private data sub-field is set.
127.6	Authorization profile	Optional	
127.8	Retention data	Optional	
127.9	Additional node data	Optional	
127.16	Address verification result	Conditional	Should be present when address verification is required with a transaction (e.g. a mail-order or airline transaction).
127.17	Cardholder information	Optional	
127.20	Originator/Authorizer settlement date	Optional	

Message Content

Field	Description	Condition	Notes
127.22	Structured data	Optional	
127.23	Payee name and address	Optional	
127.25	ICC data	Optional	
127.27	Card verification result	Optional	
127.30	3D secure result	Optional	
127.31	Issuer network ID	Optional	
127.32	UCAF data	Optional	
127.33	Extended transaction type	Optional	
127.37	Extended Response Code	Optional	
127.39	Original Response Code	Optional	
127.48	Dynamic Currency Conversion (DCC) status code	Conditional	
128	MAC extended	Conditional	Must be present if MAC'ing is enabled for the current message type.

Receive – Authorization Advice (Repeat) (0120/0121)

Field	Description	Condition	Notes
2	Primary account number	Conditional	Should be present for a card initiated transaction if Track 2 data is not present (i.e. manual PAN entry or mail order).
3	Processing code	Mandatory	
4	Amount, transaction	Mandatory	
5	Amount, settlement	Conditional	Should be present if the Transaction Manager does not perform currency conversion for the Node the message was received from and the transaction (i.e. local) currency differs from the settlement currency.
7	Transmission date and time	Mandatory	
9	Conversion rate, settlement	Conditional	Should be present if the Transaction Manager does not perform currency conversion for the Node the message was received from and the transaction (i.e. local) currency differs from the settlement currency.

Message Content

Field	Description	Condition	Notes
11	System trace audit number	Mandatory	
12	Time, local transaction	Mandatory	
13	Date, local transaction	Mandatory	
14	Date, expiration	Conditional	Should be present for a card initiated transaction if track 2 data is not present (i.e. manual PAN entry or mail order), and expiry date checking is being performed by the Transaction Manager. If this field is not present, the Transaction Manager will extract the expiry date from the track 2 data if it is present. If both this field and the expiry date subfield of track 2 are present, the Transaction Manager will enforce that they have the same value.
15	Date, settlement	Conditional	Should be present if the node to which the message is being sent is configured to use the external business date functionality. If this is the case the field should contain the settlement date of the batch to which this message's totals will be applied. If this field is not present or the node is not configured to make use of the external business date functionality then the transaction totals are applied to the batch for the current business day.
16	Date, conversion	Conditional	Should be present if the Transaction Manager does not perform currency conversion for the Node the message was received from and the transaction (i.e. local) currency differs from the settlement currency.
18	Merchant's type	Conditional	Should be present if a merchant was involved in the transaction.
22	POS entry mode	Mandatory	
23	Card sequence number	Conditional	Should be present for a card initiated transaction if Track 2 data is not present (i.e. manual PAN entry or mail order) and a card sequence number (issue number) was entered at the POS.
25	POS condition code	Mandatory	
28	Amount, transaction fee	Optional	
29	Amount, settlement fee	Conditional	Should be present if the Transaction Manager does not perform currency conversion for the Node the message was received from, field 28 is

Message Content

Field	Description	Condition	Notes
			present and the transaction (i.e. local) currency differs from the settlement currency.
30	Amount, transaction processing fee	Optional	
31	Amount, settle processing fee	Conditional	Should be present if the Transaction Manager does not perform currency conversion for the Node the message was received from, field 30 is present and the transaction currency differs from the settlement currency.
32	Acquiring institution ID code	Conditional	Should be present if the node from which the message was received has a settlement granularity of <i>acquirer</i> .
33	Forwarding institution ID code	Optional	
35	Track 2 data	Conditional	Should be included if available.
37	Retrieval reference number	Optional	
38	Authorization ID response	Conditional	Should be included if available.
39	Response code	Optional	If this field is present, it will be forwarded in the advice message to the Sink Node. If this field is not present, a Response Code of '00' will be sent to the Sink Node.
40	Service restriction code	Optional	
41	Card acceptor terminal ID	Mandatory	
42	Card acceptor ID code	Mandatory	
43	Card acceptor name location	Mandatory	
45	Track 1 data	Optional	
49	Currency code, transaction	Mandatory	
50	Currency code, settlement	Conditional	Should be present if the Transaction Manager does not perform currency conversion for the Node the message was received from and the transaction (i.e. local) currency differs from the settlement currency.
54	Additional amounts	Conditional	Should contain <i>amount cash final</i> if purchase with cash back transaction. Must be in the transaction currency. Should contain <i>amount, cash</i> if purchase with cash back transaction.

Message Content

Field	Description	Condition	Notes
56	Message reason code	Optional	
58	Authorizing agent ID code	Conditional	Should be present when the institution that processed an authorization or financial transaction is not the same institution identified by the primary account number.
59	Echo data	Optional	
67	Extended payment code	Conditional	Should be present for budget transactions.
90	Original data elements	Conditional	Should be present if this message was preceded by a request.
95	Replacement amounts	Conditional	Should be present if the transaction did not complete as authorized.
98	Payee	Conditional	Should be present for all payment transactions made to an institution defined payee.
100	Receiving institution ID code	Conditional	Should be present if no card data is available (e.g. check verification using the MICR format). If this field is present in any initial message, it will be used to route the transaction.
102	Account identification 1	Conditional	Should be included if available.
103	Account identification 2	Conditional	Should be included if available.
123	POS data code	Mandatory	
127.1	Bitmap	Conditional	Must be present if any Postilion private data sub-field is set.
127.4	POS data	Optional	
127.5	Service station data	Optional	
127.6	Authorization profile	Optional	
127.7	Check data	Conditional	Should be present for a check guarantee or a check verification transaction.
127.8	Retention data	Optional	
127.9	Additional node data	Optional	
127.12	Terminal owner	Conditional	Should be included if available.
127.13	POS geographic data	Conditional	Should be included if available.
127.14	Sponsor bank	Conditional	Should be included if available.

Message Content

Field	Description	Condition	Notes
127.19	Bank details	Conditional	Should be present for third-party payments (inter-bank transfers).
127.20	Originator/Authorizer settlement date	Optional	
127.22	Structured data	Optional	
127.23	Payee name and address	Conditional	Should be present in payment transactions to Customer defined payees, where the payee's address details have been defined.
127.24	Payer account	Optional	
127.25	ICC data	Conditional	Should be present if the PAN entry mode subfield of the POS Entry Mode field (field 22) is set to <i>Integrated circuit card (ICC)</i> . CVV can be checked (05) or <i>Integrated circuit card (ICC)</i> . CVV may not be checked (95). Otherwise optional.
127.26	Original node	Conditional	Should be present if this is a linked transaction and the original message may have come from another source node.
127.27	Card verification result	Optional	
127.30	3D Secure Result	Optional	
127.32	UCAF data	Optional	
127.33	Extended transaction type	Optional	
127.34	Account type qualifier	Optional	
127.35	Acquirer network ID	Optional	
127.36	Customer Id	Optional	
127.37	Extended Response Code	Optional	
127.40	Transaction reference	Optional	Original reference subfields of field 127.40 should be present if the transaction is linked to the original transaction and field 127.11 - Original Key is not present.
127.41	Originating remote address	Optional	
127.48	Dynamic Currency Conversion (DCC) status code	Conditional	
127.59	Payment Token Identifier	Conditional	Should be included if available.

Message Content

Field	Description	Condition	Notes
128	MAX extended	Conditional	Must be present if MAC'ing is enabled for the current message type.

Receive - Authorization Advice Response (0130)

Field	Description	Condition	Notes
5	Amount, settlement	Conditional	Should be present if the Transaction Manager does not perform currency conversion for the Node the message was received from and the transaction (i.e. local) currency differs from the settlement currency.
9	Conversion rate, settlement	Conditional	Should be present if the Transaction Manager does not perform currency conversion for the Node the message was received from and the transaction (i.e. local) currency differs from the settlement currency.
15	Date, settlement	Conditional	Should be present if the node to which the message is being sent is configured to use the external business date functionality. If this is the case the field should contain the settlement date of the batch to which this message's totals will be applied. If this field is not present or the node is not configured to make use of the external business date functionality then the transaction totals are applied to the batch for the current business day.
16	Date, conversion	Conditional	Should be present if the Transaction Manager does not perform currency conversion for the Node the message was received from and the transaction (i.e. local) currency differs from the settlement currency.
29	Amount, settlement fee	Optional	
31	Amount, settle processing fee	Optional	
39	Response code	Mandatory	
50	Currency code, settlement	Conditional	Should be present if the Transaction Manager does not perform currency conversion for the Node the message was received from and the transaction (i.e. local) currency differs from the settlement currency.
54	Additional amounts	Conditional	Should contain amount, cash for a purchase with cash back transaction if all the following conditions are met:

Message Content

Field	Description	Condition	Notes
			the Transaction Manager does not perform currency conversion for the Node the message was received from; the transaction (i.e. local) currency differs from the settlement currency; and the transaction did not complete as authorized.
59	Echo data	Mandatory	
95	Replacement amounts	Conditional	Should be present if the Transaction Manager does not perform currency conversion for the Node the message was received from and the transaction (i.e. local) currency differs from the settlement currency. This field is ignored by Transaction Manager if it performs currency conversion. If Transaction Manager does not perform currency conversion, it extracts the <i>amount settlement final</i> from this field. If this field is not present, the <i>amount settlement final</i> is assumed to be equal to the corresponding amount in the transaction currency.
127.1	Bitmap	Conditional	Must be present if any Postilion private data sub-field is set.
127.20	Originator/Authorizer settlement date	Optional	
127.37	Extended Response Code	Optional	
128	MAX extended	Conditional	Must be present if MAC'ing is enabled for the current message type.

Receive - Transaction Request (Repeat) (0200/0201)

Field	Description	Condition	Notes
2	Primary account number	Conditional	Should be present for a card initiated transaction if Track 2 data is not present (i.e. manual PAN entry).
3	Processing code	Mandatory	
4	Amount, transaction	Mandatory	
5	Amount, settlement	Conditional	Should be present if the Transaction Manager does not perform currency conversion for the Node the message was received from and the transaction (i.e. local) currency differs from the settlement currency.
7	Transmission date and time	Mandatory	

Message Content

Field	Description	Condition	Notes
9	Conversion rate, settlement	Conditional	Should be present if the Transaction Manager does not perform currency conversion for the Node the message was received from and the transaction (i.e. local) currency differs from the settlement currency.
11	System trace audit number	Mandatory	
12	Time, local transaction	Mandatory	
13	Date, local transaction	Mandatory	
14	Date, expiration	Conditional	Should be present for a card initiated transaction if track 2 data is not present (i.e. manual PAN entry or mail order), and expiry date checking is being performed by the Transaction Manager. If this field is not present, the Transaction Manager will extract the expiry date from the track 2 data if it is present. If both this field and the expiry date subfield of track 2 are present, the Transaction Manager will enforce that they have the same value.
15	Date, settlement	Conditional	Should be present if the node to which the message is being sent is configured to use the external business date functionality. If this is the case the field should contain the settlement date of the batch to which this message's totals will be applied. If this field is not present or the node is not configured to make use of the external business date functionality then the transaction totals are applied to the batch for the current business day.
16	Date, conversion	Conditional	Should be present if the Transaction Manager does not perform currency conversion for the Node the message was received from and the transaction (i.e. local) currency differs from the settlement currency.
18	Merchant's type	Conditional	Should be present if a merchant was involved in the transaction.
22	POS entry mode	Mandatory	
23	Card sequence number	Conditional	Should be present for a card initiated transaction if Track 2 data is not present (i.e. manual PAN entry or mail order) and a card sequence number (issue number) was entered at the POS.

Message Content

Field	Description	Condition	Notes
25	POS condition code	Mandatory	
26	POS PIN capture code	Conditional	Should be present if a PIN was entered.
27	Authorization ID response length	Conditional	Should be present if the authorization identification response (authorization code) in the response should be less than 6 characters.
28	Amount, transaction fee	Optional	
29	Amount, settlement fee	Conditional	Should be present if the Transaction Manager does not perform currency conversion for the Node the message was received from, field 28 is present and the transaction (i.e. local) currency differs from the settlement currency.
30	Amount, transaction processing fee	Optional	
31	Amount, settle processing fee	Conditional	Should be present if the Transaction Manager does not perform currency conversion for the Node the message was received from, field 30 is present and the transaction currency differs from the settlement currency.
32	Acquiring institution ID code	Conditional	Should be present if the node from which the message was received has a settlement granularity of <i>acquirer</i> .
33	Forwarding institution ID code	Optional	
35	Track 2 data	Conditional	Should be included if available.
37	Retrieval reference number	Optional	
40	Service restriction code	Optional	
41	Card acceptor terminal ID	Mandatory	
42	Card acceptor ID code	Mandatory	
43	Card acceptor name location	Mandatory	
45	Track 1 data	Optional	
49	Currency code, transaction	Mandatory	
50	Currency code, settlement	Conditional	Should be present if the Transaction Manager does not perform currency conversion for the Node the message was received from and the transaction (i.e. local) currency differs from the settlement currency.

Message Content

Field	Description	Condition	Notes
52	PIN data	Conditional	Should be present if a PIN was entered.
53	Security related control information	Conditional	Should be present if a PIN was entered and the DUKPT PIN encryption scheme is used.
54	Additional amounts	Conditional	Should contain the <i>cash amount</i> requested, if the transaction is a purchase with cash back transaction. Must be in the transaction currency.
56	Message reason code	Optional	
57	Authorization life cycle	Optional	
59	Echo data	Optional	
67	Extended payment code	Conditional	Should be present for budget transactions.
90	Original data elements	Conditional	Should be present for a debit or credit adjustment transaction that was preceded by a request.
98	Payee	Conditional	Should be present for all payment transactions made to an institution defined payee.
100	Receiving institution ID code	Conditional	Should be present if no card data is available (e.g. check verification using the MICR format). If this field is present in any initial message, it will be used to route the transaction.
102	Account identification 1	Conditional	Should be included if available.
103	Account identification 2	Conditional	Should be included if available.
123	POS data code	Mandatory	
127.1	Bitmap	Conditional	Must be present if any Postilion private data sub-field is set.
127.4	POS data	Optional	
127.5	Service station data	Optional	
127.7	Check data	Conditional	Should be present for a check guarantee or a check verification transaction.
127.8	Retention data	Optional	
127.9	Additional node data	Optional	
127.10	CVV2	Optional	
127.12	Terminal owner	Conditional	Should be included if available.
127.13	POS geographic data	Conditional	Should be included if available.

Message Content

Field	Description	Condition	Notes
127.14	Sponsor bank	Conditional	Should be included if available.
127.15	Address verification data	Conditional	Should be present if address verification is required with a transaction (e.g. a mail order or airline transaction).
127.18	Validation data	Optional	
127.19	Bank details	Conditional	Should be present for third-party payments (inter-bank transfers).
127.20	Originator/Authorizer settlement date	Optional	
127.22	Structured data	Optional	
127.23	Payee name and address	Conditional	Should be present in payment transactions to Customer defined payees, where the payee's address details have been defined.
127.24	Payer account	Optional	
127.25	ICC data	Conditional	Should be present if the PAN entry mode subfield of the POS Entry Mode field (field 22) is set to <i>Integrated circuit card (ICC)</i> . CVV can be checked (05) or <i>Integrated circuit card (ICC)</i> . CVV may not be checked (95). Otherwise optional.
127.26	Original node	Conditional	Should be present if this is a linked transaction and the original message may have come from another source node.
127.27	Card verification result	Optional	
127.28	American express card identifier (CID)	Optional	
127.29	3D secure data	Optional	
127.30	3D Secure Result	Optional	
127.32	UCAF data	Optional	
127.33	Extended transaction type	Optional	
127.34	Account type qualifier	Optional	
127.35	Acquirer network ID	Optional	
127.36	Customer Id	Optional	
127.38	Additional POS Data Code	Optional	

Message Content

Field	Description	Condition	Notes
127.40	Transaction reference	Optional	Original reference subfields of field 127.40 should be present if the transaction is linked to the original transaction and field 127.11 - Original Key is not present.
127.41	Originating remote address	Optional	
127.48	Dynamic Currency Conversion (DCC) status code	Conditional	
127.59	Payment Token Identifier	Conditional	Should be included if available.
128	MAX extended	Conditional	Must be present if MAC'ing is enabled for the current message type.

Receive – Transaction Completion (Repeat) (0202/0203)

Field	Description	Condition	Notes
4	Amount, transaction	Mandatory	If replacement amounts are present in the message, this field contains the requested amount. If replacement amounts are not present, this field contains the final amount (i.e. the actual transaction amount).
5	Amount, settlement	Conditional	If replacement amounts are present in the message, this field contains the requested amount. If replacement amounts are not present, this field contains the final transaction amount (i.e. the actual amount). Ignored if the Transaction Manager performs currency conversion. If the Transaction Manager does not perform currency conversion and the field is not present, this field is assumed to be equal to and in the same currency as the transaction amount.
9	Conversion rate, settlement	Conditional	Should be present if the Transaction Manager does not perform currency conversion for the Node the message was received from and the transaction (i.e. local) currency differs from the settlement currency.
16	Date, conversion	Conditional	Should be present if the Transaction Manager does not perform currency conversion for the Node the message was received from and the transaction (i.e. local) currency differs from the settlement currency.
28	Amount, transaction fee	Optional	
29	Amount, settlement fee	Conditional	Should be present if the Transaction Manager does not perform currency conversion for the

Message Content

Field	Description	Condition	Notes
			Node the message was received from, field 28 is present and the transaction (i.e. local) currency differs from the settlement currency.
30	Amount, transaction processing fee	Optional	
31	Amount, settle processing fee	Conditional	Should be present if the Transaction Manager does not perform currency conversion for the Node the message was received from, field 30 is present and the transaction currency differs from the settlement currency.
39	Response code	Mandatory	
54	Additional amounts	Conditional	If goods and services with cash back transaction, should contain <i>amount cash final</i> . Must be in the transaction currency.
56	Message reason code	Optional	
59	Echo data	Optional	
95	Replacement amounts	Optional	If this field is not present, the final transaction amounts are obtained from field 4 and 5.
127.1	Bitmap	Conditional	Must be present if any Postilion private data sub-field is set.
127.20	Originator/Authorizer settlement date	Optional	
127.22	Structured data	Optional	
127.41	Originating remote address	Optional	
128	MAX extended	Conditional	Must be present if MAC'ing is enabled for the current message type.

Receive - Transaction Request Response (0210)

Field	Description	Condition	Notes
3	Processing code	Optional	
4	Amount, transaction	Optional	
5	Amount, settlement	Conditional	Should be present if the Transaction Manager does not perform currency conversion for the Node the message was received from and the transaction (i.e. local) currency differs from the settlement currency.

Message Content

Field	Description	Condition	Notes
9	Conversion rate, settlement	Conditional	Should be present if the Transaction Manager does not perform currency conversion for the Node the message was received from and the transaction (i.e. local) currency differs from the settlement currency.
15	Date, settlement	Conditional	Should be present if the node to which the message is being sent is configured to use the external business date functionality. If this is the case the field should contain the settlement date of the batch to which this message's totals will be applied. If this field is not present or the node is not configured to make use of the external business date functionality then the transaction totals are applied to the batch for the current business day.
16	Date, conversion	Conditional	Should be present if the Transaction Manager does not perform currency conversion for the Node the message was received from and the transaction (i.e. local) currency differs from the settlement currency.
28	Amount, transaction fee	Conditional	Should be included if this fee amount has been removed/calculated/changed by the Host.
29	Amount, settlement fee	Conditional	Should be present if the Transaction Manager does not perform currency conversion for the Node the message was received from, field 28 is present and the transaction (i.e. local) currency differs from the settlement currency.
30	Amount, transaction processing fee	Conditional	Should be included if this fee amount has been removed/calculated/changed by the Host
31	Amount, settle processing fee	Conditional	Should be present if the Transaction Manager does not perform currency conversion for the Node the message was received from, field 30 is present and the transaction currency differs from the settlement currency.
38	Authorization ID response	Conditional	Should be included if available.
39	Response code	Mandatory	
44	Additional response data	Optional	
48	Additional data	Conditional	Should be present for approved linked account inquiries.
50	Currency code, settlement	Conditional	Should be present if the Transaction Manager does not perform currency conversion for the

Message Content

Field	Description	Condition	Notes
			Node the message was received from and the transaction (i.e. local) currency differs from the settlement currency.
54	Additional amounts	Conditional	If a goods and services with cash back transaction, should contain <i>amount cash approved</i> . The amount available is determined from <i>available balance</i> , <i>available credit</i> and <i>credit limit</i> (in that order) and the ledger balance from <i>ledger balance</i> . These balances are retained after being converted to the transaction currency.
58	Authorizing agent ID code	Conditional	Should be present when the institution that processed an authorization or financial transaction is not the same institution identified by the primary account number.
59	Echo data	Mandatory	
102	Account identification 1	Optional	
103	Account identification 2	Optional	
127.1	Bitmap	Conditional	Must be present if any Postilion private data sub-field is set.
127.6	Authorization profile	Optional	
127.8	Retention data	Optional	
127.9	Additional node data	Optional	
127.16	Address verification result	Conditional	Should be present when address verification is required with a transaction (e.g. a mail-order or airline transaction).
127.17	Cardholder information	Optional	
127.20	Originator/Authorizer settlement date	Optional	
127.22	Structured data	Optional	
127.25	ICC data	Optional	
127.27	Card verification result	Optional	
127.30	3D secure result	Optional	
127.31	Issuer network ID	Optional	
127.32	UCAF data	Optional	
127.33	Extended transaction type	Optional	

Message Content

Field	Description	Condition	Notes
127.37	Extended Response Code	Optional	
127.48	Dynamic Currency Conversion (DCC) status code	Conditional	
128	MAC extended	Conditional	Must be present if MAC'ing is enabled for the current message type.

Message Content

Receive – Transaction Completion Response (0212)

Field	Description	Condition	Notes
5	Amount, settlement	Conditional	Should be present if the Transaction Manager does not perform currency conversion for the Node the message was received from and the transaction (i.e. local) currency differs from the settlement currency.
9	Conversion rate, settlement	Conditional	Should be present if the Transaction Manager does not perform currency conversion for the Node the message was received from and the transaction (i.e. local) currency differs from the settlement currency.
16	Date, conversion	Conditional	Should be present if the Transaction Manager does not perform currency conversion for the Node the message was received from and the transaction (i.e. local) currency differs from the settlement currency.
29	Amount, settlement fee	Optional	
31	Amount, settle processing fee	Optional	
39	Response code	Mandatory	
50	Currency code, settlement	Conditional	Should be present if the Transaction Manager does not perform currency conversion for the Node the message was received from and the transaction (i.e. local) currency differs from the settlement currency.
54	Additional amounts	Conditional	Should contain amount, cash for a purchase with cash back transaction if all the following conditions are met: the Transaction Manager does not perform currency conversion for the Node the message was received from; the transaction (i.e. local) currency differs from the settlement currency; and the transaction did not complete as authorized.
59	Echo data	Mandatory	
127.1	Bitmap	Conditional	Must be present if any Postilion private data sub-field is set.
127.6	Authorization profile	Optional	
127.20	Originator/Authorizer settlement date	Optional	
127.22	Structured data	Optional	

Message Content

Field	Description	Condition	Notes
127.41	Originating remote address	Optional	
128	MAX extended	Conditional	Must be present if MAC'ing is enabled for the current message type.

Receive – Transaction Advice (Repeat) (0220/0221)

Field	Description	Condition	Notes
2	Primary account number	Conditional	Should be present for a card initiated transaction if Track 2 data is not present (i.e. manual PAN entry or mail order).
3	Processing code	Mandatory	
4	Amount, transaction	Mandatory	
5	Amount, settlement	Conditional	Should be present if the Transaction Manager does not perform currency conversion for the Node the message was received from and the transaction (i.e. local) currency differs from the settlement currency.
7	Transmission date and time	Mandatory	
9	Conversion rate, settlement	Conditional	Should be present if the Transaction Manager does not perform currency conversion for the Node the message was received from and the transaction (i.e. local) currency differs from the settlement currency.
11	System trace audit number	Mandatory	
12	Time, local transaction	Mandatory	
13	Date, local transaction	Mandatory	
14	Date, expiration	Conditional	Should be present for a card initiated transaction if track 2 data is not present (i.e. manual PAN entry or mail order), and expiry date checking is being performed by the Transaction Manager. If this field is not present, the Transaction Manager will extract the expiry date from the track 2 data if it is present. If both this field and the expiry date subfield of track 2 are present, the Transaction Manager will enforce that they have the same value.
15	Date, settlement	Conditional	Should be present if the node to which the message is being sent is configured to use the external business date functionality. If this is the case the field should contain the settlement date

Message Content

Field	Description	Condition	Notes
			of the batch to which this message's totals will be applied. If this field is not present or the node is not configured to make use of the external business date functionality then the transaction totals are applied to the batch for the current business day.
16	Date, conversion	Conditional	Should be present if the Transaction Manager does not perform currency conversion for the Node the message was received from and the transaction (i.e. local) currency differs from the settlement currency.
18	Merchant's type	Conditional	Should be present if a merchant was involved in the transaction.
22	POS entry mode	Mandatory	
23	Card sequence number	Conditional	Should be present for a card initiated transaction if Track 2 data is not present (i.e. manual PAN entry or mail order) and a card sequence number (issue number) was entered at the POS.
25	POS condition code	Mandatory	
28	Amount, transaction fee	Optional	
29	Amount, settlement fee	Conditional	Should be present if the Transaction Manager does not perform currency conversion for the Node the message was received from, field 28 is present and the transaction (i.e. local) currency differs from the settlement currency.
30	Amount, transaction processing fee	Optional	
31	Amount, settle processing fee	Conditional	Should be present if the Transaction Manager does not perform currency conversion for the Node the message was received from, field 30 is present and the transaction currency differs from the settlement currency.
32	Acquiring institution ID code	Conditional	Should be present if the node from which the message was received has a settlement granularity of <i>acquirer</i> .
33	Forwarding institution ID code	Optional	
35	Track 2 data	Conditional	Should be included if available.
37	Retrieval reference number	Optional	

Message Content

Field	Description	Condition	Notes
38	Authorization ID response	Conditional	Should be included if available.
39	Response code	Optional	If this field is present, it will be forwarded in the advice message to the Sink Node. If this field is not present, a Response Code of '00' will be sent to the Sink Node.
40	Service restriction code	Optional	
41	Card acceptor terminal ID	Mandatory	
42	Card acceptor ID code	Mandatory	
43	Card acceptor name location	Mandatory	
45	Track 1 data	Optional	
49	Currency code, transaction	Mandatory	
50	Currency code, settlement	Conditional	Should be present if the Transaction Manager does not perform currency conversion for the Node the message was received from and the transaction (i.e. local) currency differs from the settlement currency.
54	Additional amounts	Conditional	Should contain <i>amount cash final</i> if purchase with cash back transaction. Must be in the transaction currency. Should contain <i>amount, cash</i> if purchase with cash back transaction.
56	Message reason code	Optional	
58	Authorizing agent ID code	Conditional	Should be present when the institution that processed an authorization or financial transaction is not the same institution identified by the primary account number.
59	Echo data	Optional	
67	Extended payment code	Conditional	Should be present for budget transactions.
90	Original data elements	Conditional	Should be present if this message was preceded by a request.
95	Replacement amounts	Conditional	Should be present if the transaction did not complete as authorized.
98	Payee	Conditional	Should be present for all payment transactions made to an institution defined payee.
100	Receiving institution ID code	Conditional	Should be present if no card data is available (e.g. check verification using the MICR format).

Message Content

Field	Description	Condition	Notes
			If this field is present in any initial message, it will be used to route the transaction.
102	Account identification 1	Conditional	Should be included if available.
103	Account identification 2	Conditional	Should be included if available.
123	POS data code	Mandatory	
127.1	Bitmap	Conditional	Must be present if any Postilion private data sub-field is set.
127.4	POS data	Optional	
127.5	Service station data	Optional	
127.6	Authorization profile	Optional	
127.7	Check data	Conditional	Should be present for a check guarantee or a check verification transaction.
127.8	Retention data	Optional	
127.9	Additional node data	Optional	
127.12	Terminal owner	Conditional	Should be included if available.
127.13	POS geographic data	Conditional	Should be included if available.
127.14	Sponsor bank	Conditional	Should be included if available.
127.19	Bank details	Conditional	Should be present for third-party payments (inter-bank transfers).
127.20	Originator/Authorizer settlement date	Optional	
127.22	Structured data	Optional	
127.23	Payee name and address	Conditional	Should be present in payment transactions to Customer defined payees, where the payee's address details have been defined.
127.24	Payer account	Optional	
127.25	ICC data	Conditional	Should be present if the PAN entry mode subfield of the POS Entry Mode field (field 22) is set to <i>Integrated circuit card (ICC)</i> . CVV can be checked (05) or <i>Integrated circuit card (ICC)</i> . CVV may not be checked (95). Otherwise optional.
127.26	Original node	Conditional	Should be present if this is a linked transaction and the original message may have come from another source node.

Message Content

Field	Description	Condition	Notes
127.27	Card verification result	Optional	
127.30	3D Secure Result	Optional	
127.32	UCAF data	Optional	
127.33	Extended transaction type	Optional	
127.34	Account type qualifier	Optional	
127.35	Acquirer network ID	Optional	
127.36	Customer Id	Optional	
127.37	Extended Response Code	Optional	
127.40	Transaction reference	Optional	Original reference subfields of field 127.40 should be present if the transaction is linked to the original transaction and field 127.11 - Original Key is not present.
127.41	Originating remote address	Optional	
127.48	Dynamic Currency Conversion (DCC) status code	Conditional	
127.59	Payment Token Identifier	Conditional	Should be included if available.
128	MAX extended	Conditional	Must be present if MAC'ing is enabled for the current message type.

Receive - Transaction Advice Response (0230)

Field	Description	Condition	Notes
5	Amount, settlement	Conditional	Should be present if the Transaction Manager does not perform currency conversion for the Node the message was received from and the transaction (i.e. local) currency differs from the settlement currency.
9	Conversion rate, settlement	Conditional	Should be present if the Transaction Manager does not perform currency conversion for the Node the message was received from and the transaction (i.e. local) currency differs from the settlement currency.
15	Date, settlement	Conditional	Should be present if the node to which the message is being sent is configured to use the external business date functionality. If this is the case the field should contain the settlement date of the batch to which this message's totals will

Message Content

Field	Description	Condition	Notes
			be applied. If this field is not present or the node is not configured to make use of the external business date functionality then the transaction totals are applied to the batch for the current business day.
16	Date, conversion	Conditional	Should be present if the Transaction Manager does not perform currency conversion for the Node the message was received from and the transaction (i.e. local) currency differs from the settlement currency.
29	Amount, settlement fee	Optional	
31	Amount, settle processing fee	Optional	
39	Response code	Mandatory	
50	Currency code, settlement	Conditional	Should be present if the Transaction Manager does not perform currency conversion for the Node the message was received from and the transaction (i.e. local) currency differs from the settlement currency.
54	Additional amounts	Conditional	Should contain amount, cash for a purchase with cash back transaction if all the following conditions are met: the Transaction Manager does not perform currency conversion for the Node the message was received from; the transaction (i.e. local) currency differs from the settlement currency; and the transaction did not complete as authorized.
59	Echo data	Mandatory	
95	Replacement amounts	Conditional	Should be present if the Transaction Manager does not perform currency conversion for the Node the message was received from and the transaction (i.e. local) currency differs from the settlement currency. This field is ignored by Transaction Manager if it performs currency conversion. If Transaction Manager does not perform currency conversion, it extracts the <i>amount settlement final</i> from this field. If this field is not present, the <i>amount settlement final</i> is assumed to be equal to the corresponding amount in the transaction currency.
127.1	Bitmap	Conditional	Must be present if any Postilion private data sub-field is set.

Message Content

Field	Description	Condition	Notes
127.20	Originator/Authorizer settlement date	Optional	
127.37	Extended Response Code	Optional	
128	MAX extended	Conditional	Must be present if MAC'ing is enabled for the current message type.

Receive – Acquirer File Update Advice (Repeat) (0320/0321)

Field	Description	Condition	Notes
2	Primary account number	Conditional	This field must be present if field 100 (Receiving Institution ID code) is not present. It is used to route the 0320 to an appropriate sink node by combining with a default account type. If both fields 2 and 100 are present, then field 100 takes precedence in the routing decision. If routing based on field 100 fails then routing will be attempted based on field 2. NOTE: If the 0320 is a HOTCARDS file update the field 2 is mandatory.
7	Transmission date and time	Mandatory	
11	System trace audit number	Mandatory	
12	Time, local transaction	Mandatory	
13	Date, local transaction	Mandatory	
14	Date, expiration	Optional	
23	Card sequence number	Optional	
32	Acquiring institution ID code	Optional	
33	Forwarding institution ID code	Optional	
37	Retrieval reference number	Optional	
39	Response code	Optional	
41	Card acceptor terminal ID	Optional	
42	Card acceptor ID code	Optional	
43	Card acceptor name location	Optional	

Message Content

Field	Description	Condition	Notes
56	Message reason code	Optional	
59	Echo data	Optional	
91	File update code	Mandatory	
100	Receiving institution ID code	Conditional	This field must be present if field 2 (Primary Account Number) is not present. It is used to route the 0320 to an appropriate sink node. If both fields 2 and 100 are present, then field 100 takes precedence in the routing decision. NOTE: If routing based on field 100 fails then routing will be attempted based on field 2.
101	File name	Mandatory	
127.1	Bitmap	Conditional	Must be present if any Postilion private data sub-field is set.
127.8	Retention data	Optional	
127.9	Additional node data	Optional	
127.22	Structured data	Optional	
127.37	Extended Response Code	Optional	
127.41	Originating remote address	Optional	
128	MAX extended	Conditional	Must be present if MAC'ing is enabled for the current message type.

Receive – Issuer File Update Advice (Repeat) (0322/0323)

Field	Description	Condition	Notes
2	Primary account number	Conditional	This field must always be present unless field 127.22 (Structured Data) contains the applicable PAN(s).
7	Transmission date and time	Mandatory	
11	System trace audit number	Mandatory	
12	Time, local transaction	Mandatory	
13	Date, local transaction	Mandatory	
14	Date, expiration	Optional	
23	Card sequence number	Optional	

Message Content

Field	Description	Condition	Notes
32	Acquiring institution ID code	Optional	
33	Forwarding institution ID code	Optional	
37	Retrieval reference number	Optional	
39	Response code	Optional	
41	Card acceptor terminal ID	Optional	
42	Card acceptor ID code	Optional	
43	Card acceptor name location	Optional	
56	Message reason code	Optional	
59	Echo data	Optional	
91	File update code	Mandatory	
100	Receiving institution ID code	Conditional	If the Route to Source checkbox in the sink node setup is switched on, this field will be used to route the transaction to the source.
101	File name	Mandatory	
127.1	Bitmap	Conditional	Must be present if any Postilion private data sub-field is set.
127.8	Retention data	Optional	
127.9	Additional node data	Optional	
127.22	Structured data	Optional	
127.37	Extended Response Code	Optional	
127.41	Originating remote address	Optional	
128	MAX extended	Conditional	Must be present if MAC'ing is enabled for the current message type.

Receive – Acquirer File Update Advice Response (0330)

Field	Description	Condition	Notes
39	Response code	Mandatory	
59	Echo data	Mandatory	

Message Content

Field	Description	Condition	Notes
127.1	Bitmap	Conditional	Must be present if any Postilion private data sub-field is set.
127.22	Structured data	Optional	
127.37	Extended Response Code	Optional	
128	MAX extended	Conditional	Must be present if MAC'ing is enabled for the current message type.

Message Content

Receive – Issuer File Update Advice Response (0332)

Field	Description	Condition	Notes
39	Response code	Mandatory	
59	Echo data	Mandatory	
127.1	Bitmap	Conditional	Must be present if any Postilion private data sub-field is set.
127.22	Structured data	Optional	
127.37	Extended Response Code	Optional	
128	MAX extended	Conditional	Must be present if MAC'ing is enabled for the current message type.

Receive - Reversal Request (Repeat) (0400/0401)

Field	Description	Condition	Notes
2	Primary account number	Conditional	Should be present for a card initiated transaction if Track 2 data is not present (i.e. manual PAN entry).
3	Processing code	Mandatory	
4	Amount, transaction	Optional	
5	Amount, settlement	Optional	
7	Transmission date and time	Optional	
9	Conversion rate, settlement	Optional	
11	System trace audit number	Optional	
12	Time, local transaction	Optional	
13	Date, local transaction	Optional	
14	Date, expiration	Optional	
15	Date, settlement	Conditional	Should be present if the node to which the message is being sent is configured to use the external business date functionality. If this is the case the field should contain the settlement date of the batch to which this message's totals will be applied. If this field is not present or the node is not configured to make use of the external business date functionality then the transaction totals are applied to the batch for the current business day.

Message Content

Field	Description	Condition	Notes
16	Date, conversion	Optional	
18	Merchant's type	Optional	
22	POS entry mode	Optional	
23	Card sequence number	Optional	
25	POS condition code	Optional	
26	POS PIN capture code	Optional	
27	Authorization ID response length	Conditional	Should be present if the authorization identification response (authorization code) in the response should be less than 6 characters.
28	Amount, transaction fee	Optional	
29	Amount, settlement fee	Conditional	Should be present if the Transaction Manager does not perform currency conversion for the Node the message was received from, field 28 is present and the transaction (i.e. local) currency differs from the settlement currency.
30	Amount, transaction processing fee	Optional	
31	Amount, settle processing fee	Conditional	Should be present if the Transaction Manager does not perform currency conversion for the Node the message was received from, field 30 is present and the transaction currency differs from the settlement currency.
32	Acquiring institution ID code	Optional	
33	Forwarding institution ID code	Optional	
35	Track 2 data	Conditional	Should be included if available.
37	Retrieval reference number	Optional	
38	Authorization ID response	Optional	
40	Service restriction code	Optional	
41	Card acceptor terminal ID	Mandatory	
42	Card acceptor ID code	Mandatory	
43	Card acceptor name location	Optional	

Message Content

Field	Description	Condition	Notes
45	Track 1 data	Optional	
49	Currency code, transaction	Optional	
50	Currency code, settlement	Conditional	Should be present if the Transaction Manager does not perform currency conversion for the Node the message was received from and the transaction (i.e. local) currency differs from the settlement currency.
52	PIN data	Optional	
53	Security related control information	Optional	
54	Additional amounts	Conditional	If goods and services with cash back transaction, should contain <i>amount cash final</i> . Must be in the transaction currency.
56	Message reason code	Optional	
59	Echo data	Optional	
67	Extended payment code	Optional	
90	Original data elements	Optional	
95	Replacement amounts	Conditional	Should be present if the transaction did not complete as authorized.
98	Payee	Conditional	Should be present for all payment transactions made to an institution defined payee.
100	Receiving institution ID code	Conditional	Should be present if no card data is available (e.g. check verification using the MICR format). If this field is present in any initial message, it will be used to route the transaction.
102	Account identification 1	Optional	
103	Account identification 2	Optional	
123	POS data code	Optional	
127.1	Bitmap	Conditional	Must be present if any Postilion private data sub-field is set.
127.4	POS data	Optional	
127.5	Service station data	Optional	
127.6	Authorization Profile	Conditional	Should be present and set to "11" if the Transaction Manager should not perform online or offline limits-based stand-in.

Message Content

Field	Description	Condition	Notes
127.7	Check data	Optional	
127.8	Retention data	Optional	
127.9	Additional node data	Optional	
127.10	CVV2	Optional	
127.12	Terminal owner	Optional	
127.13	POS geographic data	Optional	
127.14	Sponsor bank	Optional	
127.15	Address verification data	Optional	
127.18	Validation data	Optional	
127.19	Bank details	Optional	
127.20	Originator/Authorizer settlement date	Optional	
127.22	Structured data	Optional	
127.23	Payee name and address	Optional	
127.24	Payer account	Optional	
127.25	ICC data	Conditional	Should be present if the PAN entry mode subfield of the POS Entry Mode field (field 22) is set to <i>Integrated circuit card (ICC)</i> . CVV can be checked (05) or <i>Integrated circuit card (ICC)</i> . CVV may not be checked (95). Otherwise optional.
127.26	Original node	Conditional	Should be present if this is a linked transaction and the original message may have come from another source node.
127.27	Card verification result	Optional	
127.28	American express card identifier (CID)	Optional	
127.29	3D secure data	Optional	
127.30	3D Secure Result	Optional	
127.33	Extended transaction type	Optional	
127.34	Account type qualifier	Optional	
127.35	Acquirer network ID	Optional	

Message Content

Field	Description	Condition	Notes
127.36	Customer Id	Optional	
127.40	Transaction reference	Optional	Original reference subfields of field 127.40 should be present if the transaction is linked to the original transaction and field 127.11 - Original Key is not present.
127.41	Originating remote address	Optional	
127.59	Payment Token Identifier	Conditional	Should be included if available.
128	MAX extended	Conditional	Must be present if MAC'ing is enabled for the current message type.

Receive - Reversal Request Response (0410)

Field	Description	Condition	Notes
3	Processing code	Optional	
5	Amount, settlement	Conditional	Should be present if the Transaction Manager does not perform currency conversion for the Node the message was received from and the transaction (i.e. local) currency differs from the settlement currency.
9	Conversion rate, settlement	Conditional	Should be present if the Transaction Manager does not perform currency conversion for the Node the message was received from and the transaction (i.e. local) currency differs from the settlement currency.
15	Date, settlement	Conditional	Should be present if the node to which the message is being sent is configured to use the external business date functionality. If this is the case the field should contain the settlement date of the batch to which this message's totals will be applied. If this field is not present or the node is not configured to make use of the external business date functionality then the transaction totals are applied to the batch for the current business day.
16	Date, conversion	Conditional	Should be present if the Transaction Manager does not perform currency conversion for the Node the message was received from and the transaction (i.e. local) currency differs from the settlement currency.
29	Amount, settlement fee	Optional	
30	Amount, transaction processing fee	Conditional	Should be included if this fee amount has been removed/calculated/changed by the Host. This

Message Content

Field	Description	Condition	Notes
			applies irrespective of whether the transaction was approved or declined.
31	Amount, settle processing fee	Conditional	Should be present if the Transaction Manager does not perform currency conversion for the Node the message was received from, field 30 is present and the transaction currency differs from the settlement currency.
38	Authorization ID response	Conditional	Should be included if available.
39	Response code	Mandatory	
44	Additional response data	Optional	
48	Additional data	Optional	
50	Currency code, settlement	Conditional	Should be present if the Transaction Manager does not perform currency conversion for the Node the message was received from and the transaction (i.e. local) currency differs from the settlement currency.
54	Additional amounts	Conditional	Should contain amount, cash for a purchase with cash back transaction if all the following conditions are met: the Transaction Manager does not perform currency conversion for the Node the message was received from; the transaction (i.e. local) currency differs from the settlement currency; and the transaction did not complete as authorized.
58	Authorizing agent ID code	Conditional	Should be present when the institution that processed an authorization or financial transaction is not the same institution identified by the primary account number.
59	Echo data	Mandatory	
95	Replacement amounts	Conditional	Should be present if the Transaction Manager does not perform currency conversion for the Node the message was received from and the transaction (i.e. local) currency differs from the settlement currency. This field is ignored by Transaction Manager if it performs currency conversion. If Transaction Manager does not perform currency conversion, it extracts the <i>amount settlement final</i> and the <i>amount</i>

Message Content

Field	Description	Condition	Notes
			<i>settlement fee final</i> from this field. If this field is not present, the <i>amount settlement final</i> and <i>amount settlement fee final</i> is assumed to be equal to the corresponding amounts in the transaction currency.
102	Account identification 1	Optional	
103	Account identification 2	Optional	
127.1	Bitmap	Conditional	Must be present if any Postilion private data sub-field is set.
127.6	Authorization profile	Optional	
127.8	Retention data	Optional	
127.9	Additional node data	Optional	
127.16	Address verification result	Conditional	Should be present when address verification is required with a transaction (e.g. a mail-order or airline transaction).
127.17	Cardholder information	Optional	
127.20	Originator/Authorizer settlement date	Optional	
127.22	Structured data	Optional	
127.25	ICC data	Optional	
127.27	Card verification result	Optional	
127.30	3D secure result	Optional	
127.31	Issuer network ID	Optional	
127.33	Extended transaction type	Optional	
127.37	Extended Response Code	Optional	
128	MAC extended	Conditional	Must be present if MAC'ing is enabled for the current message type.

Message Content

Receive – Reversal Advice (Repeat) (0420/0421)

Field	Description	Condition	Notes
2	Primary account number	Conditional	Should be present for a card initiated transaction if Track 2 data is not present (i.e. manual PAN entry or mail order).
3	Processing code	Mandatory	
4	Amount, transaction	Mandatory	
5	Amount, settlement	Conditional	Should be present if the Transaction Manager does not perform currency conversion for the Node the message was received from and the transaction (i.e. local) currency differs from the settlement currency.
7	Transmission date and time	Mandatory	
9	Conversion rate, settlement	Conditional	Should be present if the Transaction Manager does not perform currency conversion for the Node the message was received from and the transaction (i.e. local) currency differs from the settlement currency.
11	System trace audit number	Mandatory	
12	Time, local transaction	Mandatory	
13	Date, local transaction	Mandatory	
14	Date, expiration	Conditional	Should be present for a card initiated transaction if track 2 data is not present (i.e. manual PAN entry or mail order), and expiry date checking is being performed by the Transaction Manager. If this field is not present, the Transaction Manager will extract the expiry date from the track 2 data if it is present. If both this field and the expiry date subfield of track 2 are present, the Transaction Manager will enforce that they have the same value.
15	Date, settlement	Conditional	Should be present if the node to which the message is being sent is configured to use the external business date functionality. If this is the case the field should contain the settlement date of the batch to which this message's totals will be applied. If this field is not present or the node is not configured to make use of the external business date functionality then the transaction totals are applied to the batch for the current business day.
16	Date, conversion	Conditional	Should be present if the Transaction Manager does not perform currency conversion for the Node the message was received from and the

Message Content

Field	Description	Condition	Notes
			transaction (i.e. local) currency differs from the settlement currency.
18	Merchant's type	Conditional	Should be present if a merchant was involved in the transaction.
22	POS entry mode	Mandatory	
23	Card sequence number	Conditional	Should be present for a card initiated transaction if Track 2 data is not present (i.e. manual PAN entry or mail order) and a card sequence number (issue number) was entered at the POS.
25	POS condition code	Mandatory	
28	Amount, transaction fee	Optional	
29	Amount, settlement fee	Conditional	Should be present if the Transaction Manager does not perform currency conversion for the Node the message was received from, field 28 is present and the transaction (i.e. local) currency differs from the settlement currency.
30	Amount, transaction processing fee	Optional	
31	Amount, settle processing fee	Conditional	Should be present if the Transaction Manager does not perform currency conversion for the Node the message was received from, field 30 is present and the transaction currency differs from the settlement currency.
32	Acquiring institution ID code	Conditional	Should be present if the node from which the message was received has a settlement granularity of <i>acquirer</i> .
33	Forwarding institution ID code	Optional	
35	Track 2 data	Conditional	Should be included if available.
37	Retrieval reference number	Optional	
38	Authorization ID response	Conditional	Should be included if available.
39	Response code	Optional	If this field is present, it will be forwarded in the advice message to the Sink Node. If this field is not present, a Response Code of '00' will be sent to the Sink Node.
40	Service restriction code	Optional	
41	Card acceptor terminal ID	Mandatory	

Message Content

Field	Description	Condition	Notes
42	Card acceptor ID code	Mandatory	
43	Card acceptor name location	Mandatory	
45	Track 1 data	Optional	
49	Currency code, transaction	Mandatory	
50	Currency code, settlement	Conditional	Should be present if the Transaction Manager does not perform currency conversion for the Node the message was received from and the transaction (i.e. local) currency differs from the settlement currency.
54	Additional amounts	Conditional	Should contain <i>amount cash final</i> if purchase with cash back transaction. Must be in the transaction currency. Should contain <i>amount, cash</i> if purchase with cash back transaction.
56	Message reason code	Optional	
58	Authorizing agent ID code	Conditional	Should be present when the institution that processed an authorization or financial transaction is not the same institution identified by the primary account number.
59	Echo data	Optional	
67	Extended payment code	Conditional	Should be present for budget transactions.
90	Original data elements	Mandatory	
95	Replacement amounts	Conditional	Should be present if the transaction did not complete as authorized.
98	Payee	Conditional	Should be present for all payment transactions made to an institution defined payee.
100	Receiving institution ID code	Optional	
102	Account identification 1	Optional	Should be included if available.
103	Account identification 2	Optional	Should be included if available.
123	POS data code	Mandatory	
127.1	Bitmap	Conditional	Must be present if any Postilion private data sub-field is set.
127.4	POS data	Optional	

Message Content

Field	Description	Condition	Notes
127.5	Service station data	Optional	
127.7	Check data	Conditional	Should be present for a check guarantee or a check verification transaction.
127.8	Retention data	Optional	
127.9	Additional node data	Optional	
127.12	Terminal owner	Conditional	Should be included if available.
127.13	POS geographic data	Conditional	Should be included if available.
127.14	Sponsor bank	Conditional	Should be included if available.
127.19	Bank details	Conditional	Should be present for third-party payments (inter-bank transfers).
127.20	Originator/Authorizer settlement date	Optional	
127.22	Structured data	Optional	
127.23	Payee name and address	Conditional	Should be present in payment transactions to Customer defined payees, where the payee's address details have been defined.
127.24	Payer account	Optional	
127.25	ICC data	Optional	
127.26	Original node	Conditional	Should be present if this is a linked transaction and the original message may have come from another source node.
127.27	Card verification result	Optional	
127.33	Extended transaction type	Optional	
127.34	Account type qualifier	Optional	
127.35	Acquirer network ID	Optional	
127.36	Customer Id	Optional	
127.37	Extended Response Code	Optional	
127.40	Transaction reference	Optional	Original reference subfields of field 127.40 should be present if the transaction is linked to the original transaction and field 127.11 - Original Key is not present.
127.41	Originating remote address	Optional	
127.59	Payment Token Identifier	Conditional	Should be included if available.

Message Content

Field	Description	Condition	Notes
128	MAX extended	Conditional	Must be present if MAC'ing is enabled for the current message type.

Receive - Reversal Advice Response (0430)

Field	Description	Condition	Notes
5	Amount, settlement	Conditional	Should be present if the Transaction Manager does not perform currency conversion for the Node the message was received from and the transaction (i.e. local) currency differs from the settlement currency.
9	Conversion rate, settlement	Conditional	Should be present if the Transaction Manager does not perform currency conversion for the Node the message was received from and the transaction (i.e. local) currency differs from the settlement currency.
15	Date, settlement	Conditional	Should be present if the node to which the message is being sent is configured to use the external business date functionality. If this is the case the field should contain the settlement date of the batch to which this message's totals will be applied. If this field is not present or the node is not configured to make use of the external business date functionality then the transaction totals are applied to the batch for the current business day.
16	Date, conversion	Conditional	Should be present if the Transaction Manager does not perform currency conversion for the Node the message was received from and the transaction (i.e. local) currency differs from the settlement currency.
29	Amount, settlement fee	Optional	
31	Amount, settle processing fee	Optional	
39	Response code	Mandatory	
50	Currency code, settlement	Conditional	Should be present if the Transaction Manager does not perform currency conversion for the Node the message was received from and the transaction (i.e. local) currency differs from the settlement currency.
54	Additional amounts	Conditional	Should contain amount, cash for a purchase with cash back transaction if all the following conditions are met:

Message Content

			the Transaction Manager does not perform currency conversion for the Node the message was received from; the transaction (i.e. local) currency differs from the settlement currency; and the transaction did not complete as authorized.
59	Echo data	Mandatory	
95	Replacement amounts	Conditional	Should be present if the Transaction Manager does not perform currency conversion for the Node the message was received from and the transaction (i.e. local) currency differs from the settlement currency. This field is ignored by Transaction Manager if it performs currency conversion. If Transaction Manager does not perform currency conversion, it extracts the <i>amount settlement final</i> from this field. If this field is not present, the <i>amount settlement final</i> is assumed to be equal to the corresponding amount in the transaction currency.
127.1	Bitmap	Conditional	Must be present if any Postilion private data sub-field is set.
127.20	Originator/Authorizer settlement date	Optional	
127.37	Extended Response Code	Optional	
128	MAX extended	Conditional	Must be present if MAC'ing is enabled for the current message type.

Receive – Acquirer Reconciliation Request (Repeat) (0500/0501)

Field	Description	Condition	Notes
7	Transmission date and time	Mandatory	
11	System trace audit number	Mandatory	
12	Time, local transaction	Mandatory	
13	Date, local transaction	Mandatory	
15	Date, settlement	Conditional	Contains the settlement date of the batch to which this message is applicable. If this field is not present, the totals for the current business day are returned.
32	Acquiring institution ID code	Conditional	Should be present if the node from which the message was received has a settlement granularity of <i>acquirer</i> .

Message Content

Field	Description	Condition	Notes
41	Card acceptor terminal ID	Conditional	Should be present if the node from which the message was received has a settlement granularity of <i>terminal</i> .
42	Card acceptor ID code	Conditional	Should be present if the node from which the message was received has a settlement granularity of <i>terminal</i> or <i>card acceptor</i> .
50	Currency code, settlement	Optional	
59	Echo data	Optional	
127.22	Structured data	Optional	
127.41	Originating remote address	Optional	
128	MAX extended	Conditional	Must be present if MAC'ing is enabled for the current message type.

Receive – Card Issuer Reconciliation Request (Repeat) (0502/0503)

Field	Description	Condition	Notes
7	Transmission date and time	Mandatory	
11	System trace audit number	Mandatory	
12	Time, local transaction	Mandatory	
13	Date, local transaction	Mandatory	
15	Date, settlement	Conditional	Contains the settlement date of the batch to which this message is applicable. If this field is not present, the totals for the current business day are returned.
32	Acquiring institution ID code	Conditional	Should be present if the node from which the message was received has a settlement granularity of <i>acquirer</i> .
41	Card acceptor terminal ID	Conditional	Should be present if the node from which the message was received has a settlement granularity of <i>terminal</i> .
42	Card acceptor ID code	Conditional	Should be present if the node from which the message was received has a settlement granularity of <i>terminal</i> or <i>card acceptor</i> .
50	Currency code, settlement	Optional	
59	Echo data	Optional	

Message Content

127.22	Structured data	Optional	
127.41	Originating remote address	Optional	
128	MAX extended	Conditional	Must be present if MAC'ing is enabled for the current message type.

Receive – Acquirer Reconciliation Advice (Repeat) (0520/0521)

Field	Description	Condition	Notes
7	Transmission date and time	Mandatory	
11	System trace audit number	Mandatory	
12	Time, local transaction	Mandatory	
13	Date, local transaction	Mandatory	
32	Acquiring institution ID code	Conditional	Should be present if the node from which the message was received has a settlement granularity of <i>acquirer</i> .
41	Card acceptor terminal ID	Conditional	Should be present if the node from which the message was received has a settlement granularity of <i>terminal</i> .
42	Card acceptor ID code	Conditional	Should be present if the node from which the message was received has a settlement granularity of <i>terminal</i> or <i>card acceptor</i> .
50	Currency code, settlement	Optional	
59	Echo data	Optional	
74	Credits, number	Optional	
75	Credits, reversal number	Optional	
76	Debits, number	Optional	
77	Debits, reversal number	Optional	
78	Transfers, number	Optional	
79	Transfers, reversal number	Optional	
80	Inquiries, number	Optional	
81	Authorizations, number	Optional	
82	Credits, processing fee amount	Optional	

Message Content

Field	Description	Condition	Notes
83	Credits, transaction fee amount	Optional	
84	Debits, processing fee amount	Optional	
85	Debits, transaction fee amount	Optional	
86	Credits, amount	Optional	
87	Credits, reversal amount	Optional	
88	Debits, amount	Optional	
89	Debits, reversal amount	Optional	
97	Amount, net settlement	Optional	
118	Payments, number	Optional	
119	Payments, reversal number	Optional	
127.1	Bitmap	Conditional	Must be present if any Postilion private data sub-field is set.
127.22	Structured data	Optional	
127.41	Originating remote address	Optional	
128	MAX extended	Conditional	Must be present if MAC'ing is enabled for the current message type.

Receive – Card Issuer Reconciliation Advice (Repeat) (0522/0523)

Field	Description	Condition	Notes
7	Transmission date and time	Mandatory	
11	System trace audit number	Mandatory	
12	Time, local transaction	Mandatory	
13	Date, local transaction	Mandatory	
32	Acquiring institution ID code	Conditional	Should be present if the node from which the message was received has a settlement granularity of <i>acquirer</i> .
41	Card acceptor terminal ID	Conditional	Should be present if the node from which the message was received has a settlement granularity of <i>terminal</i> .

Message Content

Field	Description	Condition	Notes
42	Card acceptor ID code	Conditional	Should be present if the node from which the message was received has a settlement granularity of <i>terminal</i> or <i>card acceptor</i> .
50	Currency code, settlement	Optional	
59	Echo data	Optional	
74	Credits, number	Optional	
75	Credits, reversal number	Optional	
76	Debits, number	Optional	
77	Debits, reversal number	Optional	
78	Transfers, number	Optional	
79	Transfers, reversal number	Optional	
80	Inquiries, number	Optional	
81	Authorizations, number	Optional	
82	Credits, processing fee amount	Optional	
83	Credits, transaction fee amount	Optional	
84	Debits, processing fee amount	Optional	
85	Debits, transaction fee amount	Optional	
86	Credits, amount	Optional	
87	Credits, reversal amount	Optional	
88	Debits, amount	Optional	
89	Debits, reversal amount	Optional	
97	Amount, net settlement	Optional	
118	Payments, number	Optional	
119	Payments, reversal number	Optional	
127.1	Bitmap	Conditional	Must be present if any Postilion private data sub-field is set.
127.22	Structured data	Optional	

Message Content

Field	Description	Condition	Notes
127.41	Originating remote address	Optional	
128	MAX extended	Conditional	Must be present if MAC'ing is enabled for the current message type.

Message Content

Receive – Acquirer Reconciliation Advice Response (0530)

Field	Description	Condition	Notes
39	Response code	Mandatory	
59	Echo data	Mandatory	
66	Settlement Code	Mandatory	
74	Credits, number	Optional	
75	Credits, reversal number	Optional	
76	Debits, number	Optional	
77	Debits, reversal number	Optional	
78	Transfers, number	Optional	
79	Transfers, reversal number	Optional	
80	Inquiries, number	Optional	
81	Authorizations, number	Optional	
82	Credits, processing fee amount	Optional	
83	Credits, transaction fee amount	Optional	
84	Debits, processing fee amount	Optional	
85	Debits, transaction fee amount	Optional	
86	Credits, amount	Optional	
87	Credits, reversal amount	Optional	
88	Debits, amount	Optional	
89	Debits, reversal amount	Optional	
97	Amount, net settlement	Optional	
118	Payments, number	Optional	
119	Payments, reversal number	Optional	
127.1	Bitmap	Conditional	Must be present if any Postilion private data sub-field is set.
127.22	Structured data	Optional	

Message Content

Field	Description	Condition	Notes
127.37	Extended Response Code	Optional	
128	MAX extended	Conditional	Must be present if MAC'ing is enabled for the current message type.

Receive – Card Issuer Reconciliation Advice Response (0532)

Field	Description	Condition	Notes
39	Response code	Mandatory	
66	Settlement Code	Mandatory	
74	Credits, number	Optional	
75	Credits, reversal number	Optional	
76	Debits, number	Optional	
77	Debits, reversal number	Optional	
78	Transfers, number	Optional	
79	Transfers, reversal number	Optional	
80	Inquiries, number	Optional	
81	Authorizations, number	Optional	
82	Credits, processing fee amount	Optional	
83	Credits, transaction fee amount	Optional	
84	Debits, processing fee amount	Optional	
85	Debits, transaction fee amount	Optional	
86	Credits, amount	Optional	
87	Credits, reversal amount	Optional	
88	Debits, amount	Optional	
89	Debits, reversal amount	Optional	
97	Amount, net settlement	Optional	
118	Payments, number	Optional	

Message Content

Field	Description	Condition	Notes
119	Payments, reversal number	Optional	
127.1	Bitmap	Conditional	Must be present if any Postilion private data sub-field is set.
127.22	Structured data	Optional	
127.37	Extended Response Code	Optional	
128	MAX extended	Conditional	Must be present if MAC'ing is enabled for the current message type.

Receive - Administration Request (Repeat) (0600/0601)

Field	Description	Condition	Notes
2	Primary account number	Conditional	Should be present for a card initiated transaction (or a check verification transaction using the plastic card format) if Track 2 data is not present (i.e. manual PAN entry or mail order).
3	Processing code	Mandatory	
4	Amount, transaction	Optional	
7	Transmission date and time	Mandatory	
11	System trace audit number	Mandatory	
12	Time, local transaction	Mandatory	
13	Date, local transaction	Mandatory	
14	Date, expiration	Conditional	Should be present for a card initiated transaction if track 2 data is not present (i.e. manual PAN entry or mail order), and expiry date checking is being performed by the Transaction Manager. If this field is not present, the Transaction Manager will extract the expiry date from the track 2 data if it is present. If both this field and the expiry date subfield of track 2 are present, the Transaction Manager will enforce that they have the same value.
15	Date, settlement	Conditional	Should be present if the node to which the message is being sent is configured to use the external business date functionality. If this is the case the field should contain the settlement date of the batch to which this message's totals will be applied. If this field is not present or the node is not configured to make use of the external business date functionality then the

Message Content

Field	Description	Condition	Notes
			transaction totals are applied to the batch for the current business day.
18	Merchant's type	Conditional	Should be present if a merchant was involved in the transaction.
22	POS entry mode	Mandatory	
23	Card sequence number	Conditional	Should be present for a card initiated transaction if Track 2 data is not present (i.e. manual PAN entry or mail order) and a card sequence number (issue number) was entered at the POS.
25	POS condition code	Mandatory	
26	POS PIN capture code	Conditional	Should be present if a PIN was entered.
28	Amount, transaction fee	Optional	
32	Acquiring institution ID code	Conditional	Should be present if the node from which the message was received has a settlement granularity of <i>acquirer</i> .
33	Forwarding institution ID code	Optional	
35	Track 2 data	Conditional	Should be included if available.
37	Retrieval reference number	Optional	
40	Service restriction code	Optional	
41	Card acceptor terminal ID	Mandatory	
42	Card acceptor ID code	Mandatory	
43	Card acceptor name location	Mandatory	
45	Track 1 data	Optional	
49	Currency code, transaction	Optional	
52	PIN data	Conditional	Should be present if a PIN was entered.
53	Security related control information	Conditional	In the case of a PIN change transaction, the Transaction Manager will attempt to change the PIN if it is configured to perform PIN verification for the Sink Node.
56	Message reason code	Conditional	Should be present in messages for <i>place hold on card</i> transactions where positions 1 and 2 of the Processing Code are "90". Otherwise optional.

Message Content

Field	Description	Condition	Notes
59	Echo data	Optional	
90	Original data elements	Conditional	Should be present for a debit or credit adjustment transaction that was preceded by a request.
100	Receiving institution ID code	Conditional	Should be present if no card data is available (e.g. check verification using the MICR format). If this field is present in any initial message, it will be used to route the transaction.
102	Account identification 1	Conditional	Should be included if available.
123	POS data code	Mandatory	
127.1	Bitmap	Conditional	Must be present if any Postilion private data sub-field is set.
127.4	POS data	Optional	
127.8	Retention data	Optional	
127.9	Additional node data	Optional	
127.10	CVV2	Optional	
127.12	Terminal owner	Conditional	Should be included if available.
127.13	POS geographic data	Conditional	Should be included if available.
127.14	Sponsor bank	Conditional	Should be included if available.
127.15	Address verification data	Conditional	Should be present if address verification is required with a transaction (e.g. a mail order or airline transaction).
127.18	Validation data	Optional	
127.22	Structured data	Optional	
127.25	ICC data	Conditional	Should be present if the PAN entry mode subfield of the POS Entry Mode field (field 22) is set to <i>Integrated circuit card (ICC)</i> . CVV can be checked (05) or <i>Integrated circuit card (ICC)</i> . CVV may not be checked (95). Otherwise optional.
127.26	Original node	Conditional	Should be present if this is a linked transaction and the original message may have come from another source node.
127.27	Card verification result	Optional	
127.28	American express card identifier (CID)	Optional	

Message Content

Field	Description	Condition	Notes
127.33	Extended transaction type	Optional	
127.34	Account type qualifier	Optional	
127.35	Acquirer network ID	Optional	
127.36	Customer Id	Optional	
127.40	Transaction reference	Optional	Original reference subfields of field 127.40 should be present if the transaction is linked to the original transaction and field 127.11 - Original Key is not present.
127.41	Originating remote address	Optional	
127.59	Payment Token Identifier	Conditional	Should be included if available.
128	MAX extended	Conditional	Must be present if MAC'ing is enabled for the current message type.

Receive - Administration Request Response (0610)

Field	Description	Condition	Notes
3	Processing code	Optional	
15	Date, settlement	Conditional	Should be present if the node to which the message is being sent is configured to use the external business date functionality. If this is the case the field should contain the settlement date of the batch to which this message's totals will be applied. If this field is not present or the node is not configured to make use of the external business date functionality then the transaction totals are applied to the batch for the current business day.
38	Authorization ID response	Conditional	Should be included if available.
39	Response code	Mandatory	
44	Additional response data	Optional	
53	Security related control information	Optional	
59	Echo data	Mandatory	
127.1	Bitmap	Conditional	Must be present if any Postilion private data sub-field is set.
127.8	Retention data	Optional	

Message Content

Field	Description	Condition	Notes
127.9	Additional node data	Optional	
127.16	Address verification result	Conditional	Should be present when address verification is required with a transaction (e.g. a mail-order or airline transaction).
127.17	Cardholder information	Optional	
127.22	Structured data	Optional	
127.25	ICC data	Optional	
127.27	Card verification result	Optional	
127.31	Issuer network ID	Optional	
127.33	Extended transaction type	Optional	
127.37	Extended Response Code	Optional	
128	MAC extended	Conditional	Must be present if MAC'ing is enabled for the current message type.

Receive - Administration Advice (Repeat) (0620/0621)

Field	Description	Condition	Notes
2	Primary account number	Conditional	Should be present for a card initiated transaction (or a check verification transaction using the plastic card format) if Track 2 data is not present (i.e. manual PAN entry or mail order).
3	Processing code	Mandatory	
4	Amount, transaction	Optional	
5	Amount, settlement	Optional	
7	Transmission date and time	Mandatory	
9	Conversion rate, settlement	Optional	
11	System trace audit number	Mandatory	
12	Time, local transaction	Mandatory	
13	Date, local transaction	Mandatory	
14	Date, expiration	Conditional	Should be present for a card initiated transaction if track 2 data is not present (i.e. manual PAN entry or mail order), and expiry date checking is being performed by the

Message Content

Field	Description	Condition	Notes
			Transaction Manager. If this field is not present, the Transaction Manager will extract the expiry date from the track 2 data if it is present. If both this field and the expiry date subfield of track 2 are present, the Transaction Manager will enforce that they have the same value.
15	Date, settlement	Conditional	Should be present if the node to which the message is being sent is configured to use the external business date functionality. If this is the case the field should contain the settlement date of the batch to which this message's totals will be applied. If this field is not present or the node is not configured to make use of the external business date functionality then the transaction totals are applied to the batch for the current business day.
18	Merchant's type	Conditional	Should be present if a merchant was involved in the transaction.
22	POS entry mode	Mandatory	
23	Card sequence number	Conditional	Should be present for a card initiated transaction if Track 2 data is not present (i.e. manual PAN entry or mail order) and a card sequence number (issue number) was entered at the POS.
25	POS condition code	Mandatory	
28	Amount, transaction fee	Optional	
29	Amount, settlement fee	Optional	
32	Acquiring institution ID code	Optional	
33	Forwarding institution ID code	Optional	
35	Track 2 data	Conditional	Should be included if available.
37	Retrieval reference number	Optional	
39	Response Code	Optional	
40	Service restriction code	Optional	
41	Card acceptor terminal ID	Mandatory	

Message Content

Field	Description	Condition	Notes
42	Card acceptor ID code	Mandatory	
43	Card acceptor name location	Mandatory	
45	Track 1 data	Optional	
49	Currency code, transaction	Optional	
50	Currency code, settlement	Optional	
53	Security related control information	Conditional	In the case of a PIN change transaction, the Transaction Manager will attempt to change the PIN if it is configured to perform PIN verification for the Sink Node.
56	Message reason code	Conditional	Should be present in messages for <i>place hold on card</i> transactions where positions 1 and 2 of the Processing Code are "90". Otherwise optional.
59	Echo data	Optional	
90	Original data elements	Conditional	Should be present for a debit or credit adjustment transaction that was preceded by a request.
100	Receiving institution ID code	Conditional	Should be present if no card data is available (e.g. check verification using the MICR format). If this field is present in any initial message, it will be used to route the transaction.
102	Account identification 1	Conditional	Should be included if available.
123	POS data code	Mandatory	
127.1	Bitmap	Conditional	Must be present if any Postilion private data sub-field is set.
127.4	POS data	Optional	
127.8	Retention data	Optional	
127.9	Additional node data	Optional	
127.12	Terminal owner	Conditional	Should be included if available.
127.13	POS geographic data	Conditional	Should be included if available.
127.14	Sponsor bank	Conditional	Should be included if available.
127.22	Structured data	Optional	
127.25	ICC data	Conditional	Should be present if the PAN entry mode subfield of the POS Entry Mode field (field 22) is set to <i>Integrated circuit card (ICC)</i> . CVV can be

Message Content

Field	Description	Condition	Notes
			<i>checked</i> (05) or <i>Integrated circuit card (ICC)</i> . <i>CVV may not be checked</i> (95). Otherwise optional.
127.26	Original node	Conditional	Should be present if this is a linked transaction and the original message may have come from another source node.
127.27	Card verification result	Optional	
127.33	Extended transaction type	Optional	
127.34	Account type qualifier	Optional	
127.35	Acquirer network ID	Optional	
127.36	Customer Id	Optional	
127.37	Extended Response Code	Optional	
127.40	Transaction reference	Optional	Original reference subfields of field 127.40 should be present if the transaction is linked to the original transaction and field 127.11 - Original Key is not present.
127.41	Originating remote address	Optional	
127.59	Payment Token Identifier	Conditional	Should be included if available.
128	MAX extended	Conditional	Must be present if MAC'ing is enabled for the current message type.

Receive – Administration Advice Response (0630)

Field	Description	Condition	Notes
15	Date, settlement	Conditional	Should be present if the node to which the message is being sent is configured to use the external business date functionality. If this is the case the field should contain the settlement date of the batch to which this message's totals will be applied. If this field is not present or the node is not configured to make use of the external business date functionality then the transaction totals are applied to the batch for the current business day.
39	Response code	Mandatory	
59	Echo data	Mandatory	
128	MAX extended	Conditional	Must be present if MAC'ing is enabled for the current message type.

Message Content

Message Content

Receive – Network Management Request (Repeat) (0800/0801)

Field	Description	Condition	Notes
7	Transmission date and time	Mandatory	
11	System trace audit number	Mandatory	
12	Time, local transaction	Mandatory	
13	Date, local transaction	Mandatory	
70	Network management information code	Mandatory	
128	MAX extended	Conditional	Must be present if MAC'ing is enabled for the current message type.
127.2	Switch Key	Conditional	Must be present if the Network Management Information Code is any other value than "001" (Sign on), "002" (Sign off), "301" (Echo test), "101" (Key Change), "130" (EMV Download), "132" (Status Request), "133" (EMV Completion), "160" (MAC Key Exchange), "161" (Passthrough Key Exchange), "162" (Passthrough MAC Key Exchange)

Receive – Network Management Response (0810)

Field	Description	Condition	Notes
39	Response code	Mandatory	
53	Security related control information	Conditional	Must be present in an approved key management transaction if the "Crypto Field 125" user parameter for the interchange is set to "0". Contains the encrypted value and check digits of the PIN key used for encryption of PIN blocks from the Acquirer.
70	Network management information code	Mandatory	
125	Network management information	Conditional	Must be present in an approved key management transaction if the "Crypto Field 125" user parameter for the interchange is set to "1". Contains the encrypted value and check digits of the PIN key used for encryption of PIN blocks from the Acquirer.
127.22	Structured Data Tag "Postilion:KeyExchangeData"	Conditional	Must be present if the encryption key to be exchanged is in TR31 format.
128	MAX extended	Conditional	Must be present if MAC'ing is enabled for the current message type.

Message Content

Field	Description	Condition	Notes
127.2	Switch Key	Conditional	Must be present if the Network Management Information Code is any other value than "001" (Sign on), "002" (Sign off), "301" (Echo test), "101" (Key Change), "130" (EMV Download), "132" (Status Request), "133" (EMV Completion), "160" (MAC Key Exchange), "161" (Passthrough Key Exchange), "162" (Passthrough MAC Key Exchange)

Receive – Authorization Notification Advice Response (9130)

Field	Description	Condition	Notes
39	Response code	Mandatory	
59	Echo data	Mandatory	
128	MAX extended	Conditional	Must be present if MAC'ing is enabled for the current message type.

Receive – Transaction Notification Advice Response (9230)

Field	Description	Condition	Notes
39	Response code	Mandatory	
59	Echo data	Mandatory	
128	MAX extended	Conditional	Must be present if MAC'ing is enabled for the current message type.

Receive – Acquirer File Update Notification Response (9330)

Field	Description	Condition	Notes
39	Response code	Mandatory	
59	Echo data	Mandatory	
127.1	Bitmap	Conditional	Must be present if any Postilion private data sub-field is set.
127.22	Structured data	Optional	
128	MAX extended	Conditional	Must be present if MAC'ing is enabled for the current message type.

Message Content

Receive – Reversal Notification Advice Response (9430)

Field	Description	Condition	Notes
39	Response code	Mandatory	
59	Echo data	Mandatory	
128	MAX extended	Conditional	Must be present if MAC'ing is enabled for the current message type.

Receive – Administration Notification Advice Response (9630)

Field	Description	Condition	Notes
39	Response code	Mandatory	
59	Echo data	Mandatory	
128	MAX extended	Conditional	Must be present if MAC'ing is enabled for the current message type.

Receive – Format Error Response (0xx0)

The message type of the format error message will always be a response to the original message. E.g. if the original message was an *Authorization Request* (0100) the format error message will be an *Authorization Request Response* (0110). If the original message was an *Administrative Advice* (0620) then the format error message will be an *Administrative Advice Response* (0630).

Field	Description	Condition	Notes
39	Response code	Mandatory	
59	Echo data	Mandatory	
128	MAX extended	Conditional	Must be present if MAC'ing is enabled for the current message type.

Messages from PostBridge

Send - Authorization Request (Repeat) (0100/0101)

Field	Description	Condition	Notes
2	Primary account number	Conditional	If this information was provided in the message received by the Source Node (in this field or as part of track 2 data), then this field will be present. Present for all card initiated transactions (including check guarantee or check verification transactions that use the plastic card account format).
3	Processing code	Always sent	
4	Amount, transaction	Always sent	
5	Amount, settlement	Conditional	The amount requested in the currency of the Sink Node. Only sent if the Transaction Manager performs currency conversion for the Source Node and the transaction (i.e. local) currency differs from the settlement currency. If the Transaction Manager does not perform currency conversion for the Source Node, the Source Node returns the settlement amounts, currencies, etc. in the subsequent response.
7	Transmission date and time	Always sent	
9	Conversion rate, settlement	Conditional	Present if the Transaction Manager performs currency conversion for the Node the message is sent to and the transaction (i.e. local) currency differs from the settlement currency.
11	System trace audit number	Always sent	
12	Time, local transaction	Always sent	
13	Date, local transaction	Always sent	
14	Date, expiration	Conditional	If this information was provided in the message received by the Source Node (in this field or as part of track 2 data), then this field will be present. Present for all card initiated transactions (including check guarantee or check verification

Message Content

Field	Description	Condition	Notes
			transactions that use the plastic card account format).
15	Date, settlement	Always sent	
16	Date, conversion	Conditional	Present if the Transaction Manager performs currency conversion for the Node the message is sent to and the transaction (i.e. local) currency differs from the settlement currency.
18	Merchant's type	Conditional	Included if present in the initial message from the Source Node.
22	POS entry mode	Always sent	
23	Card sequence number	Conditional	Included if present in the initial message from the Source Node or if it could be retrieved from Track 2 data.
25	POS condition code	Always sent	
26	POS PIN capture code	Conditional	Present if a PIN was entered at the Point of Service.
27	Authorization ID response length	Conditional	Included if present in the initial message from the Source Node.
28	Amount, transaction fee	Always sent	
29	Amount, settlement fee	Conditional	Present if the Transaction Manager performs currency conversion for the Node the message is sent to and the transaction (i.e. local) currency differs from the settlement currency.
30	Amount, transaction processing fee	Always sent	
31	Amount, settle processing fee	Conditional	Present if the Transaction Manager performs currency conversion for the Node the message is sent to and the transaction (i.e. local) currency differs from the settlement currency.
32	Acquiring institution ID code	Conditional	Included if present in the initial message from the Source Node or if configured in the node configuration for the Sink Node.
33	Forwarding institution ID code	Conditional	Included if present in the initial message from the Source Node or if configured in the node configuration for the Sink Node.

Message Content

Field	Description	Condition	Notes
35	Track 2 data	Conditional	Present if Track 2 was entered at the Point of Service.
37	Retrieval reference number	Always sent	
40	Service restriction code	Conditional	Included if present in the initial message from the Source Node.
41	Card acceptor terminal ID	Always sent	
42	Card acceptor ID code	Always sent	
43	Card acceptor name location	Always sent	
45	Track 1 data	Conditional	Included if present in the initial message from the Source Node.
49	Currency code, transaction	Always sent	
50	Currency code, settlement	Conditional	Present if the Transaction Manager performs currency conversion for the Node the message is sent to and the transaction (i.e. local) currency differs from the settlement currency.
52	PIN data	Conditional	Present if a PIN was entered at the Point of Service.
53	Security related control information	Conditional	Present if a PIN was entered at the Point of Service and the DUKPT PIN encryption scheme is used.
54	Additional amounts	Conditional	Contains <i>amount cash</i> if the transaction is a goods and services with cash back transaction.
56	Message reason code	Always sent	
57	Authorization life cycle	Conditional	Included if present in the initial message from the Source Node.
59	Echo data	Always sent	
67	Extended payment code	Conditional	Included if the transaction is a budget transaction.
98	Payee	Conditional	Present for Third-party payments (inter-bank transfers) and linked bill payments.

Message Content

Field	Description	Condition	Notes
100	Receiving institution ID code	Conditional	Included if present in the initial message from the Source Node.
102	Account identification 1	Conditional	Included if present in the response message from the Source Node or if Transaction Manager provides issuer services and the transaction is a debit, inquiry, payment or transfer.
103	Account identification 2	Conditional	Included if present in the response message from the Source Node or if Transaction Manager provides issuer services and the transaction is a debit, inquiry, payment or transfer.
123	POS data code	Always sent	
127.1	Bitmap	Always sent	
127.2	Switch key	Always sent	
127.3	Routing information	Always sent	
127.4	POS data	Conditional	Included if present in the initial message from the Source Node.
127.5	Service station data	Conditional	Included if present in the initial message from the Source Node.
127.7	Check data	Conditional	Included if a check guarantee or a check verification transaction.
127.9	Additional node data	Conditional	Included if present in the initial message from the Source Node.
127.10	CVV2	Conditional	Included if present in the initial message from the Source Node.
127.11	Original key	Conditional	If the corresponding message from the Source Node contained field 127.11, then Transaction Manager will locate the Sink Node equivalent value and send it in field 127.11.
127.12	Terminal owner	Conditional	Included if present in the initial message from the Source Node.
127.13	POS geographic data	Conditional	Included if present in the initial message from the Source Node.
127.14	Sponsor bank	Conditional	Included if present in the initial message from the Source Node.

Message Content

Field	Description	Condition	Notes
127.15	Address verification data	Conditional	Included if present in the initial message from the Source Node.
127.16	Address verification result	Conditional	Included if present in the initial message from the Source Node.
127.18	Validation data	Conditional	Included if present in the initial message from the Source Node.
127.19	Bank details	Conditional	Present for third-party payments (inter-bank transfers).
127.20	Originator/Authorizer settlement date	Always sent	
127.22	Structured data	Conditional	Included if present in the initial message from the Source Node.
127.23	Payee name and address	Conditional	Included if present in the initial message from the Source Node.
127.24	Payer account	Conditional	Included if present in the initial message from the Source Node.
127.25	ICC data	Conditional	Included if present in the initial message from the Source Node.
127.26	Original node	Conditional	Present if an original transaction could be found.
127.27	Card verification result	Conditional	This field is set up if card verification is performed. If card verification is not performed then this field is included if it was present in the received message.
127.28	American express card identifier (CID)	Conditional	Included if present in the initial message from the Source Node.
127.29	3D secure data	Conditional	Included if present in the initial message from the Source Node.
127.30	3D Secure Result	Conditional	Included if present in the initial message from the Source Node.
127.33	Extended transaction type	Conditional	Included if present in the initial message from the Source Node.
127.34	Account type qualifier	Conditional	Included if present in the initial message from the Source Node.
127.35	Acquirer network ID	Conditional	Included if present in the initial message from the Source Node.
127.36	Customer Id	Conditional	Included if present in the initial message from the Source Node.

Message Content

Field	Description	Condition	Notes
127.38	Additional POS Data Code	Conditional	Included if present in the initial message from the Source Node.
127.40	Transaction reference	Conditional	Included if present in the initial message from the Source Node.
127.43	Routing Network ID	Conditional	
127.44	Extended Card Acceptor Terminal ID	Conditional	
127.45	Extended Card Acceptor ID Code	Conditional	
127.46	Original Card Acceptor Terminal ID	Conditional	
127.47	Original Card Acceptor ID Code	Conditional	
127.48	Dynamic Currency Conversion (DCC) status code	Conditional	
127.49	Card Acceptor Additional Data	Conditional	
127.59	Payment Token Identifier	Conditional	Included if present in the initial message from the Source Node.
128	MAX extended	Conditional	Present if MAC'ing is enabled for the current message type.

Message Content

Send – Authorization Request Response (0110)

Field	Description	Condition	Notes
2	Primary account number	Conditional	If this information was provided in the message received by the Source Node (in this field or as part of track 2 data), then this field will be present. Present for all card initiated transactions (including check guarantee or check verification transactions that use the plastic card account format).
3	Processing code	Always sent	
4	Amount, transaction	Always sent	
5	Amount, settlement	Conditional	Present if the transaction (i.e. local) currency differs from the settlement currency.
7	Transmission date and time	Always sent	
9	Conversion rate, settlement	Conditional	Present if the transaction (i.e. local) currency differs from the settlement currency.
11	System trace audit number	Always sent	
12	Time, local transaction	Always sent	
13	Date, local transaction	Always sent	
14	Date, expiration	Always sent	
15	Date, settlement	Always sent	
16	Date, conversion	Conditional	Present if the transaction (i.e. local) currency differs from the settlement currency.
18	Merchant's type	Conditional	Echoed from original request.
22	POS entry mode	Always sent	
23	Card sequence number	Conditional	Included if present in the initial message from the Source Node or if it could be retrieved from Track 2 data.

Message Content

Field	Description	Condition	Notes
25	POS condition code	Always sent	
28	Amount, transaction fee	Always sent	
29	Amount, settlement fee	Conditional	Present if the transaction (i.e. local) currency differs from the settlement currency.
30	Amount, transaction processing fee	Always sent	
31	Amount, settle processing fee	Conditional	Present if the transaction (i.e. local) currency differs from the settlement currency.
32	Acquiring institution ID code	Conditional	Included if present in the initial message from the Source Node.
33	Forwarding institution ID code	Conditional	Included if present in the initial message from the Source Node.
35	Track 2 data	Conditional	Present if Track 2 was entered at the Point of Service.
37	Retrieval reference number	Always sent	
38	Authorization ID response	Conditional	From authorizer (or from stand-in authorization).
39	Response code	Always sent	
40	Service restriction code	Conditional	Included if present in the initial message from the Source Node.
41	Card acceptor terminal ID	Always sent	
42	Card acceptor ID code	Always sent	
43	Card acceptor name location	Always sent	
44	Additional response data	Conditional	From authorizer (or from stand-in authorization).
45	Track 1 data	Conditional	Included if present in the initial message from the Source Node.
48	Additional response data	Conditional	Present for approved linked account inquiries.
49	Currency code, transaction	Always sent	

Message Content

Field	Description	Condition	Notes
50	Currency code, settlement	Conditional	Present if the transaction (i.e. local) currency differs from the settlement currency.
54	Additional amounts	Conditional	Contains the <i>approved amount</i> . If the transaction is a goods and services with cash back transaction <i>amount cash</i> will also be present.
58	Authorizing agent ID code	Conditional	Included if the authorizer and the card issuer differs.
59	Echo data	Conditional	Echoed from original request.
67	Extended payment code	Conditional	Echoed from original request.
98	Payee	Conditional	Present for Third-party payments (inter-bank transfers) and linked bill payments.
100	Receiving institution ID code	Conditional	Included if present in the initial message from the Source Node.
102	Account identification 1	Conditional	Included if present in the response message from the Sink Node or if Transaction Manager provides issuer services and the transaction is a debit, inquiry, payment or transfer.
103	Account identification 2	Conditional	Included if present in the response message from the Sink Node or if Transaction Manager provides issuer services and the transaction is a debit, inquiry, payment or transfer.
123	POS data code	Always sent	
127.1	Bitmap	Always sent	
127.3	Routing information	Always sent	
127.4	POS data	Conditional	Echoed from original request.
127.5	Service station data	Conditional	Echoed from original request.
127.6	Authorization profile	Always sent	
127.7	Check data	Conditional	Included if a check guarantee or a check verification transaction.
127.9	Additional node data	Conditional	From authorizer (Sink Node).

Message Content

Field	Description	Condition	Notes
127.12	Terminal owner	Conditional	Included if present in the initial message from the Source Node.
127.13	POS geographic data	Conditional	Included if present in the initial message from the Source Node.
127.14	Sponsor bank	Conditional	Included if present in the initial message from the Source Node.
127.15	Address verification data	Conditional	Included if present in the initial message from the Source Node.
127.16	Address verification result	Conditional	From authorizer (Sink Node).
127.17	Cardholder information	Conditional	From authorizer (or from stand-in authorization).
127.19	Bank details	Conditional	Included if present in the initial message from the Source Node.
127.20	Originator/Authorizer settlement date	Always sent	
127.22	Structured data	Conditional	Included if present in the response message received from the Sink Node.
127.23	Payee name and address	Conditional	Included if present in the initial message from the Source Node.
127.24	Payer account	Conditional	Included if present in the initial message from the Source Node.
127.25	ICC data	Conditional	Included if present in the response message received from the Sink Node the Sink Node is configured to do EMV authentication If the Sink Node is configured to do EMV authentication then this field will contain the IccResponse Issuer Authentication Data subfield.
127.27	Card verification result	Conditional	This field is set up if card verification is performed. If card verification is not performed then this field is included if it was present in the received message.
127.30	3D secure result	Conditional	From authorizer (Sink Node).
127.31	Issuer network ID	Conditional	From authorizer (Sink Node).
127.32	UCAF data	Conditional	From authorizer (Sink Node).

Message Content

Field	Description	Condition	Notes
127.33	Extended transaction type	Conditional	Included if present in the initial message from the Source Node or if received in the response message from the Sink Node.
127.37	Extended Response Code	Optional	
127.39	Original response code	Conditional	Included if a duplicate transaction was received, and Transaction Manager is configured to respond to duplicate transactions.
127.41	Originating remote address	Conditional	Echoed from the request/reversal/advice. This field will only be included in a response to a linked/duplicate message if the linked/duplicate message contains a value for the field. That is, the value from the original message is not used in the absence of the field in the linked/duplicate message.
127.42	Transaction number	Conditional	Sometimes this field is not sent when the transaction has not been stored in the database. This can happen for example if: format errors occurred during transaction processing, or queue filtering is being applied to transaction processing, or invalid duplicate transactions are processed, or a response is being sent for an advice queued to the active/active partner.
127.48	Dynamic Currency Conversion (DCC) status code	Conditional	
128	MAX extended	Conditional	Present if MAC'ing is enabled for the current message type.

Send - Authorization Advice (Repeat) (0120/0121)

Field	Description	Condition	Notes
2	Primary account number	Conditional	If this information was provided in the message received by the Source Node (in this field or as part of track 2 data), then this field will be present. Present for all card initiated transactions (including check guarantee or check verification transactions that use the plastic card account format).
3	Processing code	Always sent	

Message Content

Field	Description	Condition	Notes
4	Amount, transaction	Always sent	
5	Amount, settlement	Conditional	The amount requested in the currency of the Sink Node. Only sent if the Transaction Manager performs currency conversion for the Source Node and the transaction (i.e. local) currency differs from the settlement currency. If the Transaction Manager does not perform currency conversion for the Source Node, the Source Node returns the settlement amounts, currencies, etc. in the subsequent response.
7	Transmission date and time	Always sent	
9	Conversion rate, settlement	Conditional	Present if the Transaction Manager performs currency conversion for the Node the message is sent to and the transaction (i.e. local) currency differs from the settlement currency.
11	System trace audit number	Always sent	
12	Time, local transaction	Always sent	
13	Date, local transaction	Always sent	
14	Date, expiration	Always sent	
15	Date, settlement	Always sent	
16	Date, conversion	Conditional	Present if the Transaction Manager performs currency conversion for the Node the message is sent to and the transaction (i.e. local) currency differs from the settlement currency.
18	Merchant's type	Conditional	Included if present in the initial message from the Source Node.
22	POS entry mode	Always sent	
23	Card sequence number	Conditional	Included if present in the initial message from the Source Node or if it could be retrieved from Track 2 data.
25	POS condition code	Always sent	

Message Content

Field	Description	Condition	Notes
28	Amount, transaction fee	Always sent	
29	Amount, settlement fee	Conditional	Present if the Transaction Manager performs currency conversion for the Node the message is sent to and the transaction (i.e. local) currency differs from the settlement currency.
30	Amount, transaction processing fee	Always sent	
31	Amount, settle processing fee	Conditional	Present if the Transaction Manager performs currency conversion for the Node the message is sent to and the transaction (i.e. local) currency differs from the settlement currency.
32	Acquiring institution ID code	Conditional	Included if present in the initial message from the Source Node or if configured in the node configuration for the Sink Node.
33	Forwarding institution ID code	Conditional	Included if present in the initial message from the Source Node or if configured in the node configuration for the Sink Node.
35	Track 2 data	Conditional	Present if Track 2 was entered at the Point of Service.
37	Retrieval reference number	Always sent	
38	Authorization ID response	Conditional	From authorizer (or from stand-in authorization).
39	Response Code	Always sent	
40	Service restriction code	Conditional	Included if present in the initial message from the Source Node.
41	Card acceptor terminal ID	Always sent	
42	Card acceptor ID code	Always sent	
43	Card acceptor name location	Always sent	
44	Additional response data	Conditional	From authorizer (or from stand-in authorization).
45	Track 1 data	Conditional	Included if present in the initial message from the Source Node.

Message Content

Field	Description	Condition	Notes
49	Currency code, transaction	Always sent	
50	Currency code, settlement	Conditional	Present if the Transaction Manager performs currency conversion for the Node the message is sent to and the transaction (i.e. local) currency differs from the settlement currency.
54	Additional amounts	Conditional	Contains <i>amount cash</i> if the transaction is a goods and services with cash back transaction.
56	Message reason code	Always sent	
58	Authorizing agent ID code	Conditional	Included if the authorizer and the card issuer differs.
59	Echo data	Always sent	
67	Extended payment code	Conditional	Included if the transaction is a budget transaction.
90	Original data elements	Conditional	Present if supplied in the message from the source or constructed by Transaction Manager from the contents of the original message, if it could be retrieved.
95	Replacement Amounts	Always sent	
98	Payee	Conditional	Present for Third-party payments (inter-bank transfers) and linked bill payments.
100	Receiving institution ID code	Conditional	Included if present in the initial message from the Source Node.
102	Account identification 1	Conditional	Included if present in the response message from the Source Node or if Transaction Manager provides issuer services and the transaction is a debit, inquiry, payment or transfer.
103	Account identification 2	Conditional	Included if present in the response message from the Source Node or if Transaction Manager provides issuer services and the transaction is a debit, inquiry, payment or transfer.
123	POS data code	Always sent	
127.1	Bitmap	Always sent	
127.2	Switch key	Always sent	

Message Content

Field	Description	Condition	Notes
127.3	Routing information	Always sent	
127.4	POS data	Conditional	Echoed from original request.
127.5	Service station data	Conditional	Echoed from original request.
127.6	Authorization profile	Always sent	
127.7	Check data	Conditional	Included if a check guarantee or a check verification transaction.
127.9	Additional node data	Conditional	Included if present in any prior message, associated with the transaction, from Source Node.
127.11	Original key	Conditional	If the corresponding message from the Source Node contained field 127.11, then Transaction Manager will locate the Sink Node equivalent value and send it in field 127.11.
127.12	Terminal owner	Conditional	Included if present in the initial message from the Source Node.
127.13	POS geographic data	Conditional	Included if present in the initial message from the Source Node.
127.14	Sponsor bank	Conditional	Included if present in the initial message from the Source Node.
127.19	Bank details	Conditional	Present for third-party payments (inter-bank transfers).
127.20	Originator/Authorizer settlement date	Always sent	
127.22	Structured data	Conditional	Included if present in the initial message from the Source Node.
127.23	Payee name and address	Conditional	Included if present in the initial message from the Source Node.
127.24	Payer account	Conditional	Included if present in the initial message from the Source Node.
127.25	ICC data	Conditional	Included if present in the initial message from the Source Node.
127.26	Original node	Conditional	Present if an original transaction could be found.
127.27	Card verification result	Conditional	This field is set up if card verification is performed. If card verification is not performed

Message Content

Field	Description	Condition	Notes
			then this field is included if it was present in the received message.
127.30	3D Secure Result	Conditional	Included if present in the initial message from the Source Node.
127.32	UCAF data	Conditional	Included if present in the initial message from the Source Node.
127.33	Extended transaction type	Conditional	Included if present in the initial message from the Source Node.
127.34	Account type qualifier	Conditional	Included if present in the initial message from the Source Node.
127.35	Acquirer network ID	Conditional	Included if present in the initial message from the Source Node.
127.36	Customer Id	Conditional	Included if present in the initial message from the Source Node.
127.37	Extended Response Code	Optional	
127.40	Transaction reference	Conditional	Included if present in the initial message from the Source Node.
127.43	Routing Network ID	Conditional	
127.44	Extended Card Acceptor Terminal ID	Conditional	
127.45	Extended Card Acceptor ID Code	Conditional	
127.46	Original Card Acceptor Terminal ID	Conditional	
127.47	Original Card Acceptor ID Code	Conditional	
127.48	Dynamic Currency Conversion (DCC) status code	Conditional	
127.49	Card Acceptor Additional Data	Conditional	
127.59	Payment Token Identifier	Conditional	Included if present in the initial message from the Source Node.
128	MAX extended	Conditional	Present if MAC'ing is enabled for the current message type.

Message Content

Send - Authorization Advice Response (0130)

Field	Description	Condition	Notes
2	Primary account number	Conditional	If this information was provided in the message received by the Source Node (in this field or as part of track 2 data), then this field will be present. Present for all card initiated transactions (including check guarantee or check verification transactions that use the plastic card account format).
3	Processing code	Always sent	
4	Amount, transaction	Always sent	
5	Amount, settlement	Conditional	Present if the transaction (i.e. local) currency differs from the settlement currency.
7	Transmission date and time	Always sent	
9	Conversion rate, settlement	Conditional	Present if the transaction (i.e. local) currency differs from the settlement currency.
11	System trace audit number	Always sent	
12	Time, local transaction	Always sent	
13	Date, local transaction	Always sent	
14	Date, expiration	Always sent	
15	Date, settlement	Always sent	
16	Date, conversion	Conditional	Present if the transaction (i.e. local) currency differs from the settlement currency.
18	Merchant's type	Conditional	Echoed from original advice.
22	POS entry mode	Always sent	
23	Card sequence number	Conditional	Included if present in the initial message from the Source Node or if it could be retrieved from Track 2 data.

Message Content

Field	Description	Condition	Notes
25	POS condition code	Always sent	
28	Amount, transaction fee	Always sent	
29	Amount, settlement fee	Conditional	Present if the transaction (i.e. local) currency differs from the settlement currency.
30	Amount, transaction processing fee	Always sent	
31	Amount, settle processing fee	Conditional	Present if the transaction (i.e. local) currency differs from the settlement currency.
32	Acquiring institution ID code	Conditional	Included if present in the initial message from the Source Node.
33	Forwarding institution ID code	Conditional	Included if present in the initial message from the Source Node.
35	Track 2 data	Conditional	Present if Track 2 was entered at the Point of Service.
37	Retrieval reference number	Always sent	
38	Authorization ID response	Conditional	From authorizer (or from stand-in authorization).
39	Response code	Always sent	
40	Service restriction code	Conditional	Included if present in the initial message from the Source Node.
41	Card acceptor terminal ID	Always sent	
42	Card acceptor ID code	Always sent	
43	Card acceptor name location	Always sent	
44	Additional response data	Conditional	From authorizer (or from stand-in authorization).
45	Track 1 data	Conditional	Included if present in the initial message from the Source Node.
49	Currency code, transaction	Always sent	

Message Content

Field	Description	Condition	Notes
50	Currency code, settlement	Conditional	Present if the transaction (i.e. local) currency differs from the settlement currency.
54	Additional amounts	Conditional	Contains the <i>approved amount</i> . If the transaction is a goods and services with cash back transaction <i>amount cash</i> will also be present.
58	Authorizing agent ID code	Conditional	Included if the authorizer and the card issuer differs.
59	Echo data	Conditional	Echoed from original advice.
67	Extended payment code	Conditional	Echoed from original advice.
90	Original data elements	Conditional	Present if supplied in the message from the source or constructed by Transaction Manager from the contents of the original message, if it could be retrieved.
95	Replacement amounts	Always sent	
98	Payee	Conditional	Present for Third-party payments (inter-bank transfers) and linked bill payments.
100	Receiving institution ID code	Conditional	Included if present in the initial message from the Source Node.
102	Account identification 1	Conditional	Included if present in the response message from the Sink Node or if Transaction Manager provides issuer services and the transaction is a debit, inquiry, payment or transfer.
103	Account identification 2	Conditional	Included if present in the response message from the Sink Node or if Transaction Manager provides issuer services and the transaction is a debit, inquiry, payment or transfer.
123	POS data code	Always sent	
127.1	Bitmap	Always sent	
127.3	Routing information	Always sent	
127.4	POS data	Conditional	Echoed from original advice.
127.5	Service station data	Conditional	Echoed from original advice.

Message Content

Field	Description	Condition	Notes
127.6	Authorization profile	Always sent	
127.7	Check data	Conditional	Included if a check guarantee or a check verification transaction.
127.12	Terminal owner	Conditional	Included if present in the initial message from the Source Node.
127.13	POS geographic data	Conditional	Included if present in the initial message from the Source Node.
127.14	Sponsor bank	Conditional	Included if present in the initial message from the Source Node.
127.19	Bank details	Conditional	Included if present in the initial message from the Source Node.
127.20	Originator/Authorizer settlement date	Always sent	
127.23	Payee name and address	Conditional	Included if present in the initial message from the Source Node.
127.24	Payer account	Conditional	Included if present in the initial message from the Source Node.
127.33	Extended transaction type	Conditional	Included if present in the initial message from the Source Node or if received in the response message from the Sink Node.
127.37	Extended Response Code	Optional	
127.39	Original response code	Conditional	Included if a duplicate transaction was received, and Transaction Manager is configured to respond to duplicate transactions.
127.41	Originating remote address	Conditional	Echoed from the request/reversal/advice. This field will only be included in a response to a linked/duplicate message if the linked/duplicate message contains a value for the field. That is, the value from the original message is not used in the absence of the field in the linked/duplicate message.
127.42	Transaction number	Conditional	Sometimes this field is not sent when the transaction has not been stored in the database. This can happen for example if: format errors occurred during transaction processing, or queue filtering is being applied to transaction processing, or invalid duplicate transactions are processed, or

Message Content

Field	Description	Condition	Notes
			a response is being sent for an advice queued to the active/active partner.
127.48	Dynamic Currency Conversion (DCC) status code		
128	MAX extended	Conditional	Present if MAC'ing is enabled for the current message type.

Send - Transaction Request (Repeat) (0200/0201)

Field	Description	Condition	Notes
2	Primary account number	Conditional	If this information was provided in the message received by the Source Node (in this field or as part of track 2 data), then this field will be present. Present for all card initiated transactions (including check guarantee or check verification transactions that use the plastic card account format).
3	Processing code	Always sent	
4	Amount, transaction	Always sent	
5	Amount, settlement	Conditional	The amount requested in the currency of the Sink Node. Only sent if the Transaction Manager performs currency conversion for the Source Node and the transaction (i.e. local) currency differs from the settlement currency. If the Transaction Manager does not perform currency conversion for the Source Node, the Source Node returns the settlement amounts, currencies, etc. in the subsequent response.
7	Transmission date and time	Always sent	
9	Conversion rate, settlement	Conditional	Present if the Transaction Manager performs currency conversion for the Node the message is sent to and the transaction (i.e. local) currency differs from the settlement currency.
11	System trace audit number	Always sent	
12	Time, local transaction	Always sent	

Message Content

Field	Description	Condition	Notes
13	Date, local transaction	Always sent	
14	Date, expiration	Always sent	
15	Date, settlement	Always sent	
16	Date, conversion	Conditional	Present if the Transaction Manager performs currency conversion for the Node the message is sent to and the transaction (i.e. local) currency differs from the settlement currency.
18	Merchant's type	Conditional	Included if present in the initial message from the Source Node.
22	POS entry mode	Always sent	
23	Card sequence number	Conditional	Included if present in the initial message from the Source Node or if it could be retrieved from Track 2 data.
25	POS condition code	Always sent	
26	POS PIN capture code	Conditional	Present if a PIN was entered at the Point of Service.
27	Authorization ID response length	Conditional	Included if present in the initial message from the Source Node.
28	Amount, transaction fee	Always sent	
29	Amount, settlement fee	Conditional	Present if the Transaction Manager performs currency conversion for the Node the message is sent to and the transaction (i.e. local) currency differs from the settlement currency.
30	Amount, transaction processing fee	Always sent	
31	Amount, settle processing fee	Conditional	Present if the Transaction Manager performs currency conversion for the Node the message is sent to and the transaction (i.e. local) currency differs from the settlement currency.
32	Acquiring institution ID code	Conditional	Included if present in the initial message from the Source Node or if configured in the node configuration for the Sink Node.

Message Content

Field	Description	Condition	Notes
33	Forwarding institution ID code	Conditional	Included if present in the initial message from the Source Node or if configured in the node configuration for the Sink Node.
35	Track 2 data	Conditional	Present if Track 2 was entered at the Point of Service.
37	Retrieval reference number	Always sent	
40	Service restriction code	Conditional	Included if present in the initial message from the Source Node.
41	Card acceptor terminal ID	Always sent	
42	Card acceptor ID code	Always sent	
43	Card acceptor name location	Always sent	
45	Track 1 data	Conditional	Included if present in the initial message from the Source Node.
49	Currency code, transaction	Always sent	
50	Currency code, settlement	Conditional	Present if the Transaction Manager performs currency conversion for the Node the message is sent to and the transaction (i.e. local) currency differs from the settlement currency.
52	PIN data	Conditional	Present if a PIN was entered at the Point of Service.
53	Security related control information	Conditional	Present if a PIN was entered at the Point of Service and the DUKPT PIN encryption scheme is used.
54	Additional amounts	Conditional	Contains <i>amount cash</i> if the transaction is a goods and services with cash back transaction.
56	Message reason code	Always sent	
59	Echo data	Always sent	
67	Extended payment code	Conditional	Included if the transaction is a budget transaction.
98	Payee	Conditional	Present for Third-party payments (inter-bank transfers) and linked bill payments.

Message Content

Field	Description	Condition	Notes
100	Receiving institution ID code	Conditional	Included if present in the initial message from the Source Node.
102	Account identification 1	Conditional	Included if present in the response message from the Source Node or if Transaction Manager provides issuer services and the transaction is a debit, inquiry, payment or transfer.
103	Account identification 2	Conditional	Included if present in the response message from the Source Node or if Transaction Manager provides issuer services and the transaction is a debit, inquiry, payment or transfer.
123	POS data code	Always sent	
127.1	Bitmap	Always sent	
127.2	Switch key	Always sent	
127.3	Routing information	Always sent	
127.4	POS data	Conditional	Included if present in the initial message from the Source Node.
127.5	Service station data	Conditional	Included if present in the initial message from the Source Node.
127.7	Check data	Conditional	Included if a check guarantee or a check verification transaction.
127.9	Additional node data	Conditional	Included if present in the initial message from the Source Node.
127.10	CVV2	Conditional	Included if present in the initial message from the Source Node.
127.11	Original key	Conditional	If the corresponding message from the Source Node contained field 127.11, then Transaction Manager will locate the Sink Node equivalent value and send it in field 127.11.
127.12	Terminal owner	Conditional	Included if present in the initial message from the Source Node.
127.13	POS geographic data	Conditional	Included if present in the initial message from the Source Node.
127.14	Sponsor bank	Conditional	Included if present in the initial message from the Source Node.

Message Content

Field	Description	Condition	Notes
127.15	Address verification data	Conditional	Included if present in the initial message from the Source Node.
127.16	Address verification result	Conditional	Included if present in the initial message from the Source Node.
127.18	Validation data	Conditional	Included if present in the initial message from the Source Node.
127.19	Bank details	Conditional	Present for third-party payments (inter-bank transfers).
127.20	Originator/Authorizer settlement date	Always sent	
127.22	Structured data	Conditional	Included if present in the initial message from the Source Node.
127.23	Payee name and address	Conditional	Included if present in the initial message from the Source Node.
127.24	Payer account	Conditional	Included if present in the initial message from the Source Node.
127.25	ICC data	Conditional	Included if present in the initial message from the Source Node.
127.26	Original node	Conditional	Present if an original transaction could be found.
127.27	Card verification result	Conditional	This field is set up if card verification is performed. If card verification is not performed then this field is included if it was present in the received message.
127.28	American express card identifier (CID)	Conditional	Included if present in the initial message from the Source Node.
127.29	3D secure data	Conditional	Included if present in the initial message from the Source Node.
127.30	3D Secure Result	Conditional	Included if present in the initial message from the Source Node.
127.32	UCAF data	Conditional	Included if present in the initial message from the Source Node.
127.33	Extended transaction type	Conditional	Included if present in the initial message from the Source Node.
127.34	Account type qualifier	Conditional	Included if present in the initial message from the Source Node.
127.35	Acquirer network ID	Conditional	Included if present in the initial message from the Source Node.

Message Content

Field	Description	Condition	Notes
127.36	Customer Id	Conditional	Included if present in the initial message from the Source Node.
127.38	Additional POS Data Code	Conditional	Included if present in the initial message from the Source Node.
127.40	Transaction reference	Conditional	Included if present in the initial message from the Source Node.
127.43	Routing Network ID	Conditional	
127.44	Extended Card Acceptor Terminal ID	Conditional	
127.45	Extended Card Acceptor ID Code	Conditional	
127.46	Original Card Acceptor Terminal ID	Conditional	
127.47	Original Card Acceptor ID Code	Conditional	
127.48	Dynamic Currency Conversion (DCC) status code	Conditional	
127.49	Card Acceptor Additional Data	Conditional	
127.59	Payment Token Identifier	Conditional	Included if present in the initial message from the Source Node.
128	MAX extended	Conditional	Present if MAC'ing is enabled for the current message type.

Send – Transaction Completion (Repeat) (0202)

Field	Description	Condition	Notes
2	Primary account number	Conditional	If this information was provided in the message received by the Source Node (in this field or as part of track 2 data), then this field will be present. Present for all card initiated transactions (including check guarantee or check verification transactions that use the plastic card account format).
3	Processing code	Always sent	

Message Content

Field	Description	Condition	Notes
4	Amount, transaction	Always sent	
5	Amount, settlement	Conditional	The amount requested in the currency of the Sink Node. Only sent if the Transaction Manager performs currency conversion for the Source Node and the transaction (i.e. local) currency differs from the settlement currency. If the Transaction Manager does not perform currency conversion for the Source Node, the Source Node returns the settlement amounts, currencies, etc. in the subsequent response.
7	Transmission date and time	Always sent	
9	Conversion rate, settlement	Conditional	Present if the Transaction Manager performs currency conversion for the Node the message is sent to and the transaction (i.e. local) currency differs from the settlement currency.
11	System trace audit number	Always sent	
12	Time, local transaction	Always sent	
13	Date, local transaction	Always sent	
14	Date, expiration	Always sent	
15	Date, settlement	Always sent	
16	Date, conversion	Conditional	Present if the Transaction Manager performs currency conversion for the Node the message is sent to and the transaction (i.e. local) currency differs from the settlement currency.
18	Merchant's type	Conditional	Included if present in the initial message from the Source Node.
22	POS entry mode	Always sent	
23	Card sequence number	Conditional	Included if present in the initial message from the Source Node or if it could be retrieved from Track 2 data.
25	POS condition code	Always sent	

Message Content

Field	Description	Condition	Notes
28	Amount, transaction fee	Always sent	
29	Amount, settlement fee	Conditional	Present if the Transaction Manager performs currency conversion for the Node the message is sent to and the transaction (i.e. local) currency differs from the settlement currency.
30	Amount, transaction processing fee	Always sent	
31	Amount, settle processing fee	Conditional	Present if the Transaction Manager performs currency conversion for the Node the message is sent to and the transaction (i.e. local) currency differs from the settlement currency.
32	Acquiring institution ID code	Conditional	Included if present in the initial message from the Source Node or if configured in the node configuration for the Sink Node.
33	Forwarding institution ID code	Conditional	Included if present in the initial message from the Source Node or if configured in the node configuration for the Sink Node.
35	Track 2 data	Conditional	Present if Track 2 was entered at the Point of Service.
37	Retrieval reference number	Always sent	
38	Authorization ID response	Conditional	From authorizer (or from stand-in authorization).
39	Response Code	Always sent	
40	Service restriction code	Conditional	Included if present in the initial message from the Source Node.
41	Card acceptor terminal ID	Always sent	
42	Card acceptor ID code	Always sent	
43	Card acceptor name location	Always sent	
45	Track 1 data	Conditional	Included if present in the initial message from the Source Node.
49	Currency code, transaction	Always sent	

Message Content

Field	Description	Condition	Notes
50	Currency code, settlement	Conditional	Present if the Transaction Manager performs currency conversion for the Node the message is sent to and the transaction (i.e. local) currency differs from the settlement currency.
54	Additional amounts	Conditional	Contains the approved amount for the transaction. Note that the final amount can be different (and higher) than the approved amount. This is typically the case when, e.g. a tip is added in a restaurant.
56	Message reason code	Always sent	
58	Authorizing agent ID code	Conditional	Included if the authorizer and the card issuer differs.
59	Echo data	Always sent	
67	Extended payment code	Conditional	Included if the transaction is a budget transaction.
95	Replacement amounts	Always sent	
100	Receiving institution ID code	Conditional	Included if present in the initial message from the Source Node.
102	Account identification 1	Conditional	Included if present in the response message from the Source Node or if Transaction Manager provides issuer services and the transaction is a debit, inquiry, payment or transfer.
103	Account identification 2	Conditional	Included if present in the response message from the Source Node or if Transaction Manager provides issuer services and the transaction is a debit, inquiry, payment or transfer.
123	POS data code	Always sent	
127.1	Bitmap	Always sent	
127.2	Switch key	Always sent	
127.3	Routing information	Always sent	
127.4	POS data	Conditional	Echoed from original request.

Message Content

Field	Description	Condition	Notes
127.5	Service station data	Conditional	Echoed from original request.
127.6	Authorization profile	Always sent	
127.7	Check data	Conditional	Included if a check guarantee or a check verification transaction.
127.12	Terminal owner	Conditional	Included if present in the initial message from the Source Node.
127.13	POS geographic data	Conditional	Included if present in the initial message from the Source Node.
127.14	Sponsor bank	Conditional	Included if present in the initial message from the Source Node.
127.19	Bank details	Conditional	Present for third-party payments (inter-bank transfers).
127.20	Originator/Authorizer settlement date	Always sent	
127.22	Structured data	Conditional	Included if present in the initial message from the Source Node.
127.23	Payee name and address	Conditional	Included if present in the initial message from the Source Node.
127.24	Payer account	Conditional	Included if present in the initial message from the Source Node.
127.33	Extended transaction type	Conditional	Included if present in the initial message from the Source Node.
127.41	Originating remote address	Conditional	Echoed from the request/reversal/advice. This field will only be included in a response to a linked/duplicate message if the linked/duplicate message contains a value for the field. That is, the value from the original message is not used in the absence of the field in the linked/duplicate message.
127.43	Routing Network ID	Conditional	
127.44	Extended Card Acceptor Terminal ID	Conditional	
127.45	Extended Card Acceptor ID Code	Conditional	
127.46	Original Card Acceptor Terminal ID	Conditional	

Message Content

Field	Description	Condition	Notes
127.47	Original Card Acceptor ID Code	Conditional	
127.48	Dynamic Currency Conversion (DCC) status code	Conditional	
127.49	Card Acceptor Additional Data	Conditional	
128	MAX extended	Conditional	Present if MAC'ing is enabled for the current message type.

Send - Transaction Request Response (0210)

Field	Description	Condition	Notes
2	Primary account number	Conditional	If this information was provided in the message received by the Source Node (in this field or as part of track 2 data), then this field will be present. Present for all card initiated transactions (including check guarantee or check verification transactions that use the plastic card account format).
3	Processing code	Always sent	
4	Amount, transaction	Always sent	
5	Amount, settlement	Conditional	Present if the transaction (i.e. local) currency differs from the settlement currency.
7	Transmission date and time	Always sent	
9	Conversion rate, settlement	Conditional	Present if the transaction (i.e. local) currency differs from the settlement currency.
11	System trace audit number	Always sent	
12	Time, local transaction	Always sent	
13	Date, local transaction	Always sent	
14	Date, expiration	Always sent	

Message Content

Field	Description	Condition	Notes
15	Date, settlement	Always sent	
16	Date, conversion	Conditional	Present if the transaction (i.e. local) currency differs from the settlement currency.
18	Merchant's type	Conditional	Echoed from original request.
22	POS entry mode	Always sent	
23	Card sequence number	Conditional	Included if present in the initial message from the Source Node or if it could be retrieved from Track 2 data.
25	POS condition code	Always sent	
28	Amount, transaction fee	Always sent	
29	Amount, settlement fee	Conditional	Present if the transaction (i.e. local) currency differs from the settlement currency.
30	Amount, transaction processing fee	Always sent	
31	Amount, settle processing fee	Conditional	Present if the transaction (i.e. local) currency differs from the settlement currency.
32	Acquiring institution ID code	Conditional	Included if present in the initial message from the Source Node.
33	Forwarding institution ID code	Conditional	Included if present in the initial message from the Source Node.
35	Track 2 data	Conditional	Present if Track 2 was entered at the Point of Service.
37	Retrieval reference number	Always sent	
38	Authorization ID response	Conditional	From authorizer (or from stand-in authorization).
39	Response code	Always sent	
40	Service restriction code	Conditional	Included if present in the initial message from the Source Node.
41	Card acceptor terminal ID	Always sent	

Message Content

Field	Description	Condition	Notes
42	Card acceptor ID code	Always sent	
43	Card acceptor name location	Always sent	
44	Additional response data	Conditional	From authorizer (or from stand-in authorization).
45	Track 1 data	Conditional	Included if present in the initial message from the Source Node.
48	Additional response data	Conditional	Present for approved linked account inquiries.
49	Currency code, transaction	Always sent	
50	Currency code, settlement	Conditional	Present if the transaction (i.e. local) currency differs from the settlement currency.
54	Additional amounts	Conditional	Contains the <i>approved amount</i> . If the transaction is a goods and services with cash back transaction <i>amount cash</i> will also be present.
58	Authorizing agent ID code	Conditional	Included if the authorizer and the card issuer differs.
59	Echo data	Conditional	Echoed from original request.
67	Extended payment code	Conditional	Echoed from original request.
98	Payee	Conditional	Present for Third-party payments (inter-bank transfers) and linked bill payments.
100	Receiving institution ID code	Conditional	Included if present in the initial message from the Source Node.
102	Account identification 1	Conditional	Included if present in the response message from the Sink Node or if Transaction Manager provides issuer services and the transaction is a debit, inquiry, payment or transfer.
103	Account identification 2	Conditional	Included if present in the response message from the Sink Node or if Transaction Manager provides issuer services and the transaction is a debit, inquiry, payment or transfer.
123	POS data code	Always sent	
127.1	Bitmap	Always sent	

Message Content

Field	Description	Condition	Notes
127.3	Routing information	Always sent	
127.4	POS data	Conditional	Echoed from original request.
127.5	Service station data	Conditional	Echoed from original request.
127.6	Authorization profile	Always sent	
127.7	Check data	Conditional	Included if a check guarantee or a check verification transaction.
127.9	Additional node data	Conditional	From authorizer (Sink Node).
127.12	Terminal owner	Conditional	Included if present in the initial message from the Source Node.
127.13	POS geographic data	Conditional	Included if present in the initial message from the Source Node.
127.14	Sponsor bank	Conditional	Included if present in the initial message from the Source Node.
127.15	Address verification data	Conditional	Included if present in the initial message from the Source Node.
127.16	Address verification result	Conditional	From authorizer (Sink Node).
127.17	Cardholder information	Conditional	From authorizer (or from stand-in authorization).
127.19	Bank details	Conditional	Included if present in the initial message from the Source Node.
127.20	Originator/Authorizer settlement date	Always sent	
127.22	Structured data	Conditional	Included if present in the response message received from the Sink Node.
127.23	Payee name and address	Conditional	Included if present in the initial message from the Source Node.
127.24	Payer account	Conditional	Included if present in the initial message from the Source Node.
127.25	ICC data	Conditional	Included if present in the response message received from the Sink Node

Message Content

Field	Description	Condition	Notes
			<p>the Sink Node is configured to do EMV authentication</p> <p>If the Sink Node is configured to do EMV authentication then this field will contain the IccResponse Issuer Authentication Data subfield.</p>
127.27	Card verification result	Conditional	This field is set up if card verification is performed. If card verification is not performed then this field is included if it was present in the received message.
127.30	3D secure result	Conditional	From authorizer (Sink Node).
127.31	Issuer network ID	Conditional	From authorizer (Sink Node).
127.32	UCAF data	Conditional	From authorizer (Sink Node).
127.33	Extended transaction type	Conditional	Included if present in the initial message from the Source Node or if received in the response message from the Sink Node.
127.37	Extended Response Code	Optional	
127.39	Original response code	Conditional	Included if a duplicate transaction was received, and Transaction Manager is configured to respond to duplicate transactions.
127.41	Originating remote address	Conditional	Echoed from the request/reversal/advice. This field will only be included in a response to a linked/duplicate message if the linked/duplicate message contains a value for the field. That is, the value from the original message is not used in the absence of the field in the linked/duplicate message.
127.42	Transaction number	Conditional	Sometimes this field is not sent when the transaction has not been stored in the database. This can happen for example if: format errors occurred during transaction processing, or queue filtering is being applied to transaction processing, or invalid duplicate transactions are processed, or a response is being sent for an advice queued to the active/active partner.
127.48	Dynamic Currency Conversion (DCC) status code	Conditional	
128	MAX extended	Conditional	Present if MAC'ing is enabled for the current message type.

Message Content

Send – Transaction Completion Response (0212)

Field	Description	Condition	Notes
2	Primary account number	Conditional	If this information was provided in the message received by the Source Node (in this field or as part of track 2 data), then this field will be present. Present for all card initiated transactions (including check guarantee or check verification transactions that use the plastic card account format).
3	Processing code	Always sent	
4	Amount, transaction	Always sent	
5	Amount, settlement	Conditional	Present if the transaction (i.e. local) currency differs from the settlement currency.
7	Transmission date and time	Always sent	
9	Conversion rate, settlement	Conditional	Present if the transaction (i.e. local) currency differs from the settlement currency.
11	System trace audit number	Always sent	
12	Time, local transaction	Always sent	
13	Date, local transaction	Always sent	
14	Date, expiration	Always sent	
15	Date, settlement	Always sent	
16	Date, conversion	Conditional	Present if the transaction (i.e. local) currency differs from the settlement currency.
18	Merchant's type	Conditional	Echoed from original advice.
22	POS entry mode	Always sent	
23	Card sequence number	Conditional	Included if present in the initial message from the Source Node or if it could be retrieved from Track 2 data.

Message Content

Field	Description	Condition	Notes
25	POS condition code	Always sent	
28	Amount, transaction fee	Always sent	
29	Amount, settlement fee	Conditional	Present if the transaction (i.e. local) currency differs from the settlement currency.
30	Amount, transaction processing fee	Always sent	
31	Amount, settle processing fee	Conditional	Present if the transaction (i.e. local) currency differs from the settlement currency.
32	Acquiring institution ID code	Conditional	Included if present in the initial message from the Source Node.
33	Forwarding institution ID code	Conditional	Included if present in the initial message from the Source Node.
35	Track 2 data	Conditional	Present if Track 2 was entered at the Point of Service.
37	Retrieval reference number	Always sent	
38	Authorization ID response	Conditional	From authorizer (or from stand-in authorization).
39	Response code	Always sent	
40	Service restriction code	Conditional	Included if present in the initial message from the Source Node.
41	Card acceptor terminal ID	Always sent	
42	Card acceptor ID code	Always sent	
43	Card acceptor name location	Always sent	
45	Track 1 data	Conditional	Included if present in the initial message from the Source Node.
49	Currency code, transaction	Always sent	
50	Currency code, settlement	Conditional	Present if the transaction (i.e. local) currency differs from the settlement currency.

Message Content

Field	Description	Condition	Notes
54	Additional amounts	Conditional	Contains <i>amount cash</i> if the transaction is a goods and services with cash back transaction.
58	Authorizing agent ID code	Conditional	Included if the authorizer and the card issuer differs.
59	Echo data	Always sent	Echoed from original advice.
67	Extended payment code	Conditional	Echoed from original advice.
95	Replacement amounts	Always sent	
98	Payee	Conditional	Present for Third-party payments (inter-bank transfers) and linked bill payments.
100	Receiving institution ID code	Conditional	Included if present in the initial message from the Source Node.
102	Account identification 1	Conditional	Included if present in the response message from the Sink Node or if Transaction Manager provides issuer services and the transaction is a debit, inquiry, payment or transfer.
103	Account identification 2	Conditional	Included if present in the response message from the Sink Node or if Transaction Manager provides issuer services and the transaction is a debit, inquiry, payment or transfer.
123	POS data code	Always sent	
127.1	Bitmap	Always sent	
127.3	Routing information	Always sent	
127.4	POS data	Conditional	Echoed from original advice.
127.5	Service station data	Conditional	Echoed from original advice.
127.6	Authorization profile	Always sent	
127.7	Check data	Conditional	Included if a check guarantee or a check verification transaction.
127.12	Terminal owner	Conditional	Included if present in the initial message from the Source Node.

Message Content

Field	Description	Condition	Notes
127.13	POS geographic data	Conditional	Included if present in the initial message from the Source Node.
127.14	Sponsor bank	Conditional	Included if present in the initial message from the Source Node.
127.20	Originator/Authorizer settlement date	Always sent	
127.22	Structured data	Conditional	Included if present in the response message received from the Sink Node.
127.23	Payee name and address	Conditional	Included if present in the initial message from the Source Node.
127.24	Payer account	Conditional	Included if present in the initial message from the Source Node.
127.33	Extended transaction type	Conditional	Included if present in the initial message from the Source Node or if received in the response message from the Sink Node.
127.41	Originating remote address	Conditional	Echoed from the request/reversal/advice. This field will only be included in a response to a linked/duplicate message if the linked/duplicate message contains a value for the field. That is, the value from the original message is not used in the absence of the field in the linked/duplicate message.
127.42	Transaction number	Conditional	Sometimes this field is not sent when the transaction has not been stored in the database. This can happen for example if: format errors occurred during transaction processing, or queue filtering is being applied to transaction processing, or invalid duplicate transactions are processed, or a response is being sent for an advice queued to the active/active partner.
127.48	Dynamic Currency Conversion (DCC) status code	Conditional	
128	MAX extended	Conditional	Present if MAC'ing is enabled for the current message type.

Message Content

Send - Transaction Advice (Repeat) (0220/0221)

Field	Description	Condition	Notes
2	Primary account number	Conditional	If this information was provided in the message received by the Source Node (in this field or as part of track 2 data), then this field will be present. Present for all card initiated transactions (including check guarantee or check verification transactions that use the plastic card account format).
3	Processing code	Always sent	
4	Amount, transaction	Always sent	
5	Amount, settlement	Conditional	The amount requested in the currency of the Sink Node. Only sent if the Transaction Manager performs currency conversion for the Source Node and the transaction (i.e. local) currency differs from the settlement currency. If the Transaction Manager does not perform currency conversion for the Source Node, the Source Node returns the settlement amounts, currencies, etc. in the subsequent response.
7	Transmission date and time	Always sent	
9	Conversion rate, settlement	Conditional	Present if the Transaction Manager performs currency conversion for the Node the message is sent to and the transaction (i.e. local) currency differs from the settlement currency.
11	System trace audit number	Always sent	
12	Time, local transaction	Always sent	
13	Date, local transaction	Always sent	
14	Date, expiration	Always sent	
15	Date, settlement	Always sent	
16	Date, conversion	Conditional	Present if the Transaction Manager performs currency conversion for the Node the message is sent to and the transaction (i.e. local) currency differs from the settlement currency.

Message Content

Field	Description	Condition	Notes
18	Merchant's type	Conditional	Included if present in the initial message from the Source Node.
22	POS entry mode	Always sent	
23	Card sequence number	Conditional	Included if present in the initial message from the Source Node or if it could be retrieved from Track 2 data.
25	POS condition code	Always sent	
28	Amount, transaction fee	Always sent	
29	Amount, settlement fee	Conditional	Present if the Transaction Manager performs currency conversion for the Node the message is sent to and the transaction (i.e. local) currency differs from the settlement currency.
30	Amount, transaction processing fee	Always sent	
31	Amount, settle processing fee	Conditional	Present if the Transaction Manager performs currency conversion for the Node the message is sent to and the transaction (i.e. local) currency differs from the settlement currency.
32	Acquiring institution ID code	Conditional	Included if present in the initial message from the Source Node or if configured in the node configuration for the Sink Node.
33	Forwarding institution ID code	Conditional	Included if present in the initial message from the Source Node or if configured in the node configuration for the Sink Node.
35	Track 2 data	Conditional	Present if Track 2 was entered at the Point of Service.
37	Retrieval reference number	Always sent	
38	Authorization ID response	Conditional	From authorizer (or from stand-in authorization).
39	Response Code	Conditional	Copied from the 0120/0220 message from the Source Node, or if field 39 is not present in the 0120/0220 message from the Source Node, a response code of 00 will be sent. If the Transaction Manager performs PIN verification, the PIN verification failed and the Sink Node is configured to receive an advice if a

Message Content

Field	Description	Condition	Notes
			PIN failure occurs, this field indicates an incorrect PIN.
40	Service restriction code	Conditional	Included if present in the initial message from the Source Node.
41	Card acceptor terminal ID	Always sent	
42	Card acceptor ID code	Always sent	
43	Card acceptor name location	Always sent	
44	Additional response data	Conditional	From authorizer (or from stand-in authorization).
45	Track 1 data	Conditional	Included if present in the initial message from the Source Node.
49	Currency code, transaction	Always sent	
50	Currency code, settlement	Conditional	Present if the Transaction Manager performs currency conversion for the Node the message is sent to and the transaction (i.e. local) currency differs from the settlement currency.
54	Additional amounts	Conditional	Contains the approved amount for the transaction. Note that the final amount can be different (and higher) than the approved amount. This is typically the case when, e.g. a tip is added in a restaurant.
56	Message reason code	Always sent	
58	Authorizing agent ID code	Conditional	Included if the authorizer and the card issuer differs.
59	Echo data	Always sent	
67	Extended payment code	Conditional	Included if the transaction is a budget transaction.
90	Original data elements	Conditional	Present if supplied in the message from the source or constructed by Transaction Manager from the contents of the original message, if it could be retrieved.
95	Replacement amounts	Always sent	

Message Content

Field	Description	Condition	Notes
98	Payee	Conditional	Present for Third-party payments (inter-bank transfers) and linked bill payments.
100	Receiving institution ID code	Conditional	Included if present in the initial message from the Source Node.
102	Account identification 1	Conditional	Included if present in the response message from the Source Node or if Transaction Manager provides issuer services and the transaction is a debit, inquiry, payment or transfer.
103	Account identification 2	Conditional	Included if present in the response message from the Source Node or if Transaction Manager provides issuer services and the transaction is a debit, inquiry, payment or transfer.
123	POS data code	Always sent	
127.1	Bitmap	Always sent	
127.2	Switch key	Always sent	
127.3	Routing information	Always sent	
127.4	POS data	Conditional	Echoed from original request.
127.5	Service station data	Conditional	Echoed from original request.
127.6	Authorization profile	Always sent	
127.7	Check data	Conditional	Included if a check guarantee or a check verification transaction.
127.9	Additional node data	Conditional	Included if present in any prior message, associated with the transaction, from Source Node.
127.11	Original key	Conditional	If the corresponding message from the Source Node contained field 127.11, then Transaction Manager will locate the Sink Node equivalent value and send it in field 127.11.
127.12	Terminal owner	Conditional	Included if present in the initial message from the Source Node.
127.13	POS geographic data	Conditional	Included if present in the initial message from the Source Node.

Message Content

Field	Description	Condition	Notes
127.14	Sponsor bank	Conditional	Included if present in the initial message from the Source Node.
127.19	Bank details	Conditional	Present for third-party payments (inter-bank transfers).
127.20	Originator/Authorizer settlement date	Always sent	
127.22	Structured data	Conditional	Included if present in the initial message from the Source Node.
127.23	Payee name and address	Conditional	Included if present in the initial message from the Source Node.
127.24	Payer account	Conditional	Included if present in the initial message from the Source Node.
127.25	ICC data	Conditional	Included if present in the initial message from the Source Node.
127.26	Original node	Conditional	Present if an original transaction could be found.
127.27	Card verification result	Conditional	This field is set up if card verification is performed. If card verification is not performed then this field is included if it was present in the received message.
127.30	3D Secure Result	Conditional	Included if present in the initial message from the Source Node.
127.32	UCAF data	Conditional	Included if present in the initial message from the Source Node.
127.33	Extended transaction type	Conditional	Included if present in the initial message from the Source Node.
127.34	Account type qualifier	Conditional	Included if present in the initial message from the Source Node.
127.35	Acquirer network ID	Conditional	Included if present in the initial message from the Source Node.
127.36	Customer Id	Conditional	Included if present in the initial message from the Source Node.
127.37	Extended Response Code	Optional	
127.40	Transaction reference	Conditional	Included if present in the initial message from the Source Node.
127.43	Routing Network ID	Conditional	
127.44	Extended Card Acceptor Terminal ID	Conditional	

Message Content

Field	Description	Condition	Notes
127.45	Extended Card Acceptor ID Code	Conditional	
127.46	Original Card Acceptor Terminal ID	Conditional	
127.47	Original Card Acceptor ID Code	Conditional	
127.48	Dynamic Currency Conversion (DCC) status code	Conditional	
127.49	Card Acceptor Additional Data	Conditional	
127.59	Payment Token Identifier	Conditional	Included if present in the initial message from the Source Node.
128	MAX extended	Conditional	Present if MAC'ing is enabled for the current message type.

Send - Transaction Advice Response (0230)

Field	Description	Condition	Notes
2	Primary account number	Conditional	If this information was provided in the message received by the Source Node (in this field or as part of track 2 data), then this field will be present. Present for all card initiated transactions (including check guarantee or check verification transactions that use the plastic card account format).
3	Processing code	Always sent	
4	Amount, transaction	Always sent	
5	Amount, settlement	Conditional	Present if the transaction (i.e. local) currency differs from the settlement currency.
7	Transmission date and time	Always sent	
9	Conversion rate, settlement	Conditional	Present if the transaction (i.e. local) currency differs from the settlement currency.
11	System trace audit number	Always sent	

Message Content

Field	Description	Condition	Notes
12	Time, local transaction	Always sent	
13	Date, local transaction	Always sent	
14	Date, expiration	Always sent	
15	Date, settlement	Always sent	
16	Date, conversion	Conditional	Present if the transaction (i.e. local) currency differs from the settlement currency.
18	Merchant's type	Conditional	Echoed from original advice.
22	POS entry mode	Always sent	
23	Card sequence number	Conditional	Included if present in the initial message from the Source Node or if it could be retrieved from Track 2 data.
25	POS condition code	Always sent	
28	Amount, transaction fee	Always sent	
29	Amount, settlement fee	Conditional	Present if the transaction (i.e. local) currency differs from the settlement currency.
30	Amount, transaction processing fee	Always sent	
31	Amount, settle processing fee	Conditional	Present if the transaction (i.e. local) currency differs from the settlement currency.
32	Acquiring institution ID code	Conditional	Included if present in the initial message from the Source Node.
33	Forwarding institution ID code	Conditional	Included if present in the initial message from the Source Node.
35	Track 2 data	Conditional	Present if Track 2 was entered at the Point of Service.
37	Retrieval reference number	Always sent	
38	Authorization ID response	Conditional	From authorizer (or from stand-in authorization).

Message Content

Field	Description	Condition	Notes
39	Response code	Always sent	
40	Service restriction code	Conditional	Included if present in the initial message from the Source Node.
41	Card acceptor terminal ID	Always sent	
42	Card acceptor ID code	Always sent	
43	Card acceptor name location	Always sent	
44	Additional response data	Conditional	From authorizer (or from stand-in authorization).
45	Track 1 data	Conditional	Included if present in the initial message from the Source Node.
49	Currency code, transaction	Always sent	
50	Currency code, settlement	Conditional	Present if the transaction (i.e. local) currency differs from the settlement currency.
54	Additional amounts	Conditional	Contains the <i>approved amount</i> . If the transaction is a goods and services with cash back transaction <i>amount cash</i> will also be present.
58	Authorizing agent ID code	Conditional	Included if the authorizer and the card issuer differs.
59	Echo data	Conditional	Echoed from original advice.
67	Extended payment code	Conditional	Echoed from original advice.
90	Original data elements	Conditional	Present if supplied in the message from the source or constructed by Transaction Manager from the contents of the original message, if it could be retrieved.
95	Replacement amounts	Always sent	
98	Payee	Conditional	Present for Third-party payments (inter-bank transfers) and linked bill payments.
100	Receiving institution ID code	Conditional	Included if present in the initial message from the Source Node.
102	Account identification 1	Conditional	Included if present in the response message from the Sink Node or if Transaction Manager

Message Content

Field	Description	Condition	Notes
			provides issuer services and the transaction is a debit, inquiry, payment or transfer.
103	Account identification 2	Conditional	Included if present in the response message from the Sink Node or if Transaction Manager provides issuer services and the transaction is a debit, inquiry, payment or transfer.
123	POS data code	Always sent	
127.1	Bitmap	Always sent	
127.3	Routing information	Always sent	
127.4	POS data	Conditional	Echoed from original advice.
127.5	Service station data	Conditional	Echoed from original advice.
127.6	Authorization profile	Always sent	
127.12	Terminal owner	Conditional	Included if present in the initial message from the Source Node.
127.13	POS geographic data	Conditional	Included if present in the initial message from the Source Node.
127.14	Sponsor bank	Conditional	Included if present in the initial message from the Source Node.
127.19	Bank details	Conditional	Included if present in the initial message from the Source Node.
127.20	Originator/Authorizer settlement date	Always sent	
127.23	Payee name and address	Conditional	Included if present in the initial message from the Source Node.
127.24	Payer account	Conditional	Included if present in the initial message from the Source Node.
127.33	Extended transaction type	Conditional	Included if present in the initial message from the Source Node or if received in the response message from the Sink Node.
127.37	Extended Response Code	Optional	

Message Content

Field	Description	Condition	Notes
127.39	Original response code	Conditional	Included if a duplicate transaction was received, and Transaction Manager is configured to respond to duplicate transactions.
127.41	Originating remote address	Conditional	Echoed from the request/reversal/advice. This field will only be included in a response to a linked/duplicate message if the linked/duplicate message contains a value for the field. That is, the value from the original message is not used in the absence of the field in the linked/duplicate message.
127.42	Transaction number	Conditional	Sometimes this field is not sent when the transaction has not been stored in the database. This can happen for example if: format errors occurred during transaction processing, or queue filtering is being applied to transaction processing, or invalid duplicate transactions are processed, or a response is being sent for an advice queued to the active/active partner.
127.48	Dynamic Currency Conversion (DCC) status code	Conditional	
128	MAX extended	Conditional	Present if MAC'ing is enabled for the current message type.

Message Content

Send – Acquirer File Update Advice (Repeat) (0320/0321)

Note that an Acquirer File Update Advice (0320) message is sent by PostBridge connected to a **Sink Node**.

Field	Description	Condition	Notes
2	Primary account number	Conditional	Included if present in the initial message from the Source Node.
7	Transmission date and time	Always sent	
11	System trace audit number	Always sent	
12	Time, local transaction	Always sent	
13	Date, local transaction	Always sent	
14	Date, expiration	Always sent	Included if present in the initial message from the Source Node, or if it is returned as a result of a card lookup from PostCard records.
15	Date, settlement	Always sent	
23	Card sequence number	Conditional	Included if present in the initial message from the Source Node.
32	Acquiring institution ID code	Conditional	Included if present in the initial message from the Source Node.
33	Forwarding institution ID code	Conditional	Included if present in the initial message from the Source Node.
37	Retrieval reference number	Always sent	
39	Response Code	Always sent	
41	Card acceptor terminal ID	Always sent	
42	Card acceptor ID code	Always sent	
43	Card acceptor name location	Conditional	Included if present in the initial message from the Source Node.
56	Message reason code	Always sent	

Message Content

Field	Description	Condition	Notes
91	File update code	Always sent	
100	Receiving institution ID code	Conditional	Included if present in the initial message from the Source Node.
101	File name	Conditional	Included if present in the initial message from the Source Node.
127.1	Bitmap	Always sent	
127.3	Routing information	Always sent	
127.9	Additional node data	Conditional	Included if present in the initial message from the Source Node.
127.22	Structured data	Conditional	Included if present in the initial message from the Source Node.
127.37	Extended Response Code	Optional	
127.49	Card Acceptor Additional Data	Conditional	
128	MAX extended	Conditional	Present if MAC'ing is enabled for the current message type.

Send – Issuer File Update Advice (Repeat) (0322/0323)

Note that an Issuer File Update Advice (0322) message is sent by PostBridge connected to a **Source Node** if the route to source node option is ticked on the original sink node.

Field	Description	Condition	Notes
2	Primary account number	Conditional	Included if present in the initial message from the Sink Node.
7	Transmission date and time	Always sent	
11	System trace audit number	Always sent	
12	Time, local transaction	Always sent	
13	Date, local transaction	Always sent	
14	Date, expiration	Always sent	Included if present in the initial message from the Sink Node, or if it is returned as a result of a card lookup from PostCard records.

Message Content

Field	Description	Condition	Notes
15	Date, settlement	Always sent	
23	Card sequence number	Conditional	Included if present in the initial message from the Sink Node.
32	Acquiring institution ID code	Conditional	Included if present in the initial message from the Sink Node.
33	Forwarding institution ID code	Conditional	Included if present in the initial message from the Sink Node.
37	Retrieval reference number	Always sent	
39	Response Code	Always sent	
41	Card acceptor terminal ID	Always sent	
42	Card acceptor ID code	Always sent	
43	Card acceptor name location	Conditional	Included if present in the initial message from the Sink Node.
56	Message reason code	Always sent	
91	File update code	Always sent	
100	Receiving institution ID code	Conditional	Included if present in the initial message from the Sink Node.
101	File name	Conditional	Included if present in the initial message from the Sink Node.
127.1	Bitmap	Always sent	
127.3	Routing information	Always sent	
127.9	Additional node data	Conditional	Included if present in the initial message from the Sink Node.
127.22	Structured data	Conditional	Included if present in the initial message from the Sink Node.
127.37	Extended Response Code	Optional	
128	MAX extended	Conditional	Present if MAC'ing is enabled for the current message type.

Message Content

Send – Acquirer File Update Advice Response (0330)

Note that an Acquirer File Update Advice Response (0330) message is sent by PostBridge connected to a **Source Node**.

Field	Description	Condition	Notes
2	Primary account number	Conditional	Included if present in the initial message from the Source Node.
7	Transmission date and time	Always sent	
11	System trace audit number	Always sent	
14	Date, expiration	Always sent	Included if present in the initial message from the Source Node, or if it is returned as a result of a card lookup from PostCard records.
15	Date, settlement	Always sent	
23	Card sequence number	Conditional	Included if present in the initial message from the Source Node.
32	Acquiring institution ID code	Conditional	Included if present in the initial message from the Source Node.
33	Forwarding institution ID code	Conditional	Included if present in the initial message from the Source Node.
37	Retrieval reference number	Always sent	
39	Response Code	Always sent	
41	Card acceptor terminal ID	Always sent	
42	Card acceptor ID code	Always sent	
43	Card acceptor name location	Conditional	Included if present in the initial message from the Source Node.
56	Message reason code	Always sent	
59	Echo data	Conditional	Included if present in the initial message from the Sink Node.
91	File update code	Always sent	

Message Content

Field	Description	Condition	Notes
100	Receiving institution ID code	Conditional	Included if present in the initial message from the Source Node.
101	File name	Conditional	Included if present in the initial message from the Source Node.
127.1	Bitmap	Always sent	
127.3	Routing information	Always sent	
127.22	Structured data	Conditional	Included if present in the initial message from the Source Node.
127.37	Extended Response Code	Optional	
127.39	Original response code	Conditional	Included if a duplicate transaction was received, and Transaction Manager is configured to respond to duplicate transactions.
127.41	Originating remote address	Conditional	Echoed from the request/reversal/advice. This field will only be included in a response to a linked/duplicate message if the linked/duplicate message contains a value for the field. That is, the value from the original message is not used in the absence of the field in the linked/duplicate message.
127.42	Transaction number	Conditional	Sometimes this field is not sent when the transaction has not been stored in the database. This can happen for example if: format errors occurred during transaction processing, or queue filtering is being applied to transaction processing, or invalid duplicate transactions are processed, or a response is being sent for an advice queued to the active/active partner.
128	MAX extended	Conditional	Present if MAC'ing is enabled for the current message type.

Send – Issuer File Update Advice Response (0332/0323)

Note that an Issuer File Update Advice Response (0332) message is sent by PostBridge connected to a **Sink Node**.

Field	Description	Condition	Notes
2	Primary account number	Conditional	Included if present in the initial message from the Sink Node.

Message Content

Field	Description	Condition	Notes
7	Transmission date and time	Always sent	
11	System trace audit number	Always sent	
14	Date, expiration	Always sent	Included if present in the initial message from the Sink Node, or if it is returned as a result of a card lookup from PostCard records.
15	Date, settlement	Always sent	
23	Card sequence number	Conditional	Included if present in the initial message from the Sink Node.
32	Acquiring institution ID code	Conditional	Included if present in the initial message from the Sink Node.
33	Forwarding institution ID code	Conditional	Included if present in the initial message from the Sink Node.
37	Retrieval reference number	Always sent	
39	Response Code	Always sent	
41	Card acceptor terminal ID	Always sent	
42	Card acceptor ID code	Always sent	
43	Card acceptor name location	Conditional	Included if present in the initial message from the Sink Node.
56	Message reason code	Always sent	
59	Echo data	Conditional	Included if present in the initial message from the Sink Node.
91	File update code	Always sent	
100	Receiving institution ID code	Conditional	Included if present in the initial message from the Sink Node.
101	File name	Conditional	Included if present in the initial message from the Sink Node.
127.1	Bitmap	Always sent	

Message Content

Field	Description	Condition	Notes
127.3	Routing information	Always sent	
127.22	Structured data	Conditional	Included if present in the initial message from the Sink Node.
127.37	Extended Response Code	Optional	
127.39	Original Response Code	Conditional	Included if present in the initial message from the Sink Node.
127.41	Originating remote address	Conditional	Echoed from the request/reversal/advice. This field will only be included in a response to a linked/duplicate message if the linked/duplicate message contains a value for the field. That is, the value from the original message is not used in the absence of the field in the linked/duplicate message.
127.42	Transaction number	Conditional	Sometimes this field is not sent when the transaction has not been stored in the database. This can happen for example if: format errors occurred during transaction processing, or queue filtering is being applied to transaction processing, or invalid duplicate transactions are processed, or a response is being sent for an advice queued to the active/active partner.
128	MAX extended	Conditional	Present if MAC'ing is enabled for the current message type.

Send - Reversal Request (Repeat) (0400/0401)

Field	Description	Condition	Notes
2	Primary account number	Conditional	If this information was provided in the message received by the Source Node (in this field or as part of track 2 data), then this field will be present. Present for all card initiated transactions (including check guarantee or check verification transactions that use the plastic card account format).
3	Processing code	Always sent	
4	Amount, transaction	Always sent	

Message Content

Field	Description	Condition	Notes
5	Amount, settlement	Conditional	The amount requested in the currency of the Sink Node. Only sent if the Transaction Manager performs currency conversion for the Source Node and the transaction (i.e. local) currency differs from the settlement currency. If the Transaction Manager does not perform currency conversion for the Source Node, the Source Node returns the settlement amounts, currencies, etc. in the subsequent response.
7	Transmission date and time	Always sent	
9	Conversion rate, settlement	Conditional	Present if the Transaction Manager performs currency conversion for the Node the message is sent to and the transaction (i.e. local) currency differs from the settlement currency.
11	System trace audit number	Always sent	
12	Time, local transaction	Always sent	
13	Date, local transaction	Always sent	
14	Date, expiration	Conditional	If this information was provided in the message received by the Source Node (in this field or as part of track 2 data), then this field will be present.
15	Date, settlement	Always sent	
16	Date, conversion	Conditional	Present if the Transaction Manager performs currency conversion for the Node the message is sent to and the transaction (i.e. local) currency differs from the settlement currency.
18	Merchant's type	Conditional	Included if present in the initial message from the Source Node.
22	POS entry mode	Always sent	
23	Card sequence number	Conditional	Included if present in the initial message from the Source Node or if it could be retrieved from Track 2 data.
25	POS condition code	Always sent	

Message Content

Field	Description	Condition	Notes
26	POS PIN capture code	Conditional	Present if a PIN was entered at the Point of Service.
27	Authorization ID response length	Conditional	Included if present in the initial message from the Source Node.
28	Amount, transaction fee	Always sent	
29	Amount, settlement fee	Conditional	Present if the Transaction Manager performs currency conversion for the Node the message is sent to and the transaction (i.e. local) currency differs from the settlement currency.
30	Amount, transaction processing fee	Always sent	
31	Amount, settle processing fee	Conditional	Present if the Transaction Manager performs currency conversion for the Node the message is sent to and the transaction (i.e. local) currency differs from the settlement currency.
32	Acquiring institution ID code	Conditional	Included if present in the initial message from the Source Node or if configured in the node configuration for the Sink Node.
33	Forwarding institution ID code	Conditional	Included if present in the initial message from the Source Node or if configured in the node configuration for the Sink Node.
35	Track 2 data	Conditional	Present if Track 2 was entered at the Point of Service.
37	Retrieval reference number	Always sent	
38	Authorization ID response	Conditional	Included if present in the initial message from the Source Node.
40	Service restriction code	Conditional	Included if present in the initial message from the Source Node.
41	Card acceptor terminal ID	Always sent	
42	Card acceptor ID code	Always sent	
43	Card acceptor name location	Always sent	
45	Track 1 data	Conditional	Included if present in the initial message from the Source Node.

Message Content

Field	Description	Condition	Notes
49	Currency code, transaction	Always sent	
50	Currency code, settlement	Conditional	Present if the Transaction Manager performs currency conversion for the Node the message is sent to and the transaction (i.e. local) currency differs from the settlement currency.
52	PIN data	Conditional	Present if a PIN was entered at the Point of Service.
53	Security related control information	Conditional	Present if a PIN was entered at the Point of Service and the DUKPT PIN encryption scheme is used.
54	Additional amounts	Conditional	Contains <i>amount cash</i> if the transaction is a goods and services with cash back transaction.
56	Message reason code	Always sent	
59	Echo data	Always sent	
67	Extended payment code	Conditional	Included if the transaction is a budget transaction.
90	Original data elements	Always sent	
95	Replacement amounts	Always sent	
98	Payee	Conditional	Present for Third-party payments (inter-bank transfers) and linked bill payments.
100	Receiving institution ID code	Conditional	Included if present in the initial message from the Source Node.
102	Account identification 1	Conditional	Included if present in the response message from the Source Node or if Transaction Manager provides issuer services and the transaction is a debit, inquiry, payment or transfer.
103	Account identification 2	Conditional	Included if present in the response message from the Source Node or if Transaction Manager provides issuer services and the transaction is a debit, inquiry, payment or transfer.
123	POS data code	Always sent	
127.1	Bitmap	Always sent	

Message Content

Field	Description	Condition	Notes
127.2	Switch key	Always sent	
127.3	Routing information	Always sent	
127.4	POS data	Conditional	Included if present in the initial message from the Source Node.
127.5	Service station data	Conditional	Included if present in the initial message from the Source Node.
127.7	Check data	Conditional	Included if a check guarantee or a check verification transaction.
127.9	Additional node data	Conditional	Included if present in the initial message from the Source Node.
127.10	CVV2	Conditional	Included if present in the initial message from the Source Node.
127.11	Original key	Always sent	
127.12	Terminal owner	Conditional	Included if present in the initial message from the Source Node.
127.13	POS geographic data	Conditional	Included if present in the initial message from the Source Node.
127.14	Sponsor bank	Conditional	Included if present in the initial message from the Source Node.
127.15	Address verification data	Conditional	Included if present in the initial message from the Source Node.
127.16	Address verification result	Conditional	Included if present in the initial message from the Source Node.
127.18	Validation data	Conditional	Included if present in the initial message from the Source Node.
127.19	Bank details	Conditional	Present for third-party payments (inter-bank transfers).
127.20	Originator/Authorizer settlement date	Always sent	
127.22	Structured data	Conditional	Included if present in the initial message from the Source Node.
127.23	Payee name and address	Conditional	Included if present in the initial message from the Source Node.

Message Content

Field	Description	Condition	Notes
127.24	Payer account	Conditional	Included if present in the initial message from the Source Node.
127.25	ICC data	Conditional	Included if present in the initial message from the Source Node.
127.26	Original node	Conditional	Present if an original transaction could be found.
127.27	Card verification result	Conditional	This field is set up if card verification is performed. If card verification is not performed then this field is included if it was present in the received message.
127.28	American express card identifier (CID)	Conditional	Included if present in the initial message from the Source Node.
127.29	3D secure data	Conditional	Included if present in the initial message from the Source Node.
127.30	3D Secure Result	Conditional	Included if present in the initial message from the Source Node.
127.33	Extended transaction type	Conditional	Included if present in the initial message from the Source Node.
127.34	Account type qualifier	Conditional	Included if present in the initial message from the Source Node.
127.35	Acquirer network ID	Conditional	Included if present in the initial message from the Source Node.
127.36	Customer Id	Conditional	Included if present in the initial message from the Source Node.
127.40	Transaction reference	Conditional	Included if present in the initial message from the Source Node.
127.43	Routing Network ID	Conditional	
127.44	Extended Card Acceptor Terminal ID	Conditional	
127.45	Extended Card Acceptor ID Code	Conditional	
127.46	Original Card Acceptor Terminal ID	Conditional	
127.47	Original Card Acceptor ID Code	Conditional	
127.48	Dynamic Currency Conversion (DCC) status code	Conditional	

Message Content

Field	Description	Condition	Notes
127.49	Card Acceptor Additional Data	Conditional	
127.59	Payment Token Identifier	Conditional	Included if present in the initial message from the Source Node.
128	MAX extended	Conditional	Present if MAC'ing is enabled for the current message type.

Message Content

Send – Reversal Request Response (0410)

Field	Description	Condition	Notes
2	Primary account number	Conditional	If this information was provided in the message received by the Source Node (in this field or as part of track 2 data), then this field will be present. Present for all card initiated transactions (including check guarantee or check verification transactions that use the plastic card account format).
3	Processing code	Always sent	
4	Amount, transaction	Always sent	
5	Amount, settlement	Conditional	Present if the transaction (i.e. local) currency differs from the settlement currency.
7	Transmission date and time	Always sent	
9	Conversion rate, settlement	Conditional	Present if the transaction (i.e. local) currency differs from the settlement currency.
11	System trace audit number	Always sent	
12	Time, local transaction	Always sent	
13	Date, local transaction	Always sent	
14	Date, expiration	Always sent	If this information was provided in the message received by the Source Node (in this field or as part of track 2 data), then this field will be present
15	Date, settlement	Always sent	
16	Date, conversion	Conditional	Present if the transaction (i.e. local) currency differs from the settlement currency.
18	Merchant's type	Conditional	Echoed from original request.
22	POS entry mode	Always sent	
23	Card sequence number	Conditional	Included if present in the initial message from the Source Node or if it could be retrieved from Track 2 data.

Message Content

Field	Description	Condition	Notes
25	POS condition code	Always sent	
28	Amount, transaction fee	Always sent	
29	Amount, settlement fee	Conditional	Present if the transaction (i.e. local) currency differs from the settlement currency.
30	Amount, transaction processing fee	Always sent	
31	Amount, settle processing fee	Conditional	Present if the transaction (i.e. local) currency differs from the settlement currency.
32	Acquiring institution ID code	Conditional	Included if present in the initial message from the Source Node.
33	Forwarding institution ID code	Conditional	Included if present in the initial message from the Source Node.
35	Track 2 data	Conditional	Present if Track 2 was entered at the Point of Service.
37	Retrieval reference number	Always sent	
38	Authorization ID response	Conditional	From authorizer (or from stand-in authorization).
39	Response code	Always sent	
40	Service restriction code	Conditional	Included if present in the initial message from the Source Node.
41	Card acceptor terminal ID	Always sent	
42	Card acceptor ID code	Always sent	
43	Card acceptor name location	Always sent	
44	Additional response data	Conditional	From authorizer (or from stand-in authorization).
45	Track 1 data	Conditional	Included if present in the initial message from the Source Node.
49	Currency code, transaction	Always sent	

Message Content

Field	Description	Condition	Notes
50	Currency code, settlement	Conditional	Present if the transaction (i.e. local) currency differs from the settlement currency.
54	Additional amounts	Conditional	Contains the <i>approved amount</i> . If the transaction is a goods and services with cash back transaction <i>amount cash</i> will also be present.
58	Authorizing agent ID code	Conditional	Included if the authorizer and the card issuer differs.
59	Echo data	Conditional	Echoed from original request.
67	Extended payment code	Conditional	Echoed from original request.
90	Original data elements	Always sent	
95	Replacement amounts	Always sent	
98	Payee	Conditional	Present for Third-party payments (inter-bank transfers) and linked bill payments.
100	Receiving institution ID code	Conditional	Included if present in the initial message from the Source Node.
102	Account identification 1	Conditional	Included if present in the response message from the Sink Node or if Transaction Manager provides issuer services and the transaction is a debit, inquiry, payment or transfer.
103	Account identification 2	Conditional	Included if present in the response message from the Sink Node or if Transaction Manager provides issuer services and the transaction is a debit, inquiry, payment or transfer.
123	POS data code	Always sent	
127.1	Bitmap	Always sent	
127.3	Routing information	Always sent	
127.4	POS data	Conditional	Echoed from original request.
127.5	Service station data	Conditional	Echoed from original request.
127.6	Authorization profile	Always sent	

Message Content

Field	Description	Condition	Notes
127.7	Check data	Conditional	Included if a check guarantee or a check verification transaction.
127.9	Additional node data	Conditional	From authorizer (Sink Node).
127.12	Terminal owner	Conditional	Included if present in the initial message from the Source Node.
127.13	POS geographic data	Conditional	Included if present in the initial message from the Source Node.
127.14	Sponsor bank	Conditional	Included if present in the initial message from the Source Node.
127.15	Address verification data	Conditional	Included if present in the initial message from the Source Node.
127.16	Address verification result	Conditional	From authorizer (Sink Node).
127.17	Cardholder information	Conditional	From authorizer (or from stand-in authorization).
127.19	Bank details	Conditional	Included if present in the initial message from the Source Node.
127.20	Originator/Authorizer settlement date	Always sent	
127.22	Structured data	Conditional	Included if present in the response message received from the Sink Node.
127.23	Payee name and address	Conditional	Included if present in the initial message from the Source Node.
127.24	Payer account	Conditional	Included if present in the initial message from the Source Node.
127.25	ICC data	Conditional	Included if present in the response message received from the Sink Node the Sink Node is configured to do EMV authentication If the Sink Node is configured to do EMV authentication then this field will contain the IccResponse Issuer Authentication Data subfield.
127.27	Card verification result	Conditional	This field is set up if card verification is performed. If card verification is not performed then this field is included if it was present in the received message.
127.30	3D secure result	Conditional	From authorizer (Sink Node).

Message Content

Field	Description	Condition	Notes
127.31	Issuer network ID	Conditional	From authorizer (Sink Node).
127.33	Extended transaction type	Conditional	Included if present in the initial message from the Source Node or if received in the response message from the Sink Node.
127.37	Extended Response Code	Optional	
127.39	Original response code	Conditional	Included if a duplicate transaction was received, and Transaction Manager is configured to respond to duplicate transactions.
127.41	Originating remote address	Conditional	Echoed from the request/reversal/advice. This field will only be included in a response to a linked/duplicate message if the linked/duplicate message contains a value for the field. That is, the value from the original message is not used in the absence of the field in the linked/duplicate message.
127.42	Transaction number	Conditional	Sometimes this field is not sent when the transaction has not been stored in the database. This can happen for example if: format errors occurred during transaction processing, or queue filtering is being applied to transaction processing, or invalid duplicate transactions are processed, or a response is being sent for an advice queued to the active/active partner.
127.48	Dynamic Currency Conversion (DCC) status code	Conditional	
128	MAX extended	Conditional	Present if MAC'ing is enabled for the current message type.

Send – Reversal Advice (Repeat) (0420/0421)

Field	Description	Condition	Notes
2	Primary account number	Conditional	If this information was provided in the message received by the Source Node (in this field or as part of track 2 data), then this field will be present. Present for all card initiated transactions (including check guarantee or check verification transactions that use the plastic card account format).

Message Content

Field	Description	Condition	Notes
3	Processing code	Always sent	
4	Amount, transaction	Always sent	
5	Amount, settlement	Conditional	The amount requested in the currency of the Sink Node. Only sent if the Transaction Manager performs currency conversion for the Source Node and the transaction (i.e. local) currency differs from the settlement currency. If the Transaction Manager does not perform currency conversion for the Source Node, the Source Node returns the settlement amounts, currencies, etc. in the subsequent response.
7	Transmission date and time	Always sent	
9	Conversion rate, settlement	Conditional	Present if the Transaction Manager performs currency conversion for the Node the message is sent to and the transaction (i.e. local) currency differs from the settlement currency.
11	System trace audit number	Always sent	
12	Time, local transaction	Always sent	
13	Date, local transaction	Always sent	
14	Date, expiration	Conditional	If this information was provided in the message received by the Source Node (in this field or as part of track 2 data), then this field will be present. Present for all card initiated transactions (including check guarantee or check verification transactions that use the plastic card account format).
15	Date, settlement	Always sent	
16	Date, conversion	Conditional	Present if the Transaction Manager performs currency conversion for the Node the message is sent to and the transaction (i.e. local) currency differs from the settlement currency.
18	Merchant's type	Conditional	Included if present in the initial message from the Source Node.

Message Content

Field	Description	Condition	Notes
22	POS entry mode	Always sent	
23	Card sequence number	Conditional	Included if present in the initial message from the Source Node or if it could be retrieved from Track 2 data.
25	POS condition code	Always sent	
28	Amount, transaction fee	Always sent	
29	Amount, settlement fee	Conditional	Present if the Transaction Manager performs currency conversion for the Node the message is sent to and the transaction (i.e. local) currency differs from the settlement currency.
30	Amount, transaction processing fee	Always sent	
31	Amount, settle processing fee	Conditional	Present if the Transaction Manager performs currency conversion for the Node the message is sent to and the transaction (i.e. local) currency differs from the settlement currency.
32	Acquiring institution ID code	Conditional	Included if present in the initial message from the Source Node or if configured in the node configuration for the Sink Node.
33	Forwarding institution ID code	Conditional	Included if present in the initial message from the Source Node or if configured in the node configuration for the Sink Node.
35	Track 2 data	Conditional	Present if Track 2 was entered at the Point of Service.
37	Retrieval reference number	Always sent	
38	Authorization ID response	Conditional	From authorizer (or from stand-in authorization).
39	Response Code	Conditional	Copied from the 0120/0220 message from the Source Node, or if field 39 is not present in the 0120/0220 message from the Source Node, a response code of 00 will be sent. If the Transaction Manager performs PIN verification, the PIN verification failed and the Sink Node is configured to receive an advice if a PIN failure occurs, this field indicates an incorrect PIN.

Message Content

Field	Description	Condition	Notes
40	Service restriction code	Conditional	Included if present in the initial message from the Source Node.
41	Card acceptor terminal ID	Always sent	
42	Card acceptor ID code	Always sent	
43	Card acceptor name location	Always sent	
44	Additional response data	Conditional	From authorizer (or from stand-in authorization).
45	Track 1 data	Conditional	Included if present in the initial message from the Source Node.
49	Currency code, transaction	Always sent	
50	Currency code, settlement	Conditional	Present if the Transaction Manager performs currency conversion for the Node the message is sent to and the transaction (i.e. local) currency differs from the settlement currency.
54	Additional amounts	Conditional	Contains the approved amount for the transaction. Note that the final amount can be different (and higher) than the approved amount. This is typically the case when, e.g. a tip is added in a restaurant.
56	Message reason code	Always sent	
58	Authorizing agent ID code	Conditional	Included if the authorizer and the card issuer differs.
59	Echo data	Always sent	
67	Extended payment code	Conditional	Included if the transaction is a budget transaction.
90	Original data elements	Conditional	Present if supplied in the message from the source or constructed by Transaction Manager from the contents of the original message, if it could be retrieved.
95	Replacement amounts	Always sent	
98	Payee	Conditional	Present for Third-party payments (inter-bank transfers) and linked bill payments.

Message Content

Field	Description	Condition	Notes
100	Receiving institution ID code	Conditional	Included if present in the initial message from the Source Node.
102	Account identification 1	Conditional	Included if present in the response message from the Source Node or if Transaction Manager provides issuer services and the transaction is a debit, inquiry, payment or transfer.
103	Account identification 2	Conditional	Included if present in the response message from the Source Node or if Transaction Manager provides issuer services and the transaction is a debit, inquiry, payment or transfer.
123	POS data code	Always sent	
127.1	Bitmap	Always sent	
127.2	Switch key	Always sent	
127.3	Routing information	Always sent	
127.4	POS data	Conditional	Echoed from original request.
127.5	Service station data	Conditional	Echoed from original request.
127.6	Authorization profile	Always sent	
127.7	Check data	Conditional	Included if a check guarantee or a check verification transaction.
127.9	Additional node data	Conditional	Included if present in any prior message, associated with the transaction, from Source Node.
127.11	Original key	Conditional	If the reversal was generated due to a timeout, then this field will contain the value of field 127.2 of the original message that timed out. If the corresponding message from the Source Node contained field 127.11, then Transaction Manager will locate the Sink Node equivalent value and send it in field 127.11.
127.12	Terminal owner	Conditional	Included if present in the initial message from the Source Node.
127.13	POS geographic data	Conditional	Included if present in the initial message from the Source Node.

Message Content

Field	Description	Condition	Notes
127.14	Sponsor bank	Conditional	Included if present in the initial message from the Source Node.
127.19	Bank details	Conditional	Present for third-party payments (inter-bank transfers).
127.20	Originator/Authorizer settlement date	Always sent	
127.22	Structured data	Conditional	Included if present in the initial message from the Source Node.
127.23	Payee name and address	Conditional	Included if present in the initial message from the Source Node.
127.24	Payer account	Conditional	Included if present in the initial message from the Source Node.
127.25	ICC data	Conditional	Included if present in the initial message from the Source Node.
127.26	Original node	Conditional	Present if an original transaction could be found.
127.27	Card verification result	Conditional	This field is set up if card verification is performed. If card verification is not performed then this field is included if it was present in the received message.
127.33	Extended transaction type	Conditional	Included if present in the initial message from the Source Node.
127.34	Account type qualifier	Conditional	Included if present in the initial message from the Source Node.
127.35	Acquirer network ID	Conditional	Included if present in the initial message from the Source Node.
127.36	Customer Id	Conditional	Included if present in the initial message from the Source Node.
127.37	Extended Response Code	Optional	
127.40	Transaction reference	Conditional	Included if present in the initial message from the Source Node.
127.43	Routing Network ID	Conditional	
127.44	Extended Card Acceptor Terminal ID	Conditional	
127.45	Extended Card Acceptor ID Code	Conditional	
127.46	Original Card Acceptor Terminal ID	Conditional	

Message Content

Field	Description	Condition	Notes
127.47	Original Card Acceptor ID Code	Conditional	
127.48	Dynamic Currency Conversion (DCC) status code	Conditional	
127.49	Card Acceptor Additional Data	Conditional	
127.59	Payment Token Identifier	Conditional	Included if present in the initial message from the Source Node.
128	MAX extended	Conditional	Present if MAC'ing is enabled for the current message type.

Message Content

Send – Reversal Advice Response (0430)

Field	Description	Condition	Notes
2	Primary account number	Conditional	If this information was provided in the message received by the Source Node (in this field or as part of track 2 data), then this field will be present. Present for all card initiated transactions (including check guarantee or check verification transactions that use the plastic card account format).
3	Processing code	Always sent	
4	Amount, transaction	Always sent	
5	Amount, settlement	Conditional	Present if the transaction (i.e. local) currency differs from the settlement currency.
7	Transmission date and time	Always sent	
9	Conversion rate, settlement	Conditional	Present if the transaction (i.e. local) currency differs from the settlement currency.
11	System trace audit number	Always sent	
12	Time, local transaction	Always sent	
13	Date, local transaction	Always sent	
14	Date, expiration	Conditional	If this information was provided in the message received by the Source Node (in this field or as part of track 2 data), then this field will be present. Present for all card initiated transactions (including check guarantee or check verification transactions that use the plastic card account format).
15	Date, settlement	Always sent	
16	Date, conversion	Conditional	Present if the transaction (i.e. local) currency differs from the settlement currency.
18	Merchant's type	Conditional	Echoed from original advice.
22	POS entry mode	Always sent	

Message Content

Field	Description	Condition	Notes
23	Card sequence number	Conditional	Included if present in the initial message from the Source Node or if it could be retrieved from Track 2 data.
25	POS condition code	Always sent	
28	Amount, transaction fee	Always sent	
29	Amount, settlement fee	Conditional	Present if the transaction (i.e. local) currency differs from the settlement currency.
30	Amount, transaction processing fee	Always sent	
31	Amount, settle processing fee	Conditional	Present if the transaction (i.e. local) currency differs from the settlement currency.
32	Acquiring institution ID code	Conditional	Included if present in the initial message from the Source Node.
33	Forwarding institution ID code	Conditional	Included if present in the initial message from the Source Node.
35	Track 2 data	Conditional	Present if Track 2 was entered at the Point of Service.
37	Retrieval reference number	Always sent	
38	Authorization ID response	Conditional	From authorizer (or from stand-in authorization).
39	Response code	Always sent	
40	Service restriction code	Conditional	Included if present in the initial message from the Source Node.
41	Card acceptor terminal ID	Always sent	
42	Card acceptor ID code	Always sent	
43	Card acceptor name location	Always sent	
45	Track 1 data	Conditional	Included if present in the initial message from the Source Node.
49	Currency code, transaction	Always sent	

Message Content

Field	Description	Condition	Notes
50	Currency code, settlement	Conditional	Present if the transaction (i.e. local) currency differs from the settlement currency.
54	Additional amounts	Conditional	Contains the <i>approved amount</i> . If the transaction is a goods and services with cash back transaction <i>amount cash</i> will also be present.
58	Authorizing agent ID code	Conditional	Included if the authorizer and the card issuer differs.
59	Echo data	Conditional	Echoed from original advice.
67	Extended payment code	Conditional	Echoed from original advice.
90	Original data elements	Conditional	Present if supplied in the message from the source or constructed by Transaction Manager from the contents of the original message, if it could be retrieved.
95	Replacement amounts	Always sent	
98	Payee	Conditional	Present for Third-party payments (inter-bank transfers) and linked bill payments.
100	Receiving institution ID code	Conditional	Included if present in the initial message from the Source Node.
102	Account identification 1	Conditional	Included if present in the response message from the Sink Node or if Transaction Manager provides issuer services and the transaction is a debit, inquiry, payment or transfer.
103	Account identification 2	Conditional	Included if present in the response message from the Sink Node or if Transaction Manager provides issuer services and the transaction is a debit, inquiry, payment or transfer.
123	POS data code	Always sent	
127.1	Bitmap	Always sent	
127.3	Routing information	Always sent	
127.4	POS data	Conditional	Echoed from original advice.
127.5	Service station data	Conditional	Echoed from original advice.

Message Content

Field	Description	Condition	Notes
127.6	Authorization profile	Always sent	
127.7	Check data	Conditional	Included if a check guarantee or a check verification transaction.
127.12	Terminal owner	Conditional	Included if present in the initial message from the Source Node.
127.13	POS geographic data	Conditional	Included if present in the initial message from the Source Node.
127.14	Sponsor bank	Conditional	Included if present in the initial message from the Source Node.
127.19	Bank details	Conditional	Included if present in the initial message from the Source Node.
127.20	Originator/Authorizer settlement date	Always sent	
127.23	Payee name and address	Conditional	Included if present in the initial message from the Source Node.
127.24	Payer account	Conditional	Included if present in the initial message from the Source Node.
127.33	Extended transaction type	Conditional	Included if present in the initial message from the Source Node or if received in the response message from the Sink Node.
127.37	Extended Response Code	Optional	
127.39	Original response code	Conditional	Included if a duplicate transaction was received, and Transaction Manager is configured to respond to duplicate transactions.
127.41	Originating remote address	Conditional	Echoed from the request/reversal/advice. This field will only be included in a response to a linked/duplicate message if the linked/duplicate message contains a value for the field. That is, the value from the original message is not used in the absence of the field in the linked/duplicate message.
127.42	Transaction number	Conditional	Sometimes this field is not sent when the transaction has not been stored in the database. This can happen for example if: format errors occurred during transaction processing, or queue filtering is being applied to transaction processing, or invalid duplicate transactions are processed, or

Message Content

Field	Description	Condition	Notes
			a response is being sent for an advice queued to the active/active partner.
127.48	Dynamic Currency Conversion (DCC) status code	Conditional	
128	MAX extended	Conditional	Present if MAC'ing is enabled for the current message type.

Send – Acquirer Reconciliation Request Response (0510)

Field	Description	Condition	Notes
7	Transmission date and time	Always sent	
11	System trace audit number	Always sent	
12	Time, local transaction	Always sent	
13	Date, local transaction	Always sent	
15	Date, settlement	Always sent	
32	Acquiring institution ID code	Conditional	Present if the Node has a settlement granularity of <i>acquirer</i> .
39	Response Code	Always sent	
41	Card acceptor terminal ID	Conditional	Present if the Node has a settlement granularity of <i>terminal</i> .
42	Card acceptor ID code	Conditional	Present if the Node has a settlement granularity of <i>terminal</i> or <i>card acceptor</i> .
50	Currency code, settlement	Always sent	
59	Echo data	Conditional	Echoed from original request.
66	Settlement code	Always sent	
74	Credits, number	Conditional	Contains the totals maintained by the Transaction Manager for the applicable settlement period.

Message Content

Field	Description	Condition	Notes
75	Credits, reversal number	Conditional	Contains the totals maintained by the Transaction Manager for the applicable settlement period.
76	Debits, number	Conditional	Contains the totals maintained by the Transaction Manager for the applicable settlement period.
77	Debits, reversal number	Conditional	Contains the totals maintained by the Transaction Manager for the applicable settlement period.
78	Transfers, number	Conditional	Contains the totals maintained by the Transaction Manager for the applicable settlement period.
79	Transfers, reversal number	Conditional	Contains the totals maintained by the Transaction Manager for the applicable settlement period.
80	Inquiries, number	Conditional	Contains the totals maintained by the Transaction Manager for the applicable settlement period.
81	Authorizations, number	Conditional	Contains the totals maintained by the Transaction Manager for the applicable settlement period.
82	Credits, processing fee amount	Conditional	Contains the totals maintained by the Transaction Manager for the applicable settlement period.
83	Credits, transaction fee amount	Conditional	Contains the totals maintained by the Transaction Manager for the applicable settlement period.
84	Debits, processing fee amount	Conditional	Contains the totals maintained by the Transaction Manager for the applicable settlement period.
85	Debits, transaction fee amount	Conditional	Contains the totals maintained by the Transaction Manager for the applicable settlement period.
86	Credits, amount	Conditional	Contains the totals maintained by the Transaction Manager for the applicable settlement period.
87	Credits, reversal amount	Conditional	Contains the totals maintained by the Transaction Manager for the applicable settlement period.

Message Content

Field	Description	Condition	Notes
88	Debits, amount	Conditional	Contains the totals maintained by the Transaction Manager for the applicable settlement period.
89	Debits, reversal amount	Conditional	Contains the totals maintained by the Transaction Manager for the applicable settlement period.
97	Amount, net settlement	Conditional	Contains the totals maintained by the Transaction Manager for the applicable settlement period.
118	Payments, number	Conditional	Contains the totals maintained by the Transaction Manager for the applicable settlement period.
119	Payments, reversal number	Conditional	Contains the totals maintained by the Transaction Manager for the applicable settlement period.
127.41	Originating remote address	Conditional	Echoed from the request/reversal/advice. This field will only be included in a response to a linked/duplicate message if the linked/duplicate message contains a value for the field. That is, the value from the original message is not used in the absence of the field in the linked/duplicate message.
128	MAX extended	Conditional	Present if MAC'ing is enabled for the current message type.

Message Content

Send – Card Issuer Reconciliation Request Response (0512)

Field	Description	Condition	Notes
7	Transmission date and time	Always sent	
11	System trace audit number	Always sent	
12	Time, local transaction	Always sent	
13	Date, local transaction	Always sent	
15	Date, settlement	Always sent	
32	Acquiring institution ID code	Conditional	Present if the Node has a settlement granularity of <i>acquirer</i> .
39	Response Code	Always sent	
41	Card acceptor terminal ID	Conditional	Present if the Node has a settlement granularity of <i>terminal</i> .
42	Card acceptor ID code	Conditional	Present if the Node has a settlement granularity of <i>terminal</i> or <i>card acceptor</i> .
50	Currency code, settlement	Always sent	
59	Echo data	Conditional	Echoed from original request.
66	Settlement code	Always sent	
74	Credits, number	Conditional	Contains the totals maintained by the Transaction Manager for the applicable settlement period.
75	Credits, reversal number	Conditional	Contains the totals maintained by the Transaction Manager for the applicable settlement period.
76	Debits, number	Conditional	Contains the totals maintained by the Transaction Manager for the applicable settlement period.
77	Debits, reversal number	Conditional	Contains the totals maintained by the Transaction Manager for the applicable settlement period.

Message Content

Field	Description	Condition	Notes
78	Transfers, number	Conditional	Contains the totals maintained by the Transaction Manager for the applicable settlement period.
79	Transfers, reversal number	Conditional	Contains the totals maintained by the Transaction Manager for the applicable settlement period.
80	Inquiries, number	Conditional	Contains the totals maintained by the Transaction Manager for the applicable settlement period.
81	Authorizations, number	Conditional	Contains the totals maintained by the Transaction Manager for the applicable settlement period.
82	Credits, processing fee amount	Conditional	Contains the totals maintained by the Transaction Manager for the applicable settlement period.
83	Credits, transaction fee amount	Conditional	Contains the totals maintained by the Transaction Manager for the applicable settlement period.
84	Debits, processing fee amount	Conditional	Contains the totals maintained by the Transaction Manager for the applicable settlement period.
85	Debits, transaction fee amount	Conditional	Contains the totals maintained by the Transaction Manager for the applicable settlement period.
86	Credits, amount	Conditional	Contains the totals maintained by the Transaction Manager for the applicable settlement period.
87	Credits, reversal amount	Conditional	Contains the totals maintained by the Transaction Manager for the applicable settlement period.
88	Debits, amount	Conditional	Contains the totals maintained by the Transaction Manager for the applicable settlement period.
89	Debits, reversal amount	Conditional	Contains the totals maintained by the Transaction Manager for the applicable settlement period.
97	Amount, net settlement	Conditional	Contains the totals maintained by the Transaction Manager for the applicable settlement period.

Message Content

Field	Description	Condition	Notes
118	Payments, number	Conditional	Contains the totals maintained by the Transaction Manager for the applicable settlement period.
119	Payments, reversal number	Conditional	Contains the totals maintained by the Transaction Manager for the applicable settlement period.
127.41	Originating remote address	Conditional	Echoed from the request/reversal/advice. This field will only be included in a response to a linked/duplicate message if the linked/duplicate message contains a value for the field. That is, the value from the original message is not used in the absence of the field in the linked/duplicate message.
128	MAX extended	Conditional	Present if MAC'ing is enabled for the current message type.

Send – Acquirer Reconciliation Advice (Repeat) (0520/0521)

Field	Description	Condition	Notes
7	Transmission date and time	Always sent	
11	System trace audit number	Always sent	
12	Time, local transaction	Always sent	
13	Date, local transaction	Always sent	
15	Date, settlement	Always sent	
32	Acquiring institution ID code	Conditional	Present if the Node has a settlement granularity of <i>acquirer</i> .
41	Card acceptor terminal ID	Conditional	Present if the Node has a settlement granularity of <i>terminal</i> .
42	Card acceptor ID code	Conditional	Present if the Node has a settlement granularity of <i>terminal</i> or <i>card acceptor</i> .
50	Currency code, settlement	Always sent	
74	Credits, number	Conditional	Contains the totals maintained by the Transaction Manager for the applicable settlement period.

Message Content

Field	Description	Condition	Notes
75	Credits, reversal number	Conditional	Contains the totals maintained by the Transaction Manager for the applicable settlement period.
76	Debits, number	Conditional	Contains the totals maintained by the Transaction Manager for the applicable settlement period.
77	Debits, reversal number	Conditional	Contains the totals maintained by the Transaction Manager for the applicable settlement period.
78	Transfers, number	Conditional	Contains the totals maintained by the Transaction Manager for the applicable settlement period.
79	Transfers, reversal number	Conditional	Contains the totals maintained by the Transaction Manager for the applicable settlement period.
80	Inquiries, number	Conditional	Contains the totals maintained by the Transaction Manager for the applicable settlement period.
81	Authorizations, number	Conditional	Contains the totals maintained by the Transaction Manager for the applicable settlement period.
82	Credits, processing fee amount	Conditional	Contains the totals maintained by the Transaction Manager for the applicable settlement period.
83	Credits, transaction fee amount	Conditional	Contains the totals maintained by the Transaction Manager for the applicable settlement period.
84	Debits, processing fee amount	Conditional	Contains the totals maintained by the Transaction Manager for the applicable settlement period.
85	Debits, transaction fee amount	Conditional	Contains the totals maintained by the Transaction Manager for the applicable settlement period.
86	Credits, amount	Conditional	Contains the totals maintained by the Transaction Manager for the applicable settlement period.
87	Credits, reversal amount	Conditional	Contains the totals maintained by the Transaction Manager for the applicable settlement period.

Message Content

Field	Description	Condition	Notes
88	Debits, amount	Conditional	Contains the totals maintained by the Transaction Manager for the applicable settlement period.
89	Debits, reversal amount	Conditional	Contains the totals maintained by the Transaction Manager for the applicable settlement period.
97	Amount, net settlement	Conditional	Contains the totals maintained by the Transaction Manager for the applicable settlement period.
118	Payments, number	Conditional	Contains the totals maintained by the Transaction Manager for the applicable settlement period.
119	Payments, reversal number	Conditional	Contains the totals maintained by the Transaction Manager for the applicable settlement period.
127.1	Bitmap	Conditional	Sent if Postilion private data is present.
127.22	Structured data	Conditional	Included if present in the initial message from the Source Node.
128	MAX extended	Conditional	Present if MAC'ing is enabled for the current message type.

Send – Card Issuer Reconciliation Advice (Repeat) (0522/0523)

Field	Description	Condition	Notes
7	Transmission date and time	Always sent	
11	System trace audit number	Always sent	
12	Time, local transaction	Always sent	
13	Date, local transaction	Always sent	
15	Date, settlement	Always sent	
32	Acquiring institution ID code	Conditional	Present if the Node has a settlement granularity of <i>acquirer</i> .
41	Card acceptor terminal ID	Conditional	Present if the Node has a settlement granularity of <i>terminal</i> .

Message Content

Field	Description	Condition	Notes
42	Card acceptor ID code	Conditional	Present if the Node has a settlement granularity of <i>terminal</i> or <i>card acceptor</i> .
50	Currency code, settlement	Always sent	
74	Credits, number	Conditional	Contains the totals maintained by the Transaction Manager for the applicable settlement period.
75	Credits, reversal number	Conditional	Contains the totals maintained by the Transaction Manager for the applicable settlement period.
76	Debits, number	Conditional	Contains the totals maintained by the Transaction Manager for the applicable settlement period.
77	Debits, reversal number	Conditional	Contains the totals maintained by the Transaction Manager for the applicable settlement period.
78	Transfers, number	Conditional	Contains the totals maintained by the Transaction Manager for the applicable settlement period.
79	Transfers, reversal number	Conditional	Contains the totals maintained by the Transaction Manager for the applicable settlement period.
80	Inquiries, number	Conditional	Contains the totals maintained by the Transaction Manager for the applicable settlement period.
81	Authorizations, number	Conditional	Contains the totals maintained by the Transaction Manager for the applicable settlement period.
82	Credits, processing fee amount	Conditional	Contains the totals maintained by the Transaction Manager for the applicable settlement period.
83	Credits, transaction fee amount	Conditional	Contains the totals maintained by the Transaction Manager for the applicable settlement period.
84	Debits, processing fee amount	Conditional	Contains the totals maintained by the Transaction Manager for the applicable settlement period.
85	Debits, transaction fee amount	Conditional	Contains the totals maintained by the Transaction Manager for the applicable settlement period.

Message Content

Field	Description	Condition	Notes
86	Credits, amount	Conditional	Contains the totals maintained by the Transaction Manager for the applicable settlement period.
87	Credits, reversal amount	Conditional	Contains the totals maintained by the Transaction Manager for the applicable settlement period.
88	Debits, amount	Conditional	Contains the totals maintained by the Transaction Manager for the applicable settlement period.
89	Debits, reversal amount	Conditional	Contains the totals maintained by the Transaction Manager for the applicable settlement period.
97	Amount, net settlement	Conditional	Contains the totals maintained by the Transaction Manager for the applicable settlement period.
118	Payments, number	Conditional	Contains the totals maintained by the Transaction Manager for the applicable settlement period.
119	Payments, reversal number	Conditional	Contains the totals maintained by the Transaction Manager for the applicable settlement period.
127.1	Bitmap	Conditional	Sent if Postilion private data is present.
127.22	Structured data	Conditional	Included if present in the initial message from the Source Node.
128	MAX extended	Conditional	Present if MAC'ing is enabled for the current message type.

Send – Acquirer Reconciliation Advice Response (0530)

Field	Description	Condition	Notes
7	Transmission date and time	Always sent	
11	System trace audit number	Always sent	
12	Time, local transaction	Always sent	
13	Date, local transaction	Always sent	

Message Content

Field	Description	Condition	Notes
15	Date, settlement	Always sent	
32	Acquiring institution ID code	Conditional	Present if the Node has a settlement granularity of <i>acquirer</i> .
39	Response Code	Always sent	
41	Card acceptor terminal ID	Conditional	Present if the Node has a settlement granularity of <i>terminal</i> .
42	Card acceptor ID code	Conditional	Present if the Node has a settlement granularity of <i>terminal</i> or <i>card acceptor</i> .
50	Currency code, settlement	Always sent	
59	Echo data	Conditional	Echoed from original advice.
66	Settlement code	Always sent	
74	Credits, number	Conditional	Contains the totals maintained by the Transaction Manager for the applicable settlement period.
75	Credits, reversal number	Conditional	Contains the totals maintained by the Transaction Manager for the applicable settlement period.
76	Debits, number	Conditional	Contains the totals maintained by the Transaction Manager for the applicable settlement period.
77	Debits, reversal number	Conditional	Contains the totals maintained by the Transaction Manager for the applicable settlement period.
78	Transfers, number	Conditional	Contains the totals maintained by the Transaction Manager for the applicable settlement period.
79	Transfers, reversal number	Conditional	Contains the totals maintained by the Transaction Manager for the applicable settlement period.
80	Inquiries, number	Conditional	Contains the totals maintained by the Transaction Manager for the applicable settlement period.
81	Authorizations, number	Conditional	Contains the totals maintained by the Transaction Manager for the applicable settlement period.

Message Content

Field	Description	Condition	Notes
82	Credits, processing fee amount	Conditional	Contains the totals maintained by the Transaction Manager for the applicable settlement period.
83	Credits, transaction fee amount	Conditional	Contains the totals maintained by the Transaction Manager for the applicable settlement period.
84	Debits, processing fee amount	Conditional	Contains the totals maintained by the Transaction Manager for the applicable settlement period.
85	Debits, transaction fee amount	Conditional	Contains the totals maintained by the Transaction Manager for the applicable settlement period.
86	Credits, amount	Conditional	Contains the totals maintained by the Transaction Manager for the applicable settlement period.
87	Credits, reversal amount	Conditional	Contains the totals maintained by the Transaction Manager for the applicable settlement period.
88	Debits, amount	Conditional	Contains the totals maintained by the Transaction Manager for the applicable settlement period.
89	Debits, reversal amount	Conditional	Contains the totals maintained by the Transaction Manager for the applicable settlement period.
97	Amount, net settlement	Conditional	Contains the totals maintained by the Transaction Manager for the applicable settlement period.
118	Payments, number	Conditional	Contains the totals maintained by the Transaction Manager for the applicable settlement period.
119	Payments, reversal number	Conditional	Contains the totals maintained by the Transaction Manager for the applicable settlement period.
127.1	Bitmap	Conditional	Sent if Postilion private data is present.
127.37	Extended Response Code	Optional	
127.39	Original response code	Conditional	Included if a duplicate transaction was received, and Transaction Manager is configured to respond to duplicate transactions.
127.41	Originating remote address	Conditional	Echoed from the request/reversal/advice. This field will only be included in a response to a linked/duplicate message if the linked/duplicate

Message Content

Field	Description	Condition	Notes
			message contains a value for the field. That is, the value from the original message is not used in the absence of the field in the linked/duplicate message.
127.42	Transaction number	Conditional	Sometimes this field is not sent when the transaction has not been stored in the database. This can happen for example if: format errors occurred during transaction processing, or queue filtering is being applied to transaction processing, or invalid duplicate transactions are processed, or a response is being sent for an advice queued to the active/active partner.
128	MAX extended	Conditional	Present if MAC'ing is enabled for the current message type.

Message Content

Send – Card Issuer Reconciliation Advice Response (0532)

Field	Description	Condition	Notes
7	Transmission date and time	Always sent	
11	System trace audit number	Always sent	
12	Time, local transaction	Always sent	
13	Date, local transaction	Always sent	
15	Date, settlement	Always sent	
32	Acquiring institution ID code	Conditional	Present if the Node has a settlement granularity of <i>acquirer</i> .
39	Response Code	Always sent	
41	Card acceptor terminal ID	Conditional	Present if the Node has a settlement granularity of <i>terminal</i> .
42	Card acceptor ID code	Conditional	Present if the Node has a settlement granularity of <i>terminal</i> or <i>card acceptor</i> .
50	Currency code, settlement	Always sent	
59	Echo data	Conditional	Echoed from original advice.
66	Settlement code	Always sent	
74	Credits, number	Conditional	Contains the totals maintained by the Transaction Manager for the applicable settlement period.
75	Credits, reversal number	Conditional	Contains the totals maintained by the Transaction Manager for the applicable settlement period.
76	Debits, number	Conditional	Contains the totals maintained by the Transaction Manager for the applicable settlement period.
77	Debits, reversal number	Conditional	Contains the totals maintained by the Transaction Manager for the applicable settlement period.

Message Content

Field	Description	Condition	Notes
78	Transfers, number	Conditional	Contains the totals maintained by the Transaction Manager for the applicable settlement period.
79	Transfers, reversal number	Conditional	Contains the totals maintained by the Transaction Manager for the applicable settlement period.
80	Inquiries, number	Conditional	Contains the totals maintained by the Transaction Manager for the applicable settlement period.
81	Authorizations, number	Conditional	Contains the totals maintained by the Transaction Manager for the applicable settlement period.
82	Credits, processing fee amount	Conditional	Contains the totals maintained by the Transaction Manager for the applicable settlement period.
83	Credits, transaction fee amount	Conditional	Contains the totals maintained by the Transaction Manager for the applicable settlement period.
84	Debits, processing fee amount	Conditional	Contains the totals maintained by the Transaction Manager for the applicable settlement period.
85	Debits, transaction fee amount	Conditional	Contains the totals maintained by the Transaction Manager for the applicable settlement period.
86	Credits, amount	Conditional	Contains the totals maintained by the Transaction Manager for the applicable settlement period.
87	Credits, reversal amount	Conditional	Contains the totals maintained by the Transaction Manager for the applicable settlement period.
88	Debits, amount	Conditional	Contains the totals maintained by the Transaction Manager for the applicable settlement period.
89	Debits, reversal amount	Conditional	Contains the totals maintained by the Transaction Manager for the applicable settlement period.
97	Amount, net settlement	Conditional	Contains the totals maintained by the Transaction Manager for the applicable settlement period.

Message Content

Field	Description	Condition	Notes
118	Payments, number	Conditional	Contains the totals maintained by the Transaction Manager for the applicable settlement period.
119	Payments, reversal number	Conditional	Contains the totals maintained by the Transaction Manager for the applicable settlement period.
127.1	Bitmap	Conditional	Sent if Postilion private data is present.
127.22	Structured data	Conditional	Included if present in the initial message from the Source Node.
127.37	Extended response code	Optional	
127.39	Original response code	Conditional	Included if a duplicate transaction was received, and Transaction Manager is configured to respond to duplicate transactions.
127.41	Originating remote address	Conditional	Echoed from the request/reversal/advice. This field will only be included in a response to a linked/duplicate message if the linked/duplicate message contains a value for the field. That is, the value from the original message is not used in the absence of the field in the linked/duplicate message.
127.42	Transaction number	Conditional	Sometimes this field is not sent when the transaction has not been stored in the database. This can happen for example if: format errors occurred during transaction processing, or queue filtering is being applied to transaction processing, or invalid duplicate transactions are processed, or a response is being sent for an advice queued to the active/active partner.
128	MAX extended	Conditional	Present if MAC'ing is enabled for the current message type.

Send - Administration Request (Repeat) (0600/0601)

Field	Description	Condition	Notes
2	Primary account number	Conditional	If this information was provided in the message received by the Source Node (in this field or as part of track 2 data), then this field will be present. Present for all card initiated transactions (including check guarantee or check verification

Message Content

Field	Description	Condition	Notes
			transactions that use the plastic card account format).
3	Processing code	Always sent	
4	Amount, transaction	Conditional	Included if present in the initial message from the Source Node.
7	Transmission date and time	Always sent	
11	System trace audit number	Always sent	
12	Time, local transaction	Always sent	
13	Date, local transaction	Always sent	
14	Date, expiration	Conditional	If this information was provided in the message received by the Source Node (in this field or as part of track 2 data), then this field will be present. Present for all card initiated transactions (including check guarantee or check verification transactions that use the plastic card account format).
15	Date, settlement	Always sent	
18	Merchant's type	Conditional	Included if present in the initial message from the Source Node.
22	POS entry mode	Always sent	
23	Card sequence number	Conditional	Included if present in the initial message from the Source Node or if it could be retrieved from Track 2 data.
25	POS condition code	Always sent	
26	POS PIN capture code	Conditional	Present if a PIN was entered at the Point of Service.
28	Amount, transaction fee	Conditional	Included if present in the initial message from the Source Node.
32	Acquiring institution ID code	Conditional	Included if present in the initial message from the Source Node or if configured in the node configuration for the Sink Node.

Message Content

Field	Description	Condition	Notes
35	Track 2 data	Conditional	Present if Track 2 was entered at the Point of Service.
37	Retrieval reference number	Always sent	
40	Service restriction code	Conditional	Included if present in the initial message from the Source Node.
41	Card acceptor terminal ID	Always sent	
42	Card acceptor ID code	Always sent	
43	Card acceptor name location	Always sent	
45	Track 1 data	Conditional	Included if present in the initial message from the Source Node.
49	Currency code, transaction	Conditional	Included if present in the initial message from the Source Node.
52	PIN data	Conditional	Present if a PIN was entered at the Point of Service.
53	Security related control information	Conditional	Present if a PIN was entered at the Point of Service and the DUKPT PIN encryption scheme is used.
56	Message reason code	Conditional	If the transaction type is 92 (PIN change) and the response code is 38 (PIN tries exceeded, pick up), 55 (Incorrect PIN) or 75 (PIN tries exceeded) a message reason code of 1376 is sent. Otherwise the message reason code is included if present in the initial message from the Source Node.
59	Echo data	Always sent	
100	Receiving institution ID code	Conditional	Included if present in the initial message from the Source Node.
102	Account identification 1	Conditional	Included if present in the response message from the Source Node or if Transaction Manager provides issuer services and the transaction is a debit, inquiry, payment or transfer.
123	POS data code	Always sent	
127.1	Bitmap	Always sent	

Message Content

Field	Description	Condition	Notes
127.2	Switch key	Always sent	
127.3	Routing information	Always sent	
127.4	POS data	Conditional	Included if present in the initial message from the Source Node.
127.9	Additional node data	Conditional	Included if present in the initial message from the Source Node.
127.10	CVV2	Conditional	Included if present in the initial message from the Source Node.
127.11	Original key	Conditional	If the corresponding message from the Source Node contained field 127.11, then Transaction Manager will locate the Sink Node equivalent value and send it in field 127.11.
127.12	Terminal owner	Conditional	Included if present in the initial message from the Source Node.
127.13	POS geographic data	Conditional	Included if present in the initial message from the Source Node.
127.14	Sponsor bank	Conditional	Included if present in the initial message from the Source Node.
127.15	Address verification data	Conditional	Included if present in the initial message from the Source Node.
127.16	Address verification result	Conditional	Included if present in the initial message from the Source Node.
127.18	Validation data	Conditional	Included if present in the initial message from the Source Node.
127.22	Structured data	Conditional	Included if present in the initial message from the Source Node.
127.25	ICC data	Conditional	Included if present in the initial message from the Source Node.
127.26	Original node	Conditional	Present if an original transaction could be found.
127.27	Card verification result	Conditional	This field is set up if card verification is performed. If card verification is not performed then this field is included if it was present in the received message.
127.28	American express card identifier (CID)	Conditional	Included if present in the initial message from the Source Node.

Message Content

Field	Description	Condition	Notes
127.33	Extended transaction type	Conditional	Included if present in the initial message from the Source Node.
127.34	Account type qualifier	Conditional	Included if present in the initial message from the Source Node.
127.35	Acquirer network ID	Conditional	Included if present in the initial message from the Source Node.
127.36	Customer Id	Conditional	Included if present in the initial message from the Source Node.
127.40	Transaction reference	Conditional	Included if present in the initial message from the Source Node.
127.43	Routing Network ID	Conditional	
127.44	Extended Card Acceptor Terminal ID	Conditional	
127.45	Extended Card Acceptor ID Code	Conditional	
127.46	Original Card Acceptor Terminal ID	Conditional	
127.47	Original Card Acceptor ID Code	Conditional	
127.49	Card Acceptor Additional Data	Conditional	
127.59	Payment Token Identifier	Conditional	Included if present in the initial message from the Source Node.
128	MAX extended	Conditional	Present if MAC'ing is enabled for the current message type.

Message Content

Send - Administration Request Response (0610)

Field	Description	Condition	Notes
2	Primary account number	Conditional	If this information was provided in the message received by the Source Node (in this field or as part of track 2 data), then this field will be present. Present for all card initiated transactions (including check guarantee or check verification transactions that use the plastic card account format).
3	Processing code	Always sent	
4	Amount, transaction	Conditional	Echoed from original request.
7	Transmission date and time	Always sent	
11	System trace audit number	Always sent	
12	Time, local transaction	Always sent	
13	Date, local transaction	Always sent	
14	Date, expiration	Conditional	Included if present in the initial message from the Source Node.
15	Date, settlement	Always sent	
18	Merchant's type	Conditional	Echoed from original request.
22	POS entry mode	Always sent	
23	Card sequence number	Conditional	Included if present in the initial message from the Source Node or if it could be retrieved from Track 2 data.
25	POS condition code	Always sent	
28	Amount, transaction fee	Conditional	Echoed from original request.
32	Acquiring institution ID code	Conditional	Included if present in the initial message from the Source Node.
33	Forwarding institution ID code	Conditional	Included if present in the initial message from the Source Node.

Message Content

Field	Description	Condition	Notes
35	Track 2 data	Conditional	Present if Track 2 was entered at the Point of Service.
37	Retrieval reference number	Always sent	
38	Authorization ID response	Conditional	From authorizer (or from stand-in authorization).
39	Response code	Always sent	
40	Service restriction code	Conditional	Included if present in the initial message from the Source Node.
41	Card acceptor terminal ID	Always sent	
42	Card acceptor ID code	Always sent	
43	Card acceptor name location	Always sent	
44	Additional response data	Conditional	From authorizer (or from stand-in authorization).
45	Track 1 data	Conditional	Included if present in the initial message from the Source Node.
49	Currency code, transaction	Conditional	Echoed from original request.
56	Message reason code	Conditional	If the transaction type is 92 (PIN change) and the response code is 38 (PIN tries exceeded, pick up), 55 (Incorrect PIN) or 75 (PIN tries exceeded) a message reason code of 1376 is sent. Otherwise the message reason code is included if present in the initial message from the Source Node.
59	Echo data	Conditional	Echoed from original request.
100	Receiving institution ID code	Conditional	Included if present in the initial message from the Source Node.
102	Account identification 1	Conditional	Included if present in the response message from the Sink Node or if Transaction Manager provides issuer services and the transaction is a debit, inquiry, payment or transfer.
123	POS data code	Always sent	
127.1	Bitmap	Always sent	

Message Content

Field	Description	Condition	Notes
127.3	Routing information	Always sent	
127.4	POS data	Conditional	Echoed from original request.
127.9	Additional node data	Conditional	From authorizer (Sink Node).
127.12	Terminal owner	Conditional	Included if present in the initial message from the Source Node.
127.13	POS geographic data	Conditional	Included if present in the initial message from the Source Node.
127.14	Sponsor bank	Conditional	Included if present in the initial message from the Source Node.
127.15	Address verification data	Conditional	Included if present in the initial message from the Source Node.
127.16	Address verification result	Conditional	From authorizer (Sink Node).
127.17	Cardholder information	Conditional	From authorizer (or from stand-in authorization).
127.22	Structured data	Conditional	Included if present in the response message received from the Sink Node.
127.25	ICC data	Conditional	Included if present in the response message received from the Sink Node the Sink Node is configured to do EMV authentication If the Sink Node is configured to do EMV authentication then this field will contain the IccResponse Issuer Authentication Data subfield.
127.27	Card verification result	Conditional	This field is set up if card verification is performed. If card verification is not performed then this field is included if it was present in the received message.
127.31	Issuer network ID	Conditional	From authorizer (Sink Node).
127.33	Extended transaction type	Conditional	Included if present in the initial message from the Source Node or if received in the response message from the Sink Node.
127.37	Extended Response Code	Optional	

Message Content

Field	Description	Condition	Notes
127.39	Original response code	Conditional	Included if a duplicate transaction was received, and Transaction Manager is configured to respond to duplicate transactions.
127.41	Originating remote address	Conditional	Echoed from the request/reversal/advice. This field will only be included in a response to a linked/duplicate message if the linked/duplicate message contains a value for the field. That is, the value from the original message is not used in the absence of the field in the linked/duplicate message.
127.42	Transaction number	Conditional	Sometimes this field is not sent when the transaction has not been stored in the database. This can happen for example if: format errors occurred during transaction processing, or queue filtering is being applied to transaction processing, or invalid duplicate transactions are processed, or a response is being sent for an advice queued to the active/active partner.
127.48	Dynamic Currency Conversion (DCC) status code	Conditional	
128	MAX extended	Conditional	Present if MAC'ing is enabled for the current message type.

Send - Administration Advice (Repeat) (0620/0621)

Field	Description	Condition	Notes
2	Primary account number	Conditional	If this information was provided in the message received by the Source Node (in this field or as part of track 2 data), then this field will be present. Present for all card initiated transactions (including check guarantee or check verification transactions that use the plastic card account format).
3	Processing code	Always sent	
4	Amount, transaction	Conditional	Included if present in the initial message from the Source Node.
5	Amount, settlement	Optional	Included if present in the 0620 from the Source Node. No currency conversion is performed by Transaction Manager.

Message Content

Field	Description	Condition	Notes
7	Transmission date and time	Always sent	
9	Conversion rate, settlement	Optional	If present in the 0620 received from the Source Node, it will be present in the 0620 sent upstream.
11	System trace audit number	Always sent	
12	Time, local transaction	Always sent	
13	Date, local transaction	Always sent	
14	Date, expiration	Conditional	If this information was provided in the message received by the Source Node (in this field or as part of track 2 data), then this field will be present. Present for all card initiated transactions (including check guarantee or check verification transactions that use the plastic card account format).
15	Date, settlement	Always sent	
18	Merchant's type	Conditional	Included if present in the initial message from the Source Node.
22	POS entry mode	Always sent	
23	Card sequence number	Conditional	Included if present in the initial message from the Source Node or if it could be retrieved from Track 2 data.
25	POS condition code	Always sent	
28	Amount, transaction fee	Conditional	Included if present in the initial message from the Source Node.
29	Amount, settlement fee	Optional	If present in the 0620 received from the Source Node, it will be present in the 0620 sent upstream.
32	Acquiring institution ID code	Conditional	Included if present in the initial message from the Source Node or if configured in the node configuration for the Sink Node.
35	Track 2 data	Conditional	Present if Track 2 was entered at the Point of Service.

Message Content

Field	Description	Condition	Notes
37	Retrieval reference number	Always sent	
39	Response Code	Always sent	
40	Service restriction code	Conditional	Included if present in the initial message from the Source Node.
41	Card acceptor terminal ID	Always sent	
42	Card acceptor ID code	Always sent	
43	Card acceptor name location	Always sent	
44	Additional response data	Conditional	From authorizer (or from stand-in authorization).
45	Track 1 data	Conditional	Included if present in the initial message from the Source Node.
49	Currency code, transaction	Conditional	Included if present in the initial message from the Source Node.
50	Currency code, settlement	Optional	If present in the 0620 received from the Source Node, it will be present in the 0620 sent upstream.
53	Security related control information	Conditional	Included if present in the initial message from the Source Node.
56	Message reason code	Conditional	If the transaction type is 92 (PIN change) and the response code is 38 (PIN tries exceeded, pick up), 55 (Incorrect PIN) or 75 (PIN tries exceeded) a message reason code of 1376 is sent. Otherwise the message reason code is included if present in the initial message from the Source Node.
59	Echo data	Always sent	
90	Original data elements	Conditional	Present if supplied in the message from the source or constructed by Transaction Manager from the contents of the original message, if it could be retrieved.
100	Receiving institution ID code	Conditional	Included if present in the initial message from the Source Node.
102	Account identification 1	Conditional	Included if present in the response message from the Source Node or if Transaction Manager

Message Content

Field	Description	Condition	Notes
			provides issuer services and the transaction is a debit, inquiry, payment or transfer.
123	POS data code	Always sent	
127.1	Bitmap	Always sent	
127.2	Switch key	Always sent	
127.3	Routing information	Always sent	
127.4	POS data	Conditional	Included if present in the initial message from the Source Node.
127.9	Additional node data	Conditional	Included if present in the initial message from the Source Node.
127.11	Original key	Conditional	If the corresponding message from the Source Node contained field 127.11, then Transaction Manager will locate the Sink Node equivalent value and send it in field 127.11.
127.12	Terminal owner	Conditional	Included if present in the initial message from the Source Node.
127.13	POS geographic data	Conditional	Included if present in the initial message from the Source Node.
127.14	Sponsor bank	Conditional	Included if present in the initial message from the Source Node.
127.22	Structured data	Conditional	Included if present in the initial message from the Source Node.
127.25	ICC data	Conditional	Included if present in the initial message from the Source Node.
127.26	Original node	Conditional	Present if an original transaction could be found.
127.27	Card verification result	Conditional	This field is set up if card verification is performed. If card verification is not performed then this field is included if it was present in the received message.
127.33	Extended transaction type	Conditional	Included if present in the initial message from the Source Node.
127.34	Account type qualifier	Conditional	Included if present in the initial message from the Source Node.

Message Content

Field	Description	Condition	Notes
127.35	Acquirer network ID	Conditional	Included if present in the initial message from the Source Node.
127.36	Customer Id	Conditional	Included if present in the initial message from the Source Node.
127.37	Extended Response Code	Optional	
127.40	Transaction reference	Conditional	Included if present in the initial message from the Source Node.
127.43	Routing Network ID	Conditional	
127.44	Extended Card Acceptor Terminal ID	Conditional	
127.45	Extended Card Acceptor ID Code	Conditional	
127.46	Original Card Acceptor Terminal ID	Conditional	
127.47	Original Card Acceptor ID Code	Conditional	
127.49	Card Acceptor Additional Data	Conditional	
127.59	Payment Token Identifier	Conditional	Included if present in the initial message from the Source Node.
128	MAX extended	Conditional	Present if MAC'ing is enabled for the current message type.

Send - Administration Advice Response (0630)

Field	Description	Condition	Notes
2	Primary account number	Conditional	If this information was provided in the message received by the Source Node (in this field or as part of track 2 data), then this field will be present. Present for all card initiated transactions (including check guarantee or check verification transactions that use the plastic card account format).
3	Processing code	Always sent	
4	Amount, transaction	Conditional	Echoed from original advice.

Message Content

Field	Description	Condition	Notes
5	Amount, settlement	Optional	Included if present in the response message from the Sink Node. No currency conversion is performed by Transaction Manager.
7	Transmission date and time	Always sent	
9	Conversion rate, settlement	Optional	Echoed from original advice.
11	System trace audit number	Always sent	
12	Time, local transaction	Always sent	
13	Date, local transaction	Always sent	
14	Date, expiration	Always sent	
15	Date, settlement	Always sent	
18	Merchant's type	Conditional	Echoed from original advice.
22	POS entry mode	Always sent	
23	Card sequence number	Conditional	Included if present in the initial message from the Source Node or if it could be retrieved from Track 2 data.
25	POS condition code	Always sent	
28	Amount, transaction fee	Conditional	Echoed from original advice.
29	Amount, settlement fee	Optional	Echoed from original advice.
32	Acquiring institution ID code	Conditional	Included if present in the initial message from the Source Node.
33	Forwarding institution ID code	Conditional	Included if present in the initial message from the Source Node.
35	Track 2 data	Conditional	Present if Track 2 was entered at the Point of Service.
37	Retrieval reference number	Always sent	
39	Response code	Always sent	

Message Content

Field	Description	Condition	Notes
40	Service restriction code	Conditional	Included if present in the initial message from the Source Node.
41	Card acceptor terminal ID	Always sent	
42	Card acceptor ID code	Always sent	
43	Card acceptor name location	Always sent	
45	Track 1 data	Conditional	Included if present in the initial message from the Source Node.
49	Currency code, transaction	Conditional	Echoed from original advice.
50	Currency code, settlement	Optional	Echoed from original advice.
56	Message reason code	Conditional	If the transaction type is 92 (PIN change) and the response code is 38 (PIN tries exceeded, pick up), 55 (Incorrect PIN) or 75 (PIN tries exceeded) a message reason code of 1376 is sent. Otherwise the message reason code is included if present in the initial message from the Source Node.
59	Echo data	Conditional	Echoed from original advice.
100	Receiving institution ID code	Conditional	Included if present in the initial message from the Source Node.
102	Account identification 1	Conditional	Included if present in the response message from the Sink Node or if Transaction Manager provides issuer services and the transaction is a debit, inquiry, payment or transfer.
123	POS data code	Always sent	
127.1	Bitmap	Always sent	
127.3	Routing information	Always sent	
127.4	POS data	Conditional	Echoed from original advice.
127.12	Terminal owner	Conditional	Included if present in the initial message from the Source Node.
127.13	POS geographic data	Conditional	Included if present in the initial message from the Source Node.

Message Content

Field	Description	Condition	Notes
127.14	Sponsor bank	Conditional	Included if present in the initial message from the Source Node.
127.33	Extended transaction type	Conditional	Included if present in the initial message from the Source Node or if received in the response message from the Sink Node.
127.37	Extended Response Code	Optional	
127.39	Original response code	Conditional	Included if a duplicate transaction was received, and Transaction Manager is configured to respond to duplicate transactions.
127.41	Originating remote address	Conditional	Echoed from the request/reversal/advice. This field will only be included in a response to a linked/duplicate message if the linked/duplicate message contains a value for the field. That is, the value from the original message is not used in the absence of the field in the linked/duplicate message.
127.42	Transaction number	Conditional	Sometimes this field is not sent when the transaction has not been stored in the database. This can happen for example if: format errors occurred during transaction processing, or queue filtering is being applied to transaction processing, or invalid duplicate transactions are processed, or a response is being sent for an advice queued to the active/active partner.
128	MAX extended	Conditional	Present if MAC'ing is enabled for the current message type.

Send – Network Management Request (Repeat) (0800/0801)

Field	Description	Condition	Notes
7	Transmission date and time	Always sent	
11	System trace audit number	Always sent	
12	Time, local transaction	Always sent	
13	Date, local transaction	Always sent	
70	Network management information code	Always sent	

Message Content

Field	Description	Condition	Notes
127.44	Extended Card Acceptor Terminal ID	Conditional	
127.45	Extended Card Acceptor ID Code	Conditional	
127.46	Original Card Acceptor Terminal ID	Conditional	
127.47	Original Card Acceptor ID Code	Conditional	
128	MAX extended	Conditional	Present if MAC'ing is enabled for the current message type.

Send – Network Management Response (0810)

Field	Description	Condition	Notes
7	Transmission date and time	Always sent	
11	System trace audit number	Always sent	
12	Time, local transaction	Always sent	
13	Date, local transaction	Always sent	
39	Response code	Always sent	
53	Security related control information	Conditional	Present if an approved key management transaction and the "Crypto Field 125" user parameter for the interchange is set to '0'. Contains the encrypted value and check digits of the PIN key used for encryption of PIN blocks from the Acquirer.
70	Network management information code	Always sent	
125	Network management information	Conditional	Present if an approved key management transaction and the "Crypto Field 125" user parameter for the interchange is set to '1'. Contains the encrypted value and check digits of the PIN key used for encryption of PIN blocks from the Acquirer.
127.22	Structured Data Tag "Postilion:KeyExchangeData"	Conditional	Must be present if the encryption key to be exchanged is in TR31 format.

Message Content

Field	Description	Condition	Notes
128	MAX extended	Conditional	Present if MAC'ing is enabled for the current message type.

Send - Authorization Notification Advice (Repeat) (9120/9121)

Field	Description	Condition	Notes
2	Primary account number	Conditional	If this information was provided in the message received by the Source Node (in this field or as part of track 2 data), then this field will be present. Present for all card initiated transactions (including check guarantee or check verification transactions that use the plastic card account format).
3	Processing code	Always sent	
4	Amount, transaction	Always sent	
5	Amount, settlement	Conditional	The amount requested in the currency of the Sink Node. Only sent if the Transaction Manager performs currency conversion for the Source Node and the transaction (i.e. local) currency differs from the settlement currency. If the Transaction Manager does not perform currency conversion for the Source Node, the Source Node returns the settlement amounts, currencies, etc. in the subsequent response.
7	Transmission date and time	Always sent	
9	Conversion rate, settlement	Conditional	Present if the Transaction Manager performs currency conversion for the Node the message is sent to and the transaction (i.e. local) currency differs from the settlement currency.
11	System trace audit number	Always sent	
12	Time, local transaction	Always sent	
13	Date, local transaction	Always sent	
14	Date, expiration	Always sent	

Message Content

Field	Description	Condition	Notes
15	Date, settlement	Always sent	
16	Date, conversion	Conditional	Present if the Transaction Manager performs currency conversion for the Node the message is sent to and the transaction (i.e. local) currency differs from the settlement currency.
18	Merchant's type	Conditional	Included if present in the initial message from the Source Node.
22	POS entry mode	Always sent	
23	Card sequence number	Conditional	Included if present in the initial message from the Source Node or if it could be retrieved from Track 2 data.
25	POS condition code	Always sent	
28	Amount, transaction fee	Always sent	
29	Amount, settlement fee	Conditional	Present if the Transaction Manager performs currency conversion for the Node the message is sent to and the transaction (i.e. local) currency differs from the settlement currency.
30	Amount, transaction processing fee	Always sent	
31	Amount, settle processing fee	Conditional	Present if the Transaction Manager performs currency conversion for the Node the message is sent to and the transaction (i.e. local) currency differs from the settlement currency.
32	Acquiring institution ID code	Conditional	Included if present in the initial message from the Source Node or if configured in the node configuration for the Sink Node.
33	Forwarding institution ID code	Conditional	Included if present in the initial message from the Source Node or if configured in the node configuration for the Sink Node.
35	Track 2 data	Conditional	Present if Track 2 was entered at the Point of Service.
37	Retrieval reference number	Always sent	
38	Authorization ID response	Conditional	From authorizer (or from stand-in authorization).

Message Content

Field	Description	Condition	Notes
39	Response Code	Always sent	
40	Service restriction code	Conditional	Included if present in the initial message from the Source Node.
41	Card acceptor terminal ID	Always sent	
42	Card acceptor ID code	Always sent	
43	Card acceptor name location	Always sent	
44	Additional response data	Conditional	From authorizer (or from stand-in authorization).
45	Track 1 data	Conditional	Included if present in the initial message from the Source Node.
49	Currency code, transaction	Always sent	
50	Currency code, settlement	Conditional	Present if the Transaction Manager performs currency conversion for the Node the message is sent to and the transaction (i.e. local) currency differs from the settlement currency.
54	Additional amounts	Conditional	Contains <i>amount cash</i> if the transaction is a goods and services with cash back transaction.
56	Message reason code	Always sent	
58	Authorizing agent ID code	Conditional	Included if the authorizer and the card issuer differs.
59	Echo data	Always sent	
67	Extended payment code	Conditional	Included if the transaction is a budget transaction.
90	Original data elements	Conditional	Present if supplied in the message from the source or constructed by Transaction Manager from the contents of the original message, if it could be retrieved.
95	Replacement Amounts	Always sent	
98	Payee	Conditional	Present for Third-party payments (inter-bank transfers) and linked bill payments.

Message Content

Field	Description	Condition	Notes
100	Receiving institution ID code	Conditional	Included if present in the initial message from the Source Node.
102	Account identification 1	Conditional	Included if present in the response message from the Source Node or if Transaction Manager provides issuer services and the transaction is a debit, inquiry, payment or transfer.
103	Account identification 2	Conditional	Included if present in the response message from the Source Node or if Transaction Manager provides issuer services and the transaction is a debit, inquiry, payment or transfer.
123	POS data code	Always sent	
127.1	Bitmap	Always sent	
127.3	Routing information	Always sent	
127.4	POS data	Conditional	Echoed from original request/advice.
127.5	Service station data	Conditional	Echoed from original request/advice.
127.6	Authorization profile	Always sent	
127.7	Check data	Conditional	Included if a check guarantee or a check verification transaction.
127.9	Additional node data	Conditional	Included if present in any prior message, associated with the transaction, from Source Node.
127.12	Terminal owner	Conditional	Included if present in the initial message from the Source Node.
127.13	POS geographic data	Conditional	Included if present in the initial message from the Source Node.
127.14	Sponsor bank	Conditional	Included if present in the initial message from the Source Node.
127.19	Bank details	Conditional	Present for third-party payments (inter-bank transfers).
127.20	Originator/Authorizer settlement date	Always sent	
127.22	Structured data	Conditional	Included if present in the initial message from the Source Node.

Message Content

Field	Description	Condition	Notes
127.23	Payee name and address	Conditional	Included if present in the initial message from the Source Node.
127.24	Payer account	Conditional	Included if present in the initial message from the Source Node.
127.25	ICC data	Conditional	Included if present in the initial message from the Source Node.
127.26	Original node	Conditional	Present if an original transaction could be found.
127.27	Card verification result	Conditional	This field is set up if card verification is performed. If card verification is not performed then this field is included if it was present in the received message.
127.31	Issuer network ID	Conditional	From authorizer (sink node).
127.32	UCAF data	Conditional	Included if present in the initial message from the Source Node.
127.33	Extended transaction type	Conditional	Included if present in the initial message from the Source Node.
127.34	Account type qualifier	Conditional	Included if present in the initial message from the Source Node.
127.35	Acquirer network ID	Conditional	Included if present in the initial message from the Source Node.
127.36	Customer Id	Conditional	Included if present in the initial message from the Source Node.
127.37	Extended Response Code	Optional	
127.38	Additional POS Data Code	Conditional	Included if present in the initial message from the Source Node.
127.40	Transaction reference	Conditional	Included if present in the initial message from the Source Node.
127.43	Routing Network ID	Conditional	
127.44	Extended Card Acceptor Terminal ID	Conditional	
127.45	Extended Card Acceptor ID Code	Conditional	
127.46	Original Card Acceptor Terminal ID	Conditional	
127.47	Original Card Acceptor ID Code	Conditional	

Message Content

Field	Description	Condition	Notes
127.48	Dynamic Currency Conversion (DCC) status code	Conditional	
127.49	Card Acceptor Additional Data	Conditional	
128	MAX extended	Conditional	Present if MAC'ing is enabled for the current message type.

Message Content

Send - Transaction Notification Advice (Repeat) (9220/9221)

Field	Description	Condition	Notes
2	Primary account number	Conditional	If this information was provided in the message received by the Source Node (in this field or as part of track 2 data), then this field will be present. Present for all card initiated transactions (including check guarantee or check verification transactions that use the plastic card account format).
3	Processing code	Always sent	
4	Amount, transaction	Always sent	
5	Amount, settlement	Conditional	The amount requested in the currency of the Sink Node. Only sent if the Transaction Manager performs currency conversion for the Source Node and the transaction (i.e. local) currency differs from the settlement currency. If the Transaction Manager does not perform currency conversion for the Source Node, the Source Node returns the settlement amounts, currencies, etc. in the subsequent response.
7	Transmission date and time	Always sent	
9	Conversion rate, settlement	Conditional	Present if the Transaction Manager performs currency conversion for the Node the message is sent to and the transaction (i.e. local) currency differs from the settlement currency.
11	System trace audit number	Always sent	
12	Time, local transaction	Always sent	
13	Date, local transaction	Always sent	
14	Date, expiration	Always sent	
15	Date, settlement	Always sent	
16	Date, conversion	Conditional	Present if the Transaction Manager performs currency conversion for the Node the message is sent to and the transaction (i.e. local) currency differs from the settlement currency.

Message Content

Field	Description	Condition	Notes
18	Merchant's type	Conditional	Included if present in the initial message from the Source Node.
22	POS entry mode	Always sent	
23	Card sequence number	Conditional	Included if present in the initial message from the Source Node or if it could be retrieved from Track 2 data.
25	POS condition code	Always sent	
28	Amount, transaction fee	Always sent	
29	Amount, settlement fee	Conditional	Present if the Transaction Manager performs currency conversion for the Node the message is sent to and the transaction (i.e. local) currency differs from the settlement currency.
30	Amount, transaction processing fee	Always sent	
31	Amount, settle processing fee	Conditional	Present if the Transaction Manager performs currency conversion for the Node the message is sent to and the transaction (i.e. local) currency differs from the settlement currency.
32	Acquiring institution ID code	Conditional	Included if present in the initial message from the Source Node or if configured in the node configuration for the Sink Node.
33	Forwarding institution ID code	Conditional	Included if present in the initial message from the Source Node or if configured in the node configuration for the Sink Node.
35	Track 2 data	Conditional	Present if Track 2 was entered at the Point of Service.
37	Retrieval reference number	Always sent	
38	Authorization ID response	Conditional	From authorizer (or from stand-in authorization).
39	Response Code	Conditional	Copied from the 0120/0220 message from the Source Node, or if field 39 is not present in the 0120/0220 message from the Source Node, a response code of 00 will be sent. If the Transaction Manager performs PIN verification, the PIN verification failed and the

Message Content

Field	Description	Condition	Notes
			Sink Node is configured to receive an advice if a PIN failure occurs, this field indicates an incorrect PIN.
40	Service restriction code	Conditional	Included if present in the initial message from the Source Node.
41	Card acceptor terminal ID	Always sent	
42	Card acceptor ID code	Always sent	
43	Card acceptor name location	Always sent	
44	Additional response data	Conditional	From authorizer (or from stand-in authorization).
45	Track 1 data	Conditional	Included if present in the initial message from the Source Node.
49	Currency code, transaction	Always sent	
50	Currency code, settlement	Conditional	Present if the Transaction Manager performs currency conversion for the Node the message is sent to and the transaction (i.e. local) currency differs from the settlement currency.
54	Additional amounts	Conditional	Contains the approved amount for the transaction. Note that the final amount can be different (and higher) than the approved amount. This is typically the case when, e.g. a tip is added in a restaurant.
56	Message reason code	Always sent	
58	Authorizing agent ID code	Conditional	Included if the authorizer and the card issuer differs.
59	Echo data	Always sent	
67	Extended payment code	Conditional	Included if the transaction is a budget transaction.
90	Original data elements	Conditional	Present if supplied in the message from the source or constructed by Transaction Manager from the contents of the original message, if it could be retrieved.
95	Replacement amounts	Always sent	

Message Content

Field	Description	Condition	Notes
98	Payee	Conditional	Present for Third-party payments (inter-bank transfers) and linked bill payments.
100	Receiving institution ID code	Conditional	Included if present in the initial message from the Source Node.
102	Account identification 1	Conditional	Included if present in the response message from the Source Node or if Transaction Manager provides issuer services and the transaction is a debit, inquiry, payment or transfer.
103	Account identification 2	Conditional	Included if present in the response message from the Source Node or if Transaction Manager provides issuer services and the transaction is a debit, inquiry, payment or transfer.
123	POS data code	Always sent	
127.1	Bitmap	Always sent	
127.3	Routing information	Always sent	
127.4	POS data	Conditional	Echoed from original request/advice.
127.5	Service station data	Conditional	Echoed from original request/advice.
127.6	Authorization profile	Always sent	
127.7	Check data	Conditional	Included if a check guarantee or a check verification transaction.
127.9	Additional node data	Conditional	Included if present in any prior message, associated with the transaction, from Source Node.
127.12	Terminal owner	Conditional	Included if present in the initial message from the Source Node.
127.13	POS geographic data	Conditional	Included if present in the initial message from the Source Node.
127.14	Sponsor bank	Conditional	Included if present in the initial message from the Source Node.
127.19	Bank details	Conditional	Present for third-party payments (inter-bank transfers).
127.20	Originator/Authorizer settlement date	Always sent	

Message Content

Field	Description	Condition	Notes
127.22	Structured data	Conditional	Included if present in the initial message from the Source Node.
127.23	Payee name and address	Conditional	Included if present in the initial message from the Source Node.
127.24	Payer account	Conditional	Included if present in the initial message from the Source Node.
127.25	ICC data	Conditional	Included if present in the initial message from the Source Node.
127.26	Original node	Conditional	Present if an original transaction could be found.
127.27	Card verification result	Conditional	This field is set up if card verification is performed. If card verification is not performed then this field is included if it was present in the received message.
127.31	Issuer network ID	Conditional	From authorizer (sink node).
127.32	UCAF data	Conditional	Included if present in the initial message from the Source Node.
127.33	Extended transaction type	Conditional	Included if present in the initial message from the Source Node.
127.34	Account type qualifier	Conditional	Included if present in the initial message from the Source Node.
127.35	Acquirer network ID	Conditional	Included if present in the initial message from the Source Node.
127.36	Customer Id	Conditional	Included if present in the initial message from the Source Node.
127.37	Extended Response Code	Optional	
127.38	Additional POS Data Code	Conditional	Included if present in the initial message from the Source Node.
127.40	Transaction reference	Conditional	Included if present in the initial message from the Source Node.
127.43	Routing Network ID	Conditional	
127.44	Extended Card Acceptor Terminal ID	Conditional	
127.45	Extended Card Acceptor ID Code	Conditional	
127.46	Original Card Acceptor Terminal ID	Conditional	

Message Content

Field	Description	Condition	Notes
127.47	Original Card Acceptor ID Code	Conditional	
127.48	Dynamic Currency Conversion (DCC) status code	Conditional	
127.49	Card Acceptor Additional Data	Conditional	
128	MAX extended	Conditional	Present if MAC'ing is enabled for the current message type.

Message Content

Send – Acquirer File Update Notification (Repeat) (9320/9321)

Note that an Acquirer File Update Notification (9320) message is sent by PostBridge connected to a **Sink Node**.

Field	Description	Condition	Notes
2	Primary account number	Conditional	Included if present in the initial message from the Source Node.
7	Transmission date and time	Always sent	
11	System trace audit number	Always sent	
12	Time, local transaction	Always sent	
13	Date, local transaction	Always sent	
14	Date, expiration	Always sent	Included if present in the initial message from the Source Node, or if it is returned as a result of a card lookup from PostCard records.
15	Date, settlement	Always sent	
23	Card sequence number	Conditional	Included if present in the initial message from the Source Node.
32	Acquiring institution ID code	Conditional	Included if present in the initial message from the Source Node.
33	Forwarding institution ID code	Conditional	Included if present in the initial message from the Source Node.
37	Retrieval reference number	Always sent	
39	Response Code	Always sent	
41	Card acceptor terminal ID	Always sent	
42	Card acceptor ID code	Always sent	
43	Card acceptor name location	Conditional	Included if present in the initial message from the Source Node.
56	Message reason code	Always sent	

Message Content

Field	Description	Condition	Notes
91	File update code	Always sent	
100	Receiving institution ID code	Conditional	Included if present in the initial message from the Source Node.
101	File name	Conditional	Included if present in the initial message from the Source Node.
127.1	Bitmap	Always sent	
127.3	Routing information	Always sent	
127.9	Additional node data	Conditional	Included if present in the initial message from the Source Node.
127.22	Structured data	Conditional	Included if present in the initial message from the Source Node.
127.37	Extended Response Code	Optional	
127.49	Card Acceptor Additional Data	Conditional	
128	MAX extended	Conditional	Present if MAC'ing is enabled for the current message type.

Send – Reversal Notification Advice (Repeat) (9420/9421)

Field	Description	Condition	Notes
2	Primary account number	Conditional	If this information was provided in the message received by the Source Node (in this field or as part of track 2 data), then this field will be present. Present for all card initiated transactions (including check guarantee or check verification transactions that use the plastic card account format).
3	Processing code	Always sent	
4	Amount, transaction	Always sent	
5	Amount, settlement	Conditional	The amount requested in the currency of the Sink Node. Only sent if the Transaction Manager performs currency conversion for the Source Node and the transaction (i.e. local) currency differs from the settlement currency. If the

Message Content

Field	Description	Condition	Notes
			Transaction Manager does not perform currency conversion for the Source Node, the Source Node returns the settlement amounts, currencies, etc. in the subsequent response.
7	Transmission date and time	Always sent	
9	Conversion rate, settlement	Conditional	Present if the Transaction Manager performs currency conversion for the Node the message is sent to and the transaction (i.e. local) currency differs from the settlement currency.
11	System trace audit number	Always sent	
12	Time, local transaction	Always sent	
13	Date, local transaction	Always sent	
14	Date, expiration	Always sent	
15	Date, settlement	Always sent	
16	Date, conversion	Conditional	Present if the Transaction Manager performs currency conversion for the Node the message is sent to and the transaction (i.e. local) currency differs from the settlement currency.
18	Merchant's type	Conditional	Included if present in the initial message from the Source Node.
22	POS entry mode	Always sent	
23	Card sequence number	Conditional	Included if present in the initial message from the Source Node or if it could be retrieved from Track 2 data.
25	POS condition code	Always sent	
28	Amount, transaction fee	Always sent	
29	Amount, settlement fee	Conditional	Present if the Transaction Manager performs currency conversion for the Node the message is sent to and the transaction (i.e. local) currency differs from the settlement currency.

Message Content

Field	Description	Condition	Notes
30	Amount, transaction processing fee	Always sent	
31	Amount, settle processing fee	Conditional	Present if the Transaction Manager performs currency conversion for the Node the message is sent to and the transaction (i.e. local) currency differs from the settlement currency.
32	Acquiring institution ID code	Conditional	Included if present in the initial message from the Source Node or if configured in the node configuration for the Sink Node.
33	Forwarding institution ID code	Conditional	Included if present in the initial message from the Source Node or if configured in the node configuration for the Sink Node.
35	Track 2 data	Conditional	Present if Track 2 was entered at the Point of Service.
37	Retrieval reference number	Always sent	
38	Authorization ID response	Conditional	From authorizer (or from stand-in authorization).
39	Response Code	Conditional	Copied from the 0120/0220 message from the Source Node, or if field 39 is not present in the 0120/0220 message from the Source Node, a response code of 00 will be sent. If the Transaction Manager performs PIN verification, the PIN verification failed and the Sink Node is configured to receive an advice if a PIN failure occurs, this field indicates an incorrect PIN.
40	Service restriction code	Conditional	Included if present in the initial message from the Source Node.
41	Card acceptor terminal ID	Always sent	
42	Card acceptor ID code	Always sent	
43	Card acceptor name location	Always sent	
44	Additional response data	Conditional	From authorizer (or from stand-in authorization).
45	Track 1 data	Conditional	Included if present in the initial message from the Source Node.

Message Content

Field	Description	Condition	Notes
49	Currency code, transaction	Always sent	
50	Currency code, settlement	Conditional	Present if the Transaction Manager performs currency conversion for the Node the message is sent to and the transaction (i.e. local) currency differs from the settlement currency.
54	Additional amounts	Conditional	Contains the approved amount for the transaction. Note that the final amount can be different (and higher) than the approved amount. This is typically the case when, e.g. a tip is added in a restaurant.
56	Message reason code	Always sent	
58	Authorizing agent ID code	Conditional	Included if the authorizer and the card issuer differs.
59	Echo data	Always sent	
67	Extended payment code	Conditional	Included if the transaction is a budget transaction.
90	Original data elements	Conditional	Present if supplied in the message from the source or constructed by Transaction Manager from the contents of the original message, if it could be retrieved.
95	Replacement amounts	Always sent	
98	Payee	Conditional	Present for Third-party payments (inter-bank transfers) and linked bill payments.
100	Receiving institution ID code	Conditional	Included if present in the initial message from the Source Node.
102	Account identification 1	Conditional	Included if present in the response message from the Source Node or if Transaction Manager provides issuer services and the transaction is a debit, inquiry, payment or transfer.
103	Account identification 2	Conditional	Included if present in the response message from the Source Node or if Transaction Manager provides issuer services and the transaction is a debit, inquiry, payment or transfer.
123	POS data code	Always sent	

Message Content

Field	Description	Condition	Notes
127.1	Bitmap	Always sent	
127.3	Routing information	Always sent	
127.4	POS data	Conditional	Echoed from original request/advice.
127.5	Service station data	Conditional	Echoed from original request/advice.
127.6	Authorization profile	Always sent	
127.7	Check data	Conditional	Included if a check guarantee or a check verification transaction.
127.9	Additional node data	Conditional	Included if present in any prior message, associated with the transaction, from Source Node.
127.12	Terminal owner	Conditional	Included if present in the initial message from the Source Node.
127.13	POS geographic data	Conditional	Included if present in the initial message from the Source Node.
127.14	Sponsor bank	Conditional	Included if present in the initial message from the Source Node.
127.19	Bank details	Conditional	Present for third-party payments (inter-bank transfers).
127.20	Originator/Authorizer settlement date	Always sent	
127.22	Structured data	Conditional	Included if present in the initial message from the Source Node.
127.23	Payee name and address	Conditional	Included if present in the initial message from the Source Node.
127.24	Payer account	Conditional	Included if present in the initial message from the Source Node.
127.25	ICC data	Conditional	Included if present in the initial message from the Source Node.
127.26	Original node	Conditional	Present if an original transaction could be found.
127.27	Card verification result	Conditional	This field is set up if card verification is performed. If card verification is not performed then this field is included if it was present in the received message.

Message Content

Field	Description	Condition	Notes
127.31	Issuer network ID	Conditional	From authorizer (sink node).
127.33	Extended transaction type	Conditional	Included if present in the initial message from the Source Node.
127.34	Account type qualifier	Conditional	Included if present in the initial message from the Source Node.
127.35	Acquirer network ID	Conditional	Included if present in the initial message from the Source Node.
127.36	Customer Id	Conditional	Included if present in the initial message from the Source Node.
127.37	Extended Response Code	Optional	
127.40	Transaction reference	Conditional	Included if present in the initial message from the Source Node.
127.43	Routing Network ID	Conditional	
127.44	Extended Card Acceptor Terminal ID	Conditional	
127.45	Extended Card Acceptor ID Code	Conditional	
127.46	Original Card Acceptor Terminal ID	Conditional	
127.47	Original Card Acceptor ID Code	Conditional	
127.48	Dynamic Currency Conversion (DCC) status code	Conditional	
127.49	Card Acceptor Additional Data	Conditional	
128	MAX extended	Conditional	Present if MAC'ing is enabled for the current message type.

Send - Administration Notification Advice (Repeat) (9620/9621)

Field	Description	Condition	Notes
2	Primary account number	Conditional	If this information was provided in the message received by the Source Node (in this field or as part of track 2 data), then this field will be present. Present for all card initiated transactions (including check guarantee or check verification)

Message Content

Field	Description	Condition	Notes
			transactions that use the plastic card account format).
3	Processing code	Always sent	
4	Amount, transaction	Conditional	Included if present in the initial message from the Source Node.
7	Transmission date and time	Always sent	
11	System trace audit number	Always sent	
12	Time, local transaction	Always sent	
13	Date, local transaction	Always sent	
14	Date, expiration	Conditional	If this information was provided in the message received by the Source Node (in this field or as part of track 2 data), then this field will be present. Present for all card initiated transactions (including check guarantee or check verification transactions that use the plastic card account format).
15	Date, settlement	Always sent	
18	Merchant's type	Conditional	Included if present in the initial message from the Source Node.
22	POS entry mode	Always sent	
23	Card sequence number	Conditional	Included if present in the initial message from the Source Node or if it could be retrieved from Track 2 data.
25	POS condition code	Always sent	
26	POS PIN capture code	Conditional	Present if a PIN was entered at the Point of Service.
28	Amount, transaction fee	Conditional	Included if present in the initial message from the Source Node.
32	Acquiring institution ID code	Conditional	Included if present in the initial message from the Source Node or if configured in the node configuration for the Sink Node.

Message Content

Field	Description	Condition	Notes
33	Forwarding institution ID code	Conditional	Included if present in the initial message from the Source Node or if configured in the node configuration for the Sink Node.
35	Track 2 data	Conditional	Present if Track 2 was entered at the Point of Service.
37	Retrieval reference number	Always sent	
39	Response code	Always sent	
40	Service restriction code	Conditional	Included if present in the initial message from the Source Node.
41	Card acceptor terminal ID	Always sent	
42	Card acceptor ID code	Always sent	
43	Card acceptor name location	Always sent	
44	Additional response data	Conditional	From authorizer (or from stand-in authorization).
45	Track 1 data	Conditional	Included if present in the initial message from the Source Node.
49	Currency code, transaction	Conditional	Included if present in the initial message from the Source Node.
52	PIN data	Conditional	Included if present in the initial message from the Source Node.
53	Security related control information	Conditional	Included if present in the initial message from the Source Node.
54	Additional amounts	Conditional	Included if present in the initial message from the Source Node.
56	Message reason code	Conditional	Included if present in the initial message from the Source Node.
59	Echo data	Always sent	
90	Original data elements	Conditional	Present if supplied in the message from the source or constructed by Transaction Manager from the contents of the original message, if it could be retrieved.

Message Content

Field	Description	Condition	Notes
100	Receiving institution ID code	Conditional	Included if present in the initial message from the Source Node.
102	Account identification 1	Conditional	Included if present in the response message from the Source Node or if Transaction Manager provides issuer services and the transaction is a debit, inquiry, payment or transfer.
123	POS data code	Always sent	
127.1	Bitmap	Always sent	
127.3	Routing information	Always sent	
127.4	POS data	Conditional	Included if present in the initial message from the Source Node.
127.6	Authorization profile	Conditional	Included if present in the initial message from the Source Node.
127.9	Additional node data	Conditional	Included if present in the initial message from the Source Node.
127.10	CVV2	Conditional	Included if present in the initial message from the Source Node.
127.12	Terminal owner	Conditional	Included if present in the initial message from the Source Node.
127.13	POS geographic data	Conditional	Included if present in the initial message from the Source Node.
127.14	Sponsor bank	Conditional	Included if present in the initial message from the Source Node.
127.15	Address verification data	Conditional	Included if present in the initial message from the Source Node.
127.16	Address verification result	Conditional	Included if present in the initial message from the Source Node.
127.18	Validation data	Conditional	Included if present in the initial message from the Source Node.
127.22	Structured data	Conditional	Included if present in the initial message from the Source Node.
127.25	ICC data	Conditional	Included if present in the initial message from the Source Node.
127.26	Original node	Conditional	Present if an original transaction could be found.

Message Content

Field	Description	Condition	Notes
127.27	Card verification result	Conditional	This field is set up if card verification is performed. If card verification is not performed then this field is included if it was present in the received message.
127.28	American express card identifier (CID)	Conditional	Included if present in the initial message from the Source Node.
127.33	Extended transaction type	Conditional	Included if present in the initial message from the Source Node.
127.34	Account type qualifier	Conditional	Included if present in the initial message from the Source Node.
127.35	Acquirer network ID	Conditional	Included if present in the initial message from the Source Node.
127.36	Customer Id	Conditional	Included if present in the initial message from the Source Node.
127.37	Extended Response Code	Optional	
127.40	Transaction reference	Conditional	Included if present in the initial message from the Source Node.
127.43	Routing Network ID	Conditional	
127.44	Extended Card Acceptor Terminal ID	Conditional	
127.45	Extended Card Acceptor ID Code	Conditional	
127.46	Original Card Acceptor Terminal ID	Conditional	
127.47	Original Card Acceptor ID Code	Conditional	
127.49	Card Acceptor Additional Data	Conditional	
128	MAX extended	Conditional	Present if MAC'ing is enabled for the current message type.

Send – Format Error (0xx0)

The message type of the format error message will always be a response to the original message. E.g. if the original message was an *Authorization Request* (0100) the format error message will be an *Authorization Request Response* (0110). If the original message was an *Administrative Advice* (0620) then the format error message will be an *Administrative Advice Response* (0630).

Field	Description	Condition	Notes
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Message Content

7	Transmission date and time	Always sent	
11	System trace audit number	Always sent	
12	Time, local transaction	Always sent	
13	Date, local transaction	Always sent	
39	Response code	Always sent	Will always be equal to '30' (Format Error)
59	Echo data	Conditional	Echoed from original request/reversal/advice.
128	MAX extended	Conditional	Present if MAC'ing is enabled for the current message type.

Section 5: Fields

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Format

Symbol	Description
a	Alphabetic characters, A through Z and a through z
n	Numeric digits, 0 through 9
p	Pad character, space
s	Special characters, i.e. other printable
an	Alphabetic and numeric characters
as	Alphabetic and special characters
ns	Numeric and special characters
anp	Alphabetic, numeric and pad characters
ans	Alphabetic, numeric and special characters
YY	Year, 00 through 99
CCYY	Year, 0001 through 9999
MM	Month, 01 through 12
DD	Day, 01 through 31
hh	Hour, 00 through 23
mm	Minute, 00 through 59

Fields

Symbol	Description
ss	Second, 00 through 59
LL	Length of variable data element that follows, 01 through 99
LLL	Length of variable data element that follows, 001 through 999
LLLLL	Length of variable data element that follows, 00001 through 99999
LLLLLL	Length of variable data element that follows, 000001 through 999999
VAR	Variable length data element
3	Fixed length of 3 characters
..17	Variable length up to 17 characters, containing an additional 2 or 3 characters at the start of the data indicating the number of characters following to the end of the field
x	C for credit, D for debit, always associated with a numeric amount field, i.e. x+n16 means a prefix of C or D followed by 16 numeric characters.
b	Binary representation of data
z	Track 2 as defined in ISO 7813

Definitions

Field 2 – Primary Account Number

Format

n..19, LLVAR

Description

A number identifying the cardholder and the card issuer. Typically, this number is embossed on the front of the card and encoded on Track 2 of the magnetic stripe.

Field 3 – Processing Code

Format

n6

Description

The customer transaction type and the account types, if any, affected by the transaction. This is a fixed length field consisting of 3 data elements.

Transaction Type

This data element is present in positions 1-2.

Debits (00-19)	
00	Goods and services
01	Cash withdrawal
02	Adjustment
03	Check cash / guarantee
04	Check verification
05	Eurocheque
06	Travellers check
07	Letter of credit
08	Giro (postal banking)
09	Goods and services with cash back

Fields

Debits (00-19)	
10	Non-cash financial instrument (e.g. wire transfer)
11	Quasi-cash and scrip
12	General debit (see field 127.33 Extended Transaction Type)
19	Visa Cash load settlement reversal

Credits (20-29)	
20	Returns (refund)
21	Deposit
22	Adjustment
23	Check deposit guarantee
24	Check deposit
25	General credit (see field 127.33 Extended Transaction Type)
28	Merchandise request
29	Visa cash load settlement

Inquiry Services (30-39)	
30	Available balance inquiry
31	Balance inquiry
32	General inquiry (see field 127.33 Extended Transaction Type)
35	Full-statement inquiry
36	Merchandise inquiry (e.g. wire transfer inquiry)
37	Card verification inquiry
38	Mini-statement inquiry
39	Linked account inquiry

Fields

Transfer Services (40-49)	
40	Cardholder accounts transfer
42	General transfer (see field 127.33 Extended Transaction Type)

Payment Services (50-59)	
50	Payment from account
51	Payment by deposit
52	General payment (see field 127.33 Extended Transaction Type)
53	Payment to account
54	Payment from account to account

Administration transactions (90-99)	
90	Place hold on card
91	General admin (see field 127.33 Extended Transaction Type)
92	Change PIN
93	Dead-end general admin (see field 127.33 Extended Transaction Type)

Account Type

The account type affected for debits and inquiries and the "from" account for transfers, is found in positions 3-4. The account type affected for credits and the "to" account for transfers, is found in positions 5-6.

Account Type	
00	Default – unspecified
10	Savings account
20	Check account
30	Credit account
40	Universal account
50	Investment account

Fields

Account Type	
60	Electronic purse account (default)
91	Mortgage loan
92	Instalment loan

Field 4 – Amount Transaction

Format

n12

Description

The funds requested by the cardholder in the local currency of the acquirer or source location of the transaction exclusive of transaction fees. Values are expressed in the minor denomination (e.g. cents).

Field 5 – Amount Settlement

Format

n12

Description

The funds to be transferred between the acquirer and card issuer equal to the amount, transaction as expressed in the settlement currency.

Field 7 – Transmission Date and Time

Format

n10, MMDDhhmmss

Description

The date and time, expressed in Coordinated Universal Time (UTC), when this message is sent by the message initiator.

Field 9 – Conversion rate, Settlement**Format**

n8

Description

The factor used in the conversion from amount, transaction to amount, settlement. The amount, transaction is multiplied by this field to yield the amount, settlement. The leftmost digit denotes the number of positions the decimal separator shall be moved from the right. Positions 2 to 8 of the field represent the actual rate. For example, a conversion rate value of 91234567 would equate to 0,001234567.

Field 11 - Systems Trace Audit Number**Format**

n6

Description

A number assigned by a transaction originator to assist in identifying a transaction uniquely. The systems trace audit number remains unchanged for all messages within a transaction.

Field 12 - Time, Local Transaction**Format**

n6, hhmmss

Description

The local time at which the transaction takes place at the card acceptor location in authorization and financial messages.

For all other transactions, this field indicates the local time set by the initiator of the first message of the transaction.

Field 13 - Date, Local Transaction**Format**

n4, MMDD

Description

The local date at which the transaction takes place at the card acceptor location in authorization and financial and refund messages.

For all other transactions, this field indicates the local date set by the initiator of the first message of the transaction. Field 14 - Date, Expiration

Format

n4, YYMM

Description

The year and month after which the card expires.

Field 15 - Date, Settlement**Format**

n4, MMDD

Description

The month and day for which financial totals are reconciled between the acquirer and the issuer.

Field 16 - Date, Conversion**Format**

n4, MMDD

Description

The month and day on which the currency for the transaction was converted.

Field 18 - Merchant Type**Format**

n4

Description

The classification of the merchant's type of business product or service. Codes to be developed within each country.

Field 22 - POS Entry Mode

Format

n3

Description

A series of codes that identify the actual method used to capture the account number and expiry date when a terminal is used, and the PIN capture capability of the terminal. This is a fixed length field consisting of 2 data elements.

PAN entry mode (positions 1 - 2)	
00	Unknown
01	Manual (i.e. via key pad)
02	Magnetic stripe (possibly constructed manually). CVV may not be checked.
03	Bar code
04	OCR
05	Integrated circuit card (ICC). CVV can be checked.
07	Auto entry via contactless integrated circuit card (ICC)
82	Auto entry via server
90	Magnetic stripe as read from track 2. CVV can be checked.
91	Auto entry via contactless magnetic stripe
95	Integrated circuit card (ICC). CVV may not be checked.
99	Same as original transaction (Note: Only valid for a transaction linked to a previous transaction, where it is not financially related to the previous transaction.)

Note that the MasterCard PAN Entry Mode of 80 (Fallback) is not supported. Typically this will be mapped to 90.

PIN entry capability (position 3)	
0	Unknown
1	Terminal can accept PINs
2	Terminal can not accept PINs

Field 23 Card Sequence Number**Format**

n3

Description

A number distinguishing between separate cards with the same primary account number or primary account number extended.

Field 25 - POS Condition Code**Format**

n2

Description

A code that describes the condition under which the transaction takes place at the Point-Of-Service.

POS condition code	
00	Normal presentment
01	Customer not present
02	Unattended terminal - card can be retained
03	Merchant suspicious
04	Electronic Cash Register interface
05	Customer present, card not present
06	Pre-authorized request
07	Telephone device required
08	Mail/telephone order
09	POS security alert
10	Customer identity verified
11	Suspected fraud
12	Security reasons
13	Representation of item

Fields

14	Public utility terminal
15	Customer's terminal
16	Administrative terminal
17	Returned item
18	No check in envelope - return
19	Deposit out of balance - return
20	Payment out of balance - return
21	Manual reversal
22	Terminal error - counted
23	Terminal error - not counted
24	Deposit out of balance - apply
25	Payment out of balance - apply
26	Withdrawal error – reversed
27	Unattended terminal - card can not be retained
41	Partial approval allowed

Additional codes can be defined for private use.

Field 26 - POS PIN Capture Code**Format**

n2

Description

The maximum number of PIN characters that can be accepted by the Point-of-Service device.

Valid values are "04" to "12" ("00" to "03" are reserved by ISO) and if the POS device does not accept PINs or it is unknown whether the device does, this value should be set to "12".

Field 27 - Authorization ID Response Length**Format**

n1

Description

The maximum length of the authorization ID response which the acquirer can accommodate. The card issuer or agent shall limit the authorization ID response to this length.

Field 28 - Amount, Transaction Fee**Format**

x + n8

Description

A fee charged, by the acquirer to the issuer, for transaction activity, in the currency of the amount, transaction.

Field 29 - Amount, Settlement Fee**Format**

x + n8

Description

A fee charged, by the acquirer to the issuer, for transaction activity, in the currency of the amount, settlement.

Field 30 - Amount, Transaction Processing Fee**Format**

x + n8

Description

A fee charged by the network for the handling and routing of messages, in the currency of amount, transaction. This field is usually inserted by the network into the applicable messages.

Field 31 - Amount, Settle Processing Fee**Format**

x + n8

Description

A fee charged by the network for the handling and routing of messages, in the currency of amount, settlement. This field is usually inserted by the network into the applicable messages.

Field 32 - Acquiring Institution ID Code**Format**

n..11, LLVAR

Description

A code identifying the financial institution acting as the acquirer of this customer transaction. The acquirer is the member or system user that signed the merchant, installed the ATM or dispensed cash. This field usually contains the BIN of the acquirer, but could be any other number assigned to it by the relevant authorities.

When a processing centre operates for multiple acquirers, this is the code for the individual member or system user, not a code for the processing centre.

Usage

If an acquiring institution identification code is defined for the Sink Node associated with the transaction, the Transaction Manager uses this value as the acquiring institution identification code for the transaction. If not, the Transaction Manager uses the value in the message that originated the transaction as the acquiring institution identification code for the transaction.

The Transaction Manager uses this field to determine the transaction batch for the Source or Sink Node associated with the transaction if the Source or Sink Node has a settlement granularity of *acquirer*.

Field 33 - Forwarding Institution ID Code

Format

n..11, LLVAR

Description

A code identifying the institution that forwards the transaction in an interchange system en route to the card issuer. For example, assume that an acquirer routes a transaction via a third-party EFT switch to the card issuer. In the request from the acquirer to the EFT switch, this field contains the code of the acquirer. When the request is forwarded by the EFT switch to the card issuer, this field contains the code assigned to the EFT switch.

Field 35 - Track 2 Data

Format

z..37, LLVAR

Description

The information encoded on Track 2 of the magnetic stripe as defined in ISO 7813, including field separators but excluding the begin sentinel, end sentinel and longitudinal redundancy check characters. The field separator (FS) can be either a "=" or a "D" character. The layout of this field is as follows:

Field	Length
Primary account number	Up to 19 digits
Field separator	1 digit
Expiry date (YYMM)	4 digits (or a field separator if not present)
Service restriction code	3 digits (or a field separator if not present)
Discretionary data	Balance of available digits

The primary account number, expiry date and service restriction code fields are described in further detail under fields 2, 14 and 40 in this document.

For 59 type cards, where the primary account number commences with the major industry identifier "5" followed by the digit "9", the layout of the field becomes:

Fields

Field	Length
Primary account number	Up to 19 digits
Field separator	1 digit
Country code	3 digits (as specified in ISO 3166).
Expiry date (YYMM)	4 digits (or a field separator if not present)
Service restriction code	3 digits (or a field separator if not present)
Discretionary data	Balance of available digits

For Visa Cash load transactions, this field contains the Visa Cash load signature data from the chip that is sent to the issuer to allow the issuer to verify the Visa Load Request Signature (S1). The layout of this field is as follows:

Field	Length
Visa Cash card number	16 digits
Field separator	1 digit (can be a "=" or a "D" character)
Expiry date (YYMM)	4 digits: Only the YYMM portion of the Visa Cash expiration date
Service restriction code	3 digits (must be "101")
Visa Cash balance	6 digits
Transaction number	5 digits
GMT offset	2 digits

Field 37 - Retrieval Reference Number

Format

anp12

Description

A reference number supplied by the system retaining the original source information and used to assist in locating that information or a copy thereof.

Field 38 - Authorization ID Response**Format**

anp6

Description

A code assigned by the authorizing institution indicating approval.

Field 39 - Response Code**Format**

an2

Description

A code that defines the disposition of a transaction.

Response code	
00	Approved or completed successfully
01	Refer to card issuer
02	Refer to card issuer, special condition
03	Invalid merchant
04	Pick-up card
05	Do not honor
06	Error
07	Pick-up card, special condition
08	Honor with identification
09	Request in progress
10	Approved, partial
11	Approved, VIP
12	Invalid transaction
13	Invalid amount

Fields

Response code	
14	Invalid card number
15	No such issuer
16	Approved, update track 3
17	Customer cancellation
18	Customer dispute
19	Re-enter transaction
20	Invalid response
21	No action taken
22	Suspected malfunction
23	Unacceptable transaction fee
24	File update not supported
25	Unable to locate record
26	Duplicate record
27	File update field edit error
28	File update file locked
29	File update failed
30	Format error
31	Bank not supported
32	Completed partially
33	Expired card, pick-up
34	Suspected fraud, pick-up
35	Contact acquirer, pick-up
36	Restricted card, pick-up
37	Call acquirer security, pick-up
38	PIN tries exceeded, pick-up

Fields

Response code	
39	No credit account
40	Function not supported
41	Lost card, pick-up
42	No universal account
43	Stolen card, pick-up
44	No investment account
45	Account closed
46	Identification required
47	Identification cross-check required
48 to 50	Reserved for future Postilion use
51	Not sufficient funds
52	No check account
53	No savings account
54	Expired card
55	Incorrect PIN
56	No card record
57	Transaction not permitted to cardholder
58	Transaction not permitted on terminal
59	Suspected fraud
60	Contact acquirer
61	Exceeds withdrawal limit
62	Restricted card
63	Security violation
64	Original amount incorrect
65	Exceeds withdrawal frequency

Fields

Response code	
66	Call acquirer security
67	Hard capture
68	Response received too late
69	Advice received too late
70 to 74	Reserved for future Postilion use
75	PIN tries exceeded
76	Reserved for future Postilion use
77	Intervene, bank approval required
78	Intervene, bank approval required for partial amount
79 to 89	Reserved for client-specific use (declined)
90	Cut-off in progress
91	Issuer or switch inoperative
92	Routing error
93	Violation of law
94	Duplicate transaction
95	Reconcile error
96	System malfunction
97	Reserved for future Postilion use
98	Exceeds cash limit
99	Reserved for future Postilion use
Zero A to A Zero	Reserved for future Postilion use
A1	ATC not incremented
A2	ATC limit exceeded
A3	ATC configuration error
A4	CVR check failure

Fields

Response code	
A5	CVR configuration error
A6	TVR check failure
A7	TVR configuration error
A8 to BZ	Reserved for future Postilion use
C Zero	Unacceptable PIN
C1	PIN Change failed
C2	PIN Unblock failed
C3 to D Zero	Reserved for future Postilion use
D1	MAC Error
D2 to E Zero	Reserved for future Postilion use
E1	Prepay error
E2 to MZ	Reserved for future Postilion use
N Zero to ZZ	Reserved for client-specific use (declined)

Field 40 - Service Restriction Code**Format**

n3

Description

An identification of geographic/service availability. Contains:

- The area of usage and whether the card has additional read facilities
- The authorization processing requirements for this card
- The range of services available and PIN requirements

Fields

Area of usage	
1	International card
2	International card - integrated circuit facilities
5	National use only
6	National use only - integrated circuit facilities
9	Test card - online authorization mandatory

Authorization requirements	
0	Normal authorization
2	Online authorization mandatory
4	Online authorization mandatory

Services available and PIN requirements	
0	PIN required
1	No restrictions - normal cardholder verification
2	Goods and services only
3	PIN required, ATM only
5	PIN required, goods and services only at POS, cash at ATM
6	PIN required if PIN pad present
7	PIN required if PIN pad present, goods and services only at POS, cash at ATM

Field 41 - Card Acceptor Terminal ID**Format**

ans8

Description

A unique code identifying a terminal at the card acceptor location.

Field 42 - Card Acceptor ID Code**Format**

ans15

Description

A code identifying the card acceptor (typically a merchant).

Field 43 - Card Acceptor Name Location**Format**

ans40

Description

The name and location of the card acceptor (such as a merchant or an ATM). This is a fixed length field consisting of 4 data elements:

- The *location information* (positions 1 - 23), exclusive of city, state and country
- The *city* (positions 24 - 36) in which the Point-of-Service is located
- The *state* (positions 37 - 38) in which the Point-of-Service is located
- The *country* (positions 39 - 40) in which the Point-of-Service is located

For **Visa Cash** load transactions, this field contains the *Visa Cash Service Identifier* ("SV:") followed by the load request signature (S1), the load acquirer BIN and other location information. This is a fixed length field consisting of 5 data elements:

The *Visa cash service identifier* (positions 1 - 3), a constant value of "SV:"

The *Visa load request signature* (positions 4 - 19)

The *Visa load acquirer BIN* (positions 20 - 25)

The *city* (positions 26 - 38) in which the Point-of-Service is located

The *country* (positions 39 - 40) in which the Point-of-Service is located.

Field 44 - Additional Response Data

Format

ans..25, LLVAR

Description

Used to provide other supplemental data (such as a telephone number for referrals) that may be required in response to an authorization or other type of transaction request.

After a **PIN Change** request has been processed, this field contains the PIN offset (or PVV) in a 0610 message to the Source Node, as well as in a 0620 message to the Sink Node. If set in a 0610 message from the Sink Node, this field again indicates the PIN offset (or PVV).

For **Visa Cash** load transactions, this field is used to carry signature information. In load responses, it contains the Visa Cash Service Identifier ("SV:") followed by the load response signature (S2). This is a fixed length field consisting of 2 data elements:

- The *Visa cash service identifier* (positions 1 - 3), a constant value of "SV:"
- The *load authorization signature* (positions 4 - 19) for this load operation

In load settlement advices, it contains the Visa Cash Service Identifier ("SV:") followed by the load completion signature (S3). This is a fixed length field consisting of 2 data elements:

- The *Visa cash service identifier* (positions 1 - 3), a constant value of "SV:"
- The *load completion signature* (positions 4 - 19) for this load operation

Field 45 - Track 1 Data

Format

ans..76, LLVAR

Description

The information encoded on Track 1 of the magnetic stripe as defined in ISO 7813, including field separators but excluding the begin sentinel, end sentinel and longitudinal redundancy check characters.

Note that two structures are defined by ISO 7813, namely Structure A and Structure B. Structure A is reserved for proprietary use by card issuers, while Structure B is defined as follows:

Field	Length
Format code	B (ASCII 66)
Primary account number	Up to 19 digits
Field separator	1 characters (ASCII 61 or 94)
Country code	3 digits (or a field separator if not present)
Name	2 to 26 characters (this field is further described below)
Field separator	1 characters (ASCII 61 or 94)
Expiry date (YYMM)	4 digits (or a field separator if not present)
Service restriction code	3 digits (or a field separator if not present)
Discretionary data	Balance of available digits

The *primary account number*, *expiry date* and *service restriction code* fields are described in further detail under fields 2, 14 and 40 in this document.

Fields

The structure of the **Name** field is defined in the following table. Sub-fields are separated by means of a space character (ASCII 32). The minimum encoded data allowed is a single character followed by the surname separator.

Field	Length
Surname	
Surname separator	ASCII 47
First Name or Initial	
Space	When required
Middle Name or Initial	
Period	When followed by Title; ASCII 46
Title	When used

The space character (ASCII 32) is required to separate the sub-fields of the **Name** field other than the surname. The separator terminating the surname should be encoded following the last sub-field of the **Name** field. If only the surname is encoded, it will follow the surname separator.

Note: Transaction Manager currently performs no validation on track 1 data and in no way attempts to unpack the sub-fields. The contents of this field are simply saved in the transaction record and passed upstream unchanged.

Field 48 - Additional Data

Format

ans..999, LLLVAR

Description

Used to provide linked account or mini-statement information for a linked account inquiry or a mini-statement inquiry.

Mini-statement Information

Postilion terminal driving applications, excluding those driving terminals which do not support mini-statements, allow formatting of slips using a slip processing scripting language. This allows the owners of the system to determine slip formats according to their own requirements, and based on the constraints of the terminal printer (e.g. paper width).

The format for field 48 when mini-statement data is to be sent downstream, is as follows:

- A mini-statement heading line, containing tags to identify the format of the mini-statement data lines that follows, e.g.

DATE_TIME|SEQ_NR|TRAN_TYPE|TRAN_AMOUNT~

The different fields of the mini-statement heading line are separated by bar characters ("|") and the line is terminated by a tilde character ("~").

- One or more mini-statement data lines, each similar to the identifying string above in structure, but containing the actual transaction data to be printed per line, e.g.

19971201123123|001234|01|000000005000~

Below is a list of tags that Postilion supports.

Field	Tag Name	Format
Sequence Number	SEQ_NR	N6
Date and time	DATE_TIME	n14, CCYYMMDDhhmmss
Terminal ID	TERM_ID	n8
Transaction type	TRAN_TYPE	n2 (Postilion transaction type, to cater for multilingualism)
From account	FROM_ACC	n2 (Postilion account type, to cater for multilingualism)
To account	TO_ACC	n2 (Postilion account type, to cater for multilingualism)
Transaction amount	TRAN_AMOUNT	n12
Account ID 1	ACC_ID1	ans28

Fields

Field	Tag Name	Format
Account ID 2	ACC_ID2	ans28
Authorization ID	AUTH_ID	ans6
Currency code	CURR_CODE	n3 (Currency code of the Transaction Amount field)
Surcharge	SURCHARGE	n8

Linked Account Inquiry

In the case of a linked account inquiry, this field contains information relating to the accounts linked to the card that initiated the transaction. The information for up to 20 accounts can be returned. Note that when "00" is specified as an account type in the original request, a list of all accounts linked to the card is retrieved, and not only the linked accounts of the default account type. The format of the information associated with each account is as follows:

Field	Length	Description
Account ID	28	The identifier uniquely identifying the account, left justified, space-filled.
Account type	2	The ISO 8583 account type of the account.
Currency code	3	The ISO numeric currency code of the account.
Ledger balance	13	The ledger balance of the account. The first character contains the sign. A "D" indicates a debit (negative) balance and a "C" indicates a credit (positive) balance.

Field 49 - Currency Code, Transaction

Format

n3

Description

The local currency of the acquirer or source location of the transaction. This is the currency code used for the following amount fields:

- amount, transaction (field 4)
- amount, transaction fee (field 28)
- amount, transaction processing fee (field 30)

Field 50 - Currency Code, Settlement

Format

n3

Description

A code identifying the currency of settlement. If this field is not present for a transaction, it is assumed that this field is the same as the currency code, transaction field. This is the currency code used for the following amount fields:

- amount, settlement (field 5)
- amount, settlement fee (field 29)
- amount, settlement processing fee (field 31)
- amount, net settlement (field 97)

Field 52 - PIN Data

Format

b8 (Hex 16)

Description

The PIN data field contains the PIN (a number assigned to a cardholder intended to uniquely identify that cardholder) of the cardholder formatted into a 64-bit block and encrypted with a DES key.

Field 53 - Security Related Control Information

Format

b48 (Hex 96)

Description

Identifies security management information used in the current transaction or specifies security management information to be used in future transactions.

If the **DUKPT** scheme is used, the first 8 bytes of this field in authorization and financial transaction request messages containing an encrypted PIN block, contain the DUKPT key sequence number.

In **PIN change** transactions, the first byte indicates the PIN to change:

- binary 0 - insecure PIN (e.g. telephone PIN)
- binary 1 - secure PIN (e.g. ATM PIN)

Fields

The following 8 bytes of this field contains the new PIN formatted into a 64-bit block and encrypted with a DES key. It may be followed by the 8-byte DUKPT key sequence number if the DUKPT scheme is used.

In **key change** transactions, this field contains the encrypted key in the first 8-24 bytes (8 for single, 16 for double, 24 for triple length), followed by a 3-byte or less key check value (i.e. the first 3 bytes of a clear value of all zeroes encrypted with the key).

Field 54 - Additional Amounts

Format

an..120, LLLVAR

Description

Information on up to 6 amounts and related account data for which specific data elements have not been defined. Each amount is a fixed length field consisting of 5 data elements:

- Account type (positions 1 - 2)
- Amount type (positions 3 - 4)
- Currency code (positions 5 - 7)
- Amount sign (position 8) - "C" or "D"
- Amount (position 9 - 20)
-

Account Type	
00	Default – unspecified
10	Savings account
20	Check account
30	Credit account
40	Universal account
50	Investment account
60	Electronic purse account (default)
91	Mortgage loan
92	Instalment loan

Fields

Amount Type	
01	Ledger balance
02	Available balance
20	Remaining this cycle
40	Cash
53	Approved
90	Available credit
91	Credit limit

When this field is sent by the entity that performed currency conversion this field should contain amounts in the transaction and settlement currencies if they differ.

In a response message from the Transaction Manager, this field will always contain the approved amounts and cash amounts, if applicable.

When configuring a Postilion Sink Node which is providing service to an Issuer, Postilion can provide Stand-in or Full Authorization service. These types of stand-in processing are also known as *Positive Balances Authorization*.

When one of these types of stand-in has been performed successfully for a Debit, Credit, Inquiry or Payment transaction, excluding linked accounts inquiry and payment by deposit transactions, the *Additional Amounts* field will also contain the **ledger balance** followed by the **available balance** of the specific account. The account ID of the specific account is returned in field 102, *Account Identification 1*.

When one of these types of stand-in has been performed successfully for a Transfer transaction, the *Additional Amounts* field will contain the **ledger balance** followed by the available balance of the 'from account' as located in the Positive Balances environment. These amounts are followed by the ledger balance and the **available balance** of the 'to account' as located in the Positive Balances environment. The account ID of the specific 'from account' is returned in field 102, *Account Identification 1*, and the account ID of the specific 'to account' is returned in field 103, *Account Identification 2*.

If a Goods and Services with cash back transaction or a Cash transaction has been partially approved, field 54 of the 0110 / 0210 response message must contain the reduced cash portion, with Amount type '40' (Cash). Field 4 must contain the **approved** amount. The approved amount sent in field 54 to a PostBridge sink node will not be used for anything. It is informational only.

Field 56 - Message Reason Code

Format

n4, LLLVAR

Description

A code that provides the receiver of a request, advice or notification message with the reason, or purpose of that message.

For original authorizations and financial transactions, it identifies why the type of message was sent (e.g. why an advice versus a request); for other messages, it states why this action was taken.

Message reason code	
1000	Stand-in processing at the card issuer's option
1003	Card issuer unavailable
1006	Under floor limit
1376	PIN related failure
1377	Change dispensed
1378	IOU receipt printed
1510	Over floor limit
1800	Negative card
4000	Customer cancellation
4001	Unspecified, no action taken
4004	Completed partially
4013	Unable to deliver message to point-of-service
4017	Suspected malfunction / No cash dispensed
4020	Invalid response, no action taken.
4021	Timeout waiting for response
4351	Invalid CVV2
4352	Invalid address

Fields

For place hold on card transactions, in Issuer File Update Advice (0322) or Administration (0600/0620) messages, it states why a card should be put on the hotcard list:

Message reason code	
3000	Lost card
3001	Stolen card
3002	Undelivered card
3003	Counterfeit card
3700	Lost PIN

If a hold response code has not been specified in these transactions, the message reason code field will be used to determine which hold response code to use for the transaction. A message reason code of "3001-Stolen card" will result in a hold response code of "43-Stolen card", otherwise "41-Lost card" will be used.

In the case of a message to bank transaction, the message reason code specifies the type of message the cardholder wants to forward to the issuer. Note that in this case, the message reason code field is treated as a free-format field that the user can use for any user specific code.

Message reason codes are defined in the ISO 8583 (1993) specification, and this specification has been used as basis for the codes defined here.

The use of the following message reason codes have been deprecated:

Message reason code	
1801	Card lost
1802	Card stolen

Field 57 - Authorization Life-cycle Code

Format

n3, LLLVAR

Description

A value in calendar days, hours or minutes which defines the time period for which the acquirer is requesting guarantee of funds, or that the card issuer shall guarantee funds for a financial transaction which may follow. It consists of 2 fields:

- Time code (position 1)

Time code	
0	Reserved for ISO use
1	Calendar days
2	Hours
3	Minutes
4-5	Reserved for ISO use
6-7	Reserved for national use
8-9	Reserved for private use

- Time interval (positions 2 - 3): A value of 01 through 99 indicating the number of reiterations indicated in position 1.

Field 58 - Authorizing Agent Id Code

Format

n..11, LLLVAR

Description

A code identifying the authorizing agent institution.

Field 59 - Echo Data**Format**

ans..500, LLLVAR

Description

This is a Postilion specific addition to the ISO 8583 standard. Contains data from the originator of the message that shall be returned unaltered in the response message.

Field 66 - Settlement Code**Format**

n1

Description

A code indicating the result of a reconciliation.

Settlement code	
0	Unknown
1	In balance
2	Out of balance
3	Error

The result is 0 (Unknown) if the Amount, Net Settlement field (field 97) is not present in the reconciliation advice. The result is 1 (In balance) if all optional fields provided are in balance. If one or more of the optional fields in the reconciliation advice is out of balance with the local batch totals, the result is 2 (Out of balance).

Field 67 - Extended Payment Code**Format**

n2

Description

The number of months that the cardholder prefers to pay for this item if permitted by the card issuer.

Field 70 - Network Management Information Code

Format

n3

Description

The code that defines the type of network management needed.

Settlement code	
001	Sign On request
002	Sign Off request
101	Pin Working Key Change
130	EMV Download
132	Status Request
133	EMV Completion
160	MAC Working Key Change
161	Passthrough Key Exchange
162	Passthrough MAC Key Exchange
301	Echo test
999	Text

Field 73 - Date, Action

Format

n6, YYMMDD

Description

A date specifying when a future action should occur.

Field 74 - Credits, Number**Format**

n10

Description

The total number of credit transactions, other than reversals, processed since the last settlement cutover (i.e. the sum number of all financial transactions where positions 1 - 2 of the processing code in the financial transaction indicated a credit (20-29)).

Field 75 - Credits, Reversal Number**Format**

n10

Description

The total number of reversal credit transactions, having a credit effect on the cardholder's account, processed since the last settlement cutover (i.e. the sum number of all reversal transactions where positions 1 - 2 of the processing code in the reversal transaction indicated a debit (00-19) and where the original message type identifier indicated a financial transaction (02xx)).

Field 76 - Debits, Number**Format**

n10

Description

The total number of debit transactions with financial impact processed since the last settlement cutover, excluding reversals.

A transaction with financial impact is one for which the final amount in the batch totals is non-zero.

Therefore, this field is the total number of financial transactions where positions 1 - 2 of the processing code in the financial transaction indicated a debit (00-19).

Field 77 - Debits, Reversal Number**Format**

n10

Fields

Description

The total number of reversal debit transactions, having a debit effect on the cardholder's account, processed since the last settlement cutover (i.e. the sum number of all reversal transactions where positions 1 - 2 of the processing code in the reversal transaction indicated a credit (20-29) and where the original message type identifier indicated a financial transaction (02xx)).

Field 78 - Transfer, Number**Format**

n10

Description

The total number of all transfer transactions, other than reversals, processed since the last settlement cutover (i.e. the sum number of all financial transactions where positions 1 - 2 of the processing code in the financial transaction indicated a transfer (40-49)).

Field 79 - Transfer, Reversal Number**Format**

n10

Description

The total number of transfer transactions reversed since the last settlement cutover (i.e. the sum number of all reversal transactions where positions 1 - 2 of the processing code in the reversal transaction indicated a transfer (40-49) and where the original message type identifier indicates a financial transaction (02xx)).

Field 80 - Inquiries, Number**Format**

n10

Description

The total number of inquiries processed since the last settlement cutover (i.e. the sum number of all authorization transactions where positions 1 - 2 of the processing code in the financial transaction indicated an inquiry (30-39)).

Field 81 - Authorizations, Number**Format**

n10

Description

The total number of authorization transactions processed since the last settlement cutover.

Field 82 - Credits, Processing Fee Amount**Format**

n12

Description

The total amount of all credit processing fees.

Field 83 - Credits, Transaction Fee Amount**Format**

n12

Description

The total amount of all credit transaction fees.

Field 84 - Debits, Processing Fee Amount**Format**

n12

Description

The total amount of all debit processing fees.

Field 85 - Debits, Transaction Fee Amount**Format**

n12

Description

The total amount of all debit transaction fees.

Field 86 - Credits, Amount**Format**

n16

Description

The total amount of all credit transactions, other than reversals, processed since the last settlement cutover (i.e. the sum amount of amount, settlement in all financial transactions, exclusive of any fees, where positions 1 - 2 of the processing code in the financial transaction indicated a credit (20-29)).

Field 87 - Credits, Reversal Amount**Format**

n16

Description

The total amount of all reversal credit transactions, having a credit effect on the cardholder's account, processed since the last settlement cutover (i.e. the sum amount of amount, settlement of all reversal transactions, exclusive of any fees, where positions 1 - 2 of the processing code in the financial transaction indicated a debit (00-19) and where the original message type identifier indicated a financial transaction (02xx)).

Field 88 - Debits, Amount**Format**

n16

Description

The total amount for all debit transactions with financial impact processed since the last settlement cutover, excluding reversals.

A transaction with financial impact is one for which the final amount in the batch totals is non-zero. Therefore, this field is the sum of amount, settlement in all financial transactions where positions 1 - 2 of the processing code in the financial transaction indicated a debit (00-19).

Field 89 - Debits, Reversal Amount

Format

n16

Description

The total amount of all reversal debit transactions, having a debit effect on the cardholder's account, processed since the last settlement cutover (i.e. the sum amount of amount, settlement of all reversal transactions, exclusive of any fees, where positions 1 - 2 of the processing code in the financial transaction indicated a credit (20-29) and where the original message type identifier indicated a financial transaction (02xx)).

Field 90 - Original Data Elements

Format

n42

Description

The data elements contained in the original message intended for transaction matching (e.g. to identify a transaction for correction or reversal). It is a fixed length field consisting of 5 data elements:

- Original message type (positions 1 - 4) - the *message type identifier* of the original message of the transaction being reversed.
- Original systems trace audit number (positions 5 - 10) - the *systems trace audit number* (field 11) of the original message.
- Original transmission date and time (positions 11 - 20) - the *transmission date and time* (field 7) of the original message
- Original acquirer institution ID code (position 21 - 31) - the *acquirer institution ID code* (field 32) of the original message (right justified with leading zeroes).
- Original forwarding institution ID code (position 32 - 42) - the *forwarding institution ID code* (field 33) of the original message (right justified with leading zeroes).

Field 91 - File Update Code

Format

an1

Description

An indication to the system maintaining the file about which procedure to follow.

File update code	
0	Unassigned
1	Add record
2	Change record
3	Delete record
4	Bulk replacement
5	Inquiry
6	Delete record, system purge
7	Add file
8	Delete file
9	Unassigned

Field 95 - Replacement Amounts

Format

an42

Description

The corrected amounts of a transaction in a partial or full reversal (or the final amounts for the transaction). It is a fixed length field consisting of 4 data elements:

- Actual amount, transaction (positions 1 - 12) - the corrected, actual amount of the customer's transaction, in the currency of the transaction (field 49).
- Actual amount, settlement (positions 13 - 24) - the corrected, actual amount of the customer's transaction, in the settlement currency (field 50).
- Actual amount, transaction fee (positions 25 - 33) - the corrected, actual amount of the fee (in format x + n8) for this customer transaction, in the currency of the transaction.

Fields

- Actual amount, settlement fee (positions 34 - 42) - the corrected, actual amount of the fee (in format x + n8) for this customer transaction, in the settlement currency.

Field 97 - Amount, Net Settlement

Format

x + n16

Description

The net of all gross debit and gross credit amounts for a settlement period for a specific settlement entity. Specified in the settlement currency (field 50).

Field 98 - Payee

Format

ans25

Description

A code or ID identifying the payee (recipient) of a payment transaction. This field is used in a payment transaction when the payee is an Institution defined payee. Customer defined payees do not have a payee ID.

When using this field with the Postilion Payments Engine, however, it contains the ID of the payee as maintained in the payee list for a cardholder. Because the Payments Engine assigns an ID to both institution defined and customer defined payees, this field can be used to refer to either type of payee.

Field 100 - Receiving Institution ID Code

Format

n..11, LLVAR

Description

A code identifying the financial institution that should receive a request or advice. This identification code is used when it is not possible to route a message using the account number field in the message, e.g. in a check verification message. When this field is included in a request or advice, it takes precedence over all account number fields for routing.

Fields

Field 101 - File Name

Format

ans..17, LLVAR

Description

The actual or abbreviated name of the file being accessed.

The following file names are used to update the database of the Payments Engine using 0300 messages:

RTE_USER_PAYEES

RTE_STD_PAYEES

RTE_USER_XFER

RTE_USER_PAYMENTS

The following file name is used to update the Postilion issuer card records with respect to card status, card hold response code and PIN codes (typically this only applies to systems with a card management system installed):

CARD_MANAGEMENT

The following file names are used to update the hotcard file of Postilion using 0322 messages:

HOTCARDS

The following *file update codes* (field 91) can be used to update the hotcard file of Postilion using 0322 messages:

File update code	
1	Add record
2	Change record
3	Delete record

Field 102 - Account Identification 1**Format**

ans..28, LLVAR

Description

A series of digits and/or characters used to identify a specific account held by the cardholder at the card issuer and if present, shall remain unchanged for the life of the transaction. This field usually contains the description of the "from" account.

Field 103 - Account Identification 2**Format**

ans..28, LLVAR

Description

A series of digits and/or characters used to identify a specific account held by the cardholder at the card issuer and if present, shall remain unchanged for the life of the transaction. This field usually contains the description of the "to" account.

When used in payment transactions, this field specifies the bank account number of the payee.

Field 118 - Payments, Number**Format**

n10, LLLVAR

Description

The total number of payments processed since the last settlement cutover (i.e. the sum number of all authorization transactions where positions 1 - 2 of the processing code in the financial transaction indicated a payment (50-59)).

Field 119 - Payments, Reversal Number

Format

n10, LLLVAR

Description

The total number of payment transactions reversed since the last settlement cutover (i.e. the sum number of all reversal transactions where positions 1 - 2 of the processing code in the reversal transaction indicated a payment (50-59) and where the original message type identifier indicates a financial transaction (02xx)).

Field 123 - POS Data Code

Format

an15, LLLVAR

Description

A Postillion specific addition to the ISO 8583 standard used to identify terminal capability, terminal environment and presentation security data. It is used to indicate specific conditions that were present at the time a transaction took place at the Point-of-Service. This field consists of the following sub-fields:

Card data input capability (position 1)	
0	Unknown
1	Manual, no terminal
2	Magnetic stripe
3	Bar code
4	OCR
5	Magnetic stripe, key entry and integrated circuit card (ICC)
6	Key entry
7	Magnetic stripe and key entry
8	Magnetic stripe and integrated circuit card (ICC)
9	Integrated circuit card (ICC)
A	Contact and contactless entry, magnetic stripe and integrated circuit card (ICC) and key entry

Fields

Card data input capability (position 1)	
B	Contactless magnetic stripe
C	Contactless integrated circuit card (ICC)

Cardholder authentication capability (position 2)	
0	No electronic authentication
1	PIN
2	Electronic signature analysis
3	Biometrics
4	Biographic
5	Electronic authentication inoperative
6	Other

Card capture capability (position 3)	
0	None
1	Card Capture

Operating environment (position 4)	
0	No terminal used
1	On premises of card acceptor, attended
2	On premises of card acceptor, unattended
3	Off premises of card acceptor, attended
4	Off premises of card acceptor, unattended
5	On premises of cardholder, unattended

Fields

Cardholder is present (position 5)	
0	Cardholder present
1	Cardholder not present, unspecified
2	Cardholder not present, mail order
3	Cardholder not present, telephone
4	Cardholder not present, standing authorization/recurring transaction
5	Cardholder not present, electronic order

Card is present (position 6)	
0	Card not present
1	Card present

Card data input mode (position 7)	
0	Unknown
1	Manual, no terminal
2	Magnetic stripe
3	Bar code
4	OCR
5	Integrated circuit card (ICC)
6	Key entered
7	Contactless integrated circuit card (ICC)
8	Contactless magnetic stripe

Cardholder authentication method (position 8)	
0	No electronic authentication
1	PIN

Fields

2	Electronic signature analysis
3	Biometrics
4	Biographic
5	Manual
6	Other
9	Consumer device cardholder verification

Cardholder authentication entity (position 9)

0	Not authenticated
1	Integrated circuit card (ICC)
2	Terminal
3	Authorizing agent
4	Merchant
5	Other

Card data output capability (position 10)

0	Unknown
1	None
2	Magnetic stripe write
3	Integrated circuit card (ICC)

Terminal output capability (position 11)

0	Unknown
1	None
2	Printing
3	Display

Fields

Terminal output capability (position 11)

4 Printing and display

Fields

PIN capture capability (position 12)	
0	No PIN capture capability
1	Device PIN capture capability unknown
4	Four characters
5	Five characters
6	Six characters
7	Seven characters
8	Eight characters
9	Nine characters
A	Ten characters
B	Eleven characters
C	Twelve characters

Terminal operator (position 13)	
0	Customer operated
1	Card acceptor operated
2	Administrative

Terminal type (position 14-15)	
00	Administrative terminal
01	POS terminal
02	ATM
03	Home terminal
04	Electronic Cash Register (ECR)
05	Dial terminal
06	Travellers check machine

Fields

Terminal type (position 14-15)	
07	Fuel machine
08	Scrip machine
09	Coupon machine
10	Ticket machine
11	Point-of-Banking terminal
12	Teller
13	Franchise teller
14	Personal banking
15	Public utility
16	Vending
17	Self-service
18	Authorization
19	Payment
20	VRU
21	Smart phone
22	Interactive television
23	Personal digital assistant
24	Screen phone
27	Mobile POS device (mPOS)
90	E-commerce - No encryption; no authentication
91	E-commerce - SET encryption; cardholder certificate not used (non-authenticated)
92	E-commerce - SET encryption; cardholder certificate used (authenticated)
93	E-commerce - SET encryption, chip cryptogram used; cardholder certificate not used
94	E-commerce - SET encryption, chip cryptogram used; cardholder certificate used
95	E-commerce - Channel encryption (SSL); cardholder certificate not used (non-authenticated)

Fields

Terminal type (position 14-15)	
96	E-commerce - Channel encryption (SSL); cardholder certificate not used (non-authenticated)

Field 125 - Network management information

Format

ans..40, LLLVAR

Description

In key change transactions, this field contains the encrypted key in the first 16-32 positions of this field (16 for Single Length, 32 for Double Length), followed by 6 or less positions for the key check value. The encrypted key and key check value are encoded as hexadecimal characters in this field. (When using this field for key exchange messages Triple Length keys cannot be used)

Usage

Postilion will load the encrypted key and verify the key check value.

Field 127.1 - Bitmap

Format

b8

Description

This is a Postilion specific addition to the ISO 8583 standard. The bitmap signifies the presence (1) or absence (0) of data sub-elements contained within field 127.

Usage

The Postilion private data bit map (bits 1-64) is always present when field 127 is present in the message. The Postilion private data bitmap is used to indicate the presence (1) or absence (0) of data sub-elements and is thus used to decode the Postilion private data (field 127).

Postilion Private Data Bit map



Position 1 - 64 Data sub-elements

Fields

Postilion private data sub-elements are indexed from these bit positions i.e. the fifth bit in the bitmap will index Service Station Data (field 127.5).

Field 127.2 - Switch Key

Format

ans..32, LLVAR

Description

This is a Postilion specific addition to the ISO 8583 standard. The switch key field uniquely identifies a transaction.

Field 127.3 - Routing Information

Format

ans48

Description

This is a Postilion specific addition to the ISO 8583 standard. The totals group, Source Node, Sink Node and systems trace audit numbers associated with a customer transaction. Although passed in a variable length field, this is a fixed length field of 48 characters consisting of 5 data elements:

- The *source node* (positions 1 - 12), left justified, space-filled.
- The *sink node* (positions 13 - 24), left justified, space-filled.
- The *source node systems trace audit number* (positions 25 - 30).
- The *sink node systems trace audit number* (positions 31 - 36).
- The *totals group* (positions 37 - 48), left justified, space-filled.

Field 127.4 - POS Data

Format

ans22

Description

This is a Postilion specific addition to the ISO 8583 standard. Contains data passed from the Point-of-Service (POS) system, e.g. a cash register. Although passed in a variable length field, this is a fixed length field of 22 characters consisting of 3 data elements:

- The *POS terminal ID* (positions 1 - 8) identifying the POS terminal, e.g. a cash register, on which the transaction was performed.

Fields

- The *POS sequence number* (positions 9 - 14) specifying the POS terminal sequence number.
- The *POS operator ID* (positions 15 - 22) specifying the cashier that performed the transaction.

Field 127.5 - Service Station Data

Format

ans73

Description

This is a Postilion specific addition to the ISO 8583 standard. Contains data passed from a service station, i.e. forecourt system, for forwarding to the card issuer. This data is typically used for fleet management. This data element consists of 2 mandatory fields and up to 3 repetitions of a group of 3 fields. Note that this is a fixed format data element. All unused fields should contain spaces.

- The *vehicle usage* (position 1) indicates whether the product(s) was purchased for business or private use (0 - private, 1 - business).
- The *odometer reading* (positions 2 - 7) of the vehicle.

The following group of fields represents a fuel product and can be repeated up to 3 times (i.e. 3 different products are supported):

- The *product ID* (positions 1 - 2) specifying the fuel product purchased.
- The *literage* (positions 3 - 10) specifying the literage of the product purchased.
- The *amount* (positions 11 - 22) of the product purchased.

Field 127.6 - Authorization Profile

Format

n2

Description

This is a Postilion specific addition to the ISO 8583 standard. Provides additional information on the conditions under which authorization should be or was performed:

Authorization type (position 1)	
0	Unknown
1	The transaction was authorized by the card issuer.
2	Online stand-in. The transaction amount was below the local limits.
3	Timeout stand-in. The Sink Node did not respond to a request.

Fields

Authorization type (position 1)	
4	Offline stand-in. The Sink Node was not available.
5	The use of this authorization type has been deprecated.
9	The transaction was authorized by Visa.
A	Declined by the Sink Node, not sent to the remote entity. This is not forwarded to the Source Node.
B	Declined by the Sink Node after an approved response was received from the remote entity. This is not forwarded to the Source Node.

Authorization limits (position 2)	
0	Unknown
1	Transaction authorized against cardholder record at card issuer.
2	Transaction authorized using card issuer limits.
3	Transaction authorized using card acceptor (merchant) limits.
4	Transaction authorized using card issuer balances.
5	Authorized using card issuer velocity limits.

If the *Authorization Type* field is set to 9 (Authorized by Visa), the values of *Authorization Limits* are defined in the following Visa manual: *V.I.P. System Technical Reference Vol. 2, Field and Code Descriptions, Additional Response Data (Field 44), Response Source/Reason Code (Field 44.1)*.

Field 127.7 - Check Data

Format

ans..50, LLVAR

Description

This is a Postilion specific addition to the ISO 8583 standard. Contains check guarantee or check verification data. This field can be in a number of different formats. The first 2 digits indicate the format. This field may be extended to new formats in the future. Currently supported formats are:

Driver License Check Verification Data	
Length	Description
2	Format – “00”
6	Check number
2	State code (space-filled if not available)
6	Date of birth - MMDDYY
24	Drivers license number (left justified, space-filled)

Formatted MICR Check Verification Data	
Length	Description
2	Format – “01”
6	Check number
2	State code (space-filled if not available)
8	Institution code
16	MICR account number
9	ZIP code

Fields

Plastic Card Account Check Verification Data³	
Length	Description
2	Format – “02”
6	Check number
2	State code (space-filled if not available)

Unformatted MICR Check Verification Data⁴	
Length	Description
2	Format – “03”
65	MICR data

Note: The use of the *CheckData DTD* (for field 127.22) is preferred over the use of field 127.7.

Field 127.8 - Retention Data

Format

ans..999, LLLVAR

Description

This is a Postilion specific addition to the ISO 8583 standard. Transparent data passed from a Source or Sink Node to the Transaction Manager for retention in the transaction table.

Field 127.9 - Additional Node Data

Format

ans..255(999), LLLVAR

Description

This is a Postilion specific addition to the ISO 8583 standard. Transparent data passed from a Source Node to a Sink Node, or from a Sink Node to a Source Node.

³ The plastic card account number is carried in the primary account number or track 2 data fields.

Field 127.10 - CVV2**Format**

n3

Description

This is a Postillion specific addition to the ISO 8583 standard. The embossed Visa CVV2 value that was manually entered when the magnetic stripe could not be read.

Field 127.11 - Original Key**Format**

ans..32, LLVAR

Description

This is a Postillion specific addition to the ISO 8583 standard. The switch key of the original message, intended for transaction matching (e.g. to identify a transaction for correction or reversal).

Field 127.12 - Terminal Owner**Format**

ans..25, LLVAR

Description

This is a Postillion specific addition to the ISO 8583 standard. Contains the name of the financial institution that owns the ATM, or the name of the merchant where the POS terminal is located.

Field 127.13 - POS Geographic Data

Format

ans17

Description

This is a Postilion specific addition to the ISO 8583 standard. Contains a series of codes to identify the state, county, postal service code and country code where the POS device is physically located. This data element is defined in ANSI X9.2 (1988). The layout is as follows:

- The numeric *state code* (positions 1 - 2).
- The numeric *county code* (positions 3 - 5).
- The alphanumeric *postal service code* (positions 6 - 14).
- The numeric *country code* (positions 15 - 17).

If any of the sub-fields are not used, it should be set to spaces.

Field 127.14 - Sponsor Bank

Format

ans8

Description

This is a Postilion specific addition to the ISO 8583 standard. Identifies the institution sponsoring the card acceptor POS terminal.

Field 127.15 - Address Verification Data

Format

ans..29, LLVAR

Description

This is a Postilion specific addition to the ISO 8583 standard. This field can contain cardholder address information for a mail order or airline transaction. The layout is as follows:

- The alphanumeric *postal/ZIP code* (positions 1 - 9).
- The alphanumeric *cardholder address* (positions 10 - 29).

Field 127.16 - Address Verification Result

Format

ans1

Description

This is a Postilion specific addition to the ISO 8583 standard. Contains the result of a transaction involving address verification.

Address verification result	
A	Address matches, postal/ZIP code does not
E	Error
N	Neither address nor postal/ZIP code matches
R	Retry
U	Unavailable
Y	Address and postal/ZIP code matches
Z	postal/ZIP code matches, address does not

Field 127.17 - Cardholder Information

Format

ans..50, LLVAR

Description

This is a Postilion specific addition to the ISO 8583 standard. Contains cardholder related response information. This information is typically returned by the authorizer of the transaction.

Field 127.18 - Validation data

Format

ans..50, LLVAR

Description

This is a Postilion specific addition to the ISO 8583 standard. Contains cardholder related validation information. This information is typically supplied by the originator of the transaction as an additional security mechanism. This data can be used by the authorizer when authorizing a transaction. For example, this field could contain the identification number of the cardholder. If this value differs from the value carried in the cardholder database of the authorizer, the transaction may be declined.

Field 127.19 - Bank details

Format

ans31

Description

This is a Postilion specific addition to the ISO 8583 standard. Contains bank and branch details.

This field is used to specify the bank details of the payee (recipient) of a payment transaction. Payments made to Customer defined payees require either bank details or address details to be specified in the transaction message.

Field	Length	Format	Description
Bank ID	9	ANS	The financial institution where the bank account of the recipient is kept. Typically, the field will be space filled to the right when less than 9 characters are available. The interpretation of this field varies by country.
Branch ID	22	ANS	The branch where the bank account is kept. Typically, the field will be space filled to the right when less than 22 characters are available. The interpretation of this field varies by country.

Field 127.20 - Originator / Authorizer date settlement

Format

n8, CCYYMMDD

Description

This is a Postilion specific addition to the ISO 8583 standard. This field contains the settlement date of the authorizer.

Field 127.21 - Record identification

Format

ans..12, LLVAR

Description

This is a Postilion specific addition to the ISO 8583 standard. Contains the record ID for any file update transaction.

Field 127.22 - Structured Data

Format

ans..99999, LLLLLVAR

Description

This is a Postilion specific addition to the ISO 8583 standard. As of Postilion 4.0 Service Pack 5, this field is stored in the Postilion Transaction Table. This field uses a key/value pair structure to represent data. The idea behind the field is to provide a flexible mechanism with which to transport data through Postilion. There is therefore no limitation to what either the key or value may contain, provided of course that the format of the field is adhered to.

The physical layout of the field is as follows:

- 1 byte length indicator of the key length indicator
- Length indicator of the key
- Key
- 1 byte length indicator of the value length indicator
- Length indicator of the value
- Value

Fields

The above describes the physical layout of a single key/value pair. It is therefore repeated for each key/value pair in the field. There is no limitation to the number of key value pairs that may be used, besides the overall field length.

XML content

Postilion defines DTDs for the following:

- StatementData
- CardManagementUpdateData
- CardManagementUpdateLoad
- PrepaidMerchandise
- PurchasingCardData
- FleetCardData
- CheckData
- AirlineItineraryData
- VehicleRentalData
- LodgingData

For more details, please refer to [XML schemas](#).

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Field 127.23 - Payee name and address

Format

ans253

Description

This is a Postilion specific addition to the ISO 8583 standard. Contains identification and billing information for a payee. All fields are left-justified, space filled to the right.

This field is used when making a payment to a Customer defined payee, where the payee is defined by its address details. A bank, for example, would use these details to post a check to the payee on the customer's behalf.

Fields

Field	Length	Format	Description
Name	35	ANS	Name of the payee.
Address line 1	35	ANS	First address line.
Address line 2	35	ANS	Second address line.
Address line 3	35	ANS	Third address line.
City	35	ANS	City payee is located in.
Region	20	ANS	Region / State the City is located in.
Postal code	20	ANS	Postal code of the City.
Country code	3	A	A 3 letter ISO country code.
Phone	35	ANS	Phone number of payee.

Field 127.24 - Payer account**Format**

ans..28, LLVAR

Description

This is a Postilion specific addition to the ISO 8583 standard. Defines the payer account ID at the payee.

Field 127.25 - Integrated circuit card (ICC) Data

Format

ans..8000, LLLLVAR

Description

This is a Postilion specific addition to the ISO 8583 standard. The field contains data for use with integrated circuit cards that implement the EMV specification.

This field can contain ICC Data in two different formats but only one format can be used per message. PostBridge will automatically detect which format is used in messages to PostBridge. A user parameter will configure how ICC Data is formatted in messages from PostBridge.

The two formats, ICC Data in XML and ICC Data in Bitmap Field, are described in the following sections.

ICC Data in XML

IccData (field 127.25) is formatted as an XML document, as per a DTD. This XML document has an outer tag (IccData), and 2 primary inner tags (IccRequest and IccResponse). The IccRequest tag is used in request messages, and the IccResponse tag is used in response messages.

A request message would have the following structure for example

```
<?xml version="1.0"?>
<IccData>
<IccRequest>
...
...
</IccRequest>
</IccData>
```

A response message would have the following structure for example:

```
<?xml version="1.0"?>
<IccData>
<IccResponse>
...
...
</IccResponse>
</IccData>
```

For more details, please refer to [XML schemas](#).

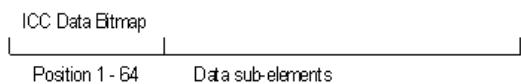
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Fields

ICC Data in Bitmap Field

ICC Data is formatted as a Bitmap field. Each of the ICC Data elements is defined as a sub-field within the Bitmap field.

The bitmap signifies the presence (1) or absence (0) of data sub-elements contained within field 127.25 (ICC Data). The bitmap is a binary field, but is formatted as a hexadecimal. This means the 8 binary characters representing the bitmap must be converted to hexadecimal before being placed in this field.



ICC Data sub-elements are indexed from these bit positions. For example, the fifth bit in the bitmap will index Application Interchange Profile (field 127.25.5).

To illustrate assume that fields 3, 5, 7 and 11 are present. This would give the following bitmap:
(The "|" character is not part of the bitmap and is only used for clarity, to indicate the bytes of the bitmap)

"00101010|00100000|00000000|00000000|00000000|00000000|00000000|00000000"

Which would translate to the following binary bitmap: (Assume that "*" represents the NULL character)

".2*****"

Before this value can be placed into Field 127.25.1 it has to be formatted as a hexadecimal, which would give the following value:

"2E32000000000000"

The fields present in the bitmap will differ between request/advice messages and response messages.

Request/Advice messages				
Field	Name	Description	Format	Condition
127.25.1	Bitmap	The bitmap signifies the presence (1) or absence (0) of data sub-elements contained within field 127.25 (ICC Data). The bitmap is a binary field, but is formatted as a hexadecimal. This means the 8 binary characters representing the bitmap must be converted to hexadecimal before being placed in this field.	b8 (Hex 16)	Mandatory
127.25.2	Amount Authorized	The amount of the transaction	n12	Must be present in a 0100, 0120, 0200 or 0220 message for an ICC chip transaction. Otherwise optional.

Fields

Request/Advice messages				
127.25.3	Amount Other	Secondary amount associated with the transaction, representing a cash back amount.	n12	In a cash back transaction, must be present in a 0100, 0120, 0200 or 0220 message for an ICC chip transaction. Otherwise optional.
127.25.4	Application Identifier	Identifies the application on the ICC as described in ISO/IEC 7816-5. (Field value: translate 16 byte binary EMV value to 32 byte hex string.)	ans..32, LLVAR	Optional
127.25.5	Application Interchange Profile	Indicates the capabilities of the ICC to support specific functions in the application. (Field value: translate 2 byte binary EMV value to 4 byte hex string.)	ans4	Must be present in a 0100, 0120, 0200 or 0220 message for an ICC chip transaction. Otherwise optional.
127.25.6	Application Transaction Counter	Counter maintained by the application in the ICC. (Incrementing the ATC is managed by the ICC). (Field value: translate 2 byte binary EMV value to 4 byte hex string.)	ans4	Must be present in a 0100, 0120, 0200 or 0220 message for an ICC chip transaction. Otherwise optional.
127.25.7	Application Usage Control	Indicates the issuer's specified restrictions on the geographic usage and services allowed for the application. (Field value: translate 2 byte binary EMV value to 4 byte hex string.)	ans4	Optional
127.25.8	Authorization Response Code	Code returned by the issuer or generated by the terminal if it did not receive an online response from the issuer.	an2	Optional
127.25.9	Card Authentication Reliability Indicator	May be set and sent by the acquirer when the acquirer or issuer is inactive for card authentication.	n1	Optional

Fields

Request/Advice messages				
127.25. 10	Card Authentication Results Code	An issuer-supplied code indicating card authentication results.	ans1	Optional
127.25. 11	Chip Condition Code	Indicates the status of last chip attempt at the terminal. 0 Magnetic stripe read, service code does not begin with 2 or 6 1 Magnetic stripe read, service code begins with 2 or 6, last transaction was a successful IC read or not an IC transaction 2 Magnetic stripe read, service code begins with 2 or 6, last transaction was an unsuccessful IC read	n1	May be present in an ICC chip transaction or a non-chip transaction such as an ICC fallback to magnetic stripe.
127.25. 12	Cryptogram	The cryptogram generated by the ICC. Consists of one of the following: Authorization Request Cryptogram (ARQC) for an authorization request, Application Authentication Cryptogram (AAC) for a declined transaction, or Transaction Certificate (TC) for an approved transaction. (Field value: translate 8 byte binary EMV value to 16 byte hex string.)	ans16	Must be present in a 0100, 0120, 0200 or 0220 message for an ICC chip transaction. Otherwise optional.
127.25. 13	Cryptogram Information Data	Indicates the type of cryptogram returned by the ICC (ARQC, AAC or TC) and the actions to be performed by the terminal. (Field value: translate 1 byte binary EMV value to 2 byte hex string.)	ans2	Will be present if available from the terminal, and must be set if available. May be used in validating the cryptogram.
127.25. 14	Cvm List	Identifies the cardholder verification methods (CVMs) supported by the application. (Field value: translate 252 byte binary EMV value to 504 byte hex string.)	ans..50 4, LLLVAR	Optional

Fields

Request/Advice messages				
127.25. 15	Cvm Results	Cardholder verification method (CVM) results indicating the results of the last CVM performed. (Field value: translate 3 byte binary EMV value to 6 byte hex string.)	ans6	Optional
127.25. 16	Interface Device Serial Number	A unique and permanent serial number assigned to the interface device (IFD) by the terminal manufacturer.	an8	Should be set if available.
127.25. 17	Issuer Action Code	Card parameters that instruct the terminal about actions to take under various conditions. The first byte of the field indicates the type of Action Code: 0 = Default, specifies the issuer's conditions that cause a transaction to be rejected if it might have been approved online, but the terminal is unable to process the transaction online. 1 = Denial, specifies the issuer's conditions that cause the denial of a transaction without attempt to go online. 2 = Online, specifies the issuer's conditions that cause a transaction to be transmitted online. The remainder of the field consists of the 5 byte binary EMV value translated to a 10 byte hex string.	ans11	Optional
127.25. 18	Issuer Application Data	Proprietary application data for transmission from the ICC to the issuer. May contain the following subfields: Scheme Discretionary Data, Issuer Discretionary Data, Derivation Key Index, Cryptogram Version Number, Card Verification Results, DAC. The	ans..64, LLVAR	Will be present if available from the terminal, and must be set if available. May be used in validating the cryptogram.

Fields

Request/Advice messages				
		layout of this field is specific to the issuer. (Field value: translate 32 byte binary EMV value to 64 byte hex string.)		
127.25.19	Issuer Script Results	Indicates the result of the terminal script processing. (Field value: translate binary EMV value to hex string.)	ans..507, LLLLVAR	May be returned by the ICC to indicate the results of a script processed in a previous transaction. Typically sent in an advice message (0120/0220/0420).
127.25.20	Terminal Application Version Number	Version number assigned by the payment system for the application.	ans4	Optional
127.25.21	Terminal Capabilities	Indicates the card data input, CVM, and security capabilities of the terminal. (Field value: translate 3 byte binary EMV value to 6 byte hex string.)	ans6	Optional
127.25.22	Terminal Country Code	Indicates the country of the terminal, represented according to ISO 3166.	n3	Must be present in a 0100, 0120, 0200 or 0220 message for an ICC chip transaction. Otherwise optional.
127.25.23	Terminal Type	Indicates the environment of the terminal, its communications capability, and its operational control.	n2	Optional
127.25.24	Terminal Verification Result	Status of the different functions as seen from the terminal. (Field value: translate 5 byte binary EMV value to 10 byte hex string.)	ans10	Must be present in a 0100, 0120, 0200 or 0220 message for an ICC chip transaction. Otherwise optional.
127.25.25	Transaction Category Code	Defines the type of transaction for which authorization is being requested. Used in risk management.	ans1	Optional

Fields

Request/Advice messages				
127.25.26	Transaction Currency Code	Indicates the currency code of the transaction according to ISO 4217.	n3	Must be present in a 0100, 0120, 0200 or 0220 message for an ICC chip transaction. Otherwise optional.
127.25.27	Transaction Date	The local date (in YYMMDD format) on which the transaction was authorized.	n6	Must be present in a 0100, 0120, 0200 or 0220 message for an ICC chip transaction. Otherwise optional.
127.25.28	Transaction Sequence Counter	Counter maintained by the terminal and incremented by one for each transaction.	n..8, LVAR	Optional
127.25.29	Transaction Type	Indicates the type of the transaction, represented by the first two digits of the ISO 8583:1997 Processing Code.	n2	Must be present in a 0100, 0120, 0200 or 0220 message for an ICC chip transaction. Otherwise optional.
127.25.30	Unpredictable Number	Value to provide uniqueness to the generation of the cryptogram. (Field value: translate 4 byte binary EMV value to 8 byte hex string.)	ans8	Must be present in a 0100, 0120, 0200 or 0220 message for an ICC chip transaction. Otherwise optional.
127.25.35	Customer Exclusive Data (CED)	Available for the issuer's discretionary use. (Field Value: translate 32 byte binary EMV value to 64 byte hex string.)	ans..64, LLVAR	Optional
127.25.36	Form Factor Indicator	Contains indicators about the attributes of cardholder's device and the technology used for communication between the cardholder's device and the acquiring POS device. (Field Value: translate 4 byte binary EMV value to 8 byte hex string.)	ans..64, LLVAR	Optional

Fields

Response messages				
Field	Name	Description	Format	Condition
127.25.1	Bitmap	The bitmap signifies the presence (1) or absence (0) of data sub-elements contained within field 127.25 (ICC Data). The bitmap is a binary field, but is formatted as a hexadecimal. This means the 8 binary characters representing the bitmap must be converted to hexadecimal before being placed in this field.	b8 (Hex 16)	Mandatory
127.25.6	Application Transaction Counter	Counter maintained by the application in the ICC. (Incrementing the ATC is managed by the ICC). (Field value: translate 2 byte binary EMV value to 4 byte hex string.)	ans4	Should be set if available in the message from the issuer.
127.25.10	Card Authentication Results Code	An issuer-supplied code indicating card authentication results.		Optional
127.25.31	Issuer Authentication Data	Data sent to the ICC for online issuer authentication. May contain the following subfields: Authorization Response Cryptogram (ARPC), Authorization Response Code. The layout of this field is specific to the issuer . (Field value: translate binary EMV value to hex string.)	ans..32, LLVAR	Optional
127.25.32	Issuer Script Template 1	A command from the issuer for transmission to the ICC. This script is processed by the terminal before sending the second GENERATE AC command to the ICC. (Field value: translate binary EMV value to hex string.)	ans..33 54, LLLLVAR	Optional

Fields

Response messages				
127.25. 33	Issuer Script Template 2	A command from the issuer for transmission to the ICC. This script is processed by the terminal after sending the second GENERATE AC command to the ICC. (Field value: translate binary EMV value to hex string.)	ans..33 54, LLLLVAR	Optional
127.25. 34	PostilionPrivateI CCResponseDat a	This field is added so as to distinguish between standard EMV response data and additional Postilion-specific response data elements This field will contain below 3 sub tags Conditionally. 0: Response Code 1: CVRAuthenticationResults 2: TVRAuthenticationResults These sub tags will be followed by its value.	ans..27, LLVAR	Optional
sub tag 0	ResponseCode	This field contains the Postilion response code used when generating the Authorization Response Cryptogram (ARPC)	an2	Conditional
sub tag 1	CVRAuthenticati onResults	This field is computed as the hexadecimal equivalent of the bitwise AND between the Card Verification Results, in field IssuerApplicationData in IccRequest in field 127.25 (ICC data), and the CVR decision mask configured for the associated card program.	an8/12	Conditional
sub tag 2	TVRAuthenticati onResults	This field is computed as the hexadecimal equivalent of the bitwise AND between the Terminal Verification Results, in field IssuerApplicationData in IccRequest in field 127.25 (ICC data), and the TVR	an10	Conditional

Fields

Response messages				
		decision mask configured for the associated card program.		

Field 127.26 - Original Node

Format

ans..12, LLVAR

Description

This is a Postilion specific addition to the ISO 8583 standard. Contains the name of the original source node for this transaction.

This field is used for linking transactions across source nodes, to handle cases where (for example) the authorization request arrives from one source node, while the matching transaction request or reversal is sent from another.

Field 127.27 - Card Verification Result

Format

ans1

Description

This is a Postilion specific addition to the ISO 8583 standard. Contains the result of a transaction involving card verification.

Card verification result	
M	CVV2 valid (match), CVV valid or not available
N	CVV2 invalid (non-match), CVV valid or not available
P	Unable to process CVV2, CVV valid or not available
U	Issuer unregistered to process CVV2, CVV valid or not available

Fields

Card verification result	
Y	CVV invalid

Field 127.28 - American Express Card Identifier (CID)

Format

n4

Description

This is a Postilion specific addition to the ISO 8583 standard. The American Express Card Identifier (CID) is similar to Visa's CVV2 and MasterCard's CVC2. It is used for additional validation in card-not-present transactions.

Note that if the Transaction Manager is configured to perform stand-in, it will not validate the American Express Card Identifier (CID) while performing stand-in. Hence if the Transaction Manager performs stand-in for a transaction where this field is present, it does not imply that the data in this field is valid and correct.

The American Express Card Identifier (CID) is passed through the Transaction Manager unaltered and not saved in the database.

Field 127.29 - 3D Secure Data

Format

b40

Description

This is a Postilion specific addition to the ISO 8583 standard. 3D-Secure Data is made up of the following two subfields (both with format b20):

- The Transaction Identifier (XID) (positions 1 to 20).
- The Cardholder Authentication Verification Value (CAVV) (positions 21 to 40).

3D-Secure data is passed through the Transaction Manager unaltered and not saved in the database.

The Transaction Manager is not allowed to perform stand-in authorization for 3D-Secure transactions.

Field 127.30 - 3D Secure Result

Format

ans1

Description

This is a Postilion specific addition to the ISO 8583 standard. Contains the Cardholder Authentication Verification Value (CAVV) results code.

3D Secure result	
blank (a space)	CAVV not validated
0	CAVV not validated due to erroneous data submitted
1	CAVV failed validation
2	CAVV passed validation
3	CAVV validation could not be performed. Issuer attempt incomplete.
4	CAVV validation could not be performed. Issuer system error.

3D-Secure Result is passed through Postilion unaltered and saved in the database.

Field 127.31 - Issuer Network ID

Format

ans..11, LLVAR

Description

This is a Postilion specific addition to the ISO 8583 standard. Contains the ID of the network that the issuer belongs to, that either switched the transaction to the issuer, or authorized the transaction on behalf of the Issuer.

Field 127.32 - UCAF data

Format

b..33, LLVAR

Description

This is a Postilion specific addition to the ISO 8583 standard. Contains the MasterCard UCAF (Universal Cardholder Authentication Field) field for electronic commerce transactions.

This field consists of two subfields:

- *UCAF collection indicator*, with a format of n1

UCAF collection indicator	
0	UCAF data collection is not supported at the merchant's web site.
1	UCAF data collection is supported by the merchant, but UCAF data was not populated.
2	UCAF data collection is supported by the merchant and the UCAF data was populated.

- *UCAF authentication data*, with a format of b..32.
- This should be a Base64 encoded [ans..32](#) representation of the binary authentication data.
- If the UCAF collection indicator subfield is set to 0 or 1, this subfield will not be present.

Field 127.33 - Extended Transaction Type

Format

n4

Description

This is a Postilion specific addition to the ISO 8583 standard. The extended transaction type is a code that distinguishes between transaction types with the same code in the transaction type subfield of field 3 (Processing code).

The extended transaction type field can be used in conjunction with any of the current transaction types.

Administration transaction types (1000 - 5999):	
1000	Membership sign-up
1001	Bills retracted
1002	IOU dispense
1003	Cash accepted
1004	Rounding
1005	Fee reversal
1006	Change dispense from cash acceptor
1007	Change dispense from canister
1008	Deposit envelope dispense
1009	Deposit with unknown amount
1160	Remote key delivery - Public key request – Signature
1161	Remote key delivery - Master key request – Signature
1162	Remote key delivery - Master key verification – Signature
1170	Remote key delivery - Public key request – Certificate
1171	Remote key delivery - Master key request – Certificate
1172	Remote key delivery - Master key verification – Certificate
1180	Remote key delivery - Master key exchange
1181	Remote key delivery - Public key exchange

Fields

Administration transaction types (1000 - 5999):	
1182	Remote key delivery - Master key update
2000	Cash replenishment
2001	Depositor cleanout
2002	Cash replenishment & depositor cleanout
2003	Suspect transaction - Bank saved
2004	Suspect transaction - Bank not saved
2005	Media totals printed
2006	Media totals cleared
2007	Suspect transaction - No action taken
2008	Declined transaction - Terminal problem
3000	Unblock PIN
3001	PIN change failure
3002	PIN unblock failure
3010	EMV cryptogram validation
3011	EMV transaction result
3030	Signature capture
3100	Card activation
3101	Card deactivation
3200	Statement order
3201	Check/cheque book order
3202	Stop check/cheque
3300	Customer update
3301	Account update
3302	Card update
4000	Fraud alert

Fields

Administration transaction types (1000 - 5999):	
4001	Suspect transaction
4100	Transaction documentation retrieval request
4101	Chargeback
4102	Chargeback reversal
4103	Representment
4101	Arbitration chargeback
4105	Fee collection
4106	Funds disbursement
4107	Administration text message
4108	Retrieval confirmation
4109	Rejection
4110	Arbitration chargeback reversal
4111	Representment reversal
4112	Fee collection reversal
4113	Funds disbursement reversal
4114	Retrieval request reversal
4200	Check/Cheque image retrieval
4201	Deposit receipt image retrieval
4202	Statement image retrieval
4204	Deposit image sub-item retrieval
5000-5999	Reserved for client-specific use

Financial transaction types (6000 - 9999):	
6000	Money order
6001	Money transfer

Fields

Financial transaction types (6000 – 9999):	
6002	Money transfer inquiry
6003	Check/cheque cash inquiry
6010	Debit order
6011	Debit order inquiry
6012	Future debit orders inquiry
6100	Check/cheque deposit with OCR entry
6101	Check/cheque deposit with manual entry
6102	Check/cheque deposit with OCR entry – Cash back to follow
6103	Check/cheque deposit with manual entry – Cash back to follow
6110	Cash deposit with bunch note acceptor
6200	Offline funds load
6201	Offline funds unload
6202	Offline funds account synchronization
6203	Non-usage fee
6204	Funding account credit
6300	Loan activation
6301	Loan cancellation
6400	Prepay
6401	Prepay – Anonymous voucher
6402	Prepay – Consumer-specific voucher
6403	Prepay – Electronic topup
6404	Prepay – Anonymous voucher reprint
6500	Card activation with deposit verified by operator
6501	Deposit verified by operator
6502	Card deactivation with cash back

Fields

Financial transaction types (6000 – 9999):	
6600	Check/cheque guarantee for goods and services with cash back
6601	Check/cheque verification for goods and services with cash back
6700	Currency conversion lookup inquiry
7000	Customer verification inquiry
7001	Customer linked account inquiry
7002	Customer linked card inquiry
7003	Customer inquiry
7004	Card linked account inquiry
7005	Card inquiry
7006	Account linked customer inquiry
7007	Account inquiry
7008	Account verification inquiry
7010	Statement image list inquiry
7015	Funds reserved pending management approval
7050	Fee collection
7055	Check/Cheque representment
7060	Savings bond purchase
7100	Payment between accounts held at different institutions
7101	Bill payment by payment processor
7102	Bill payment by payment processor & check/cheque issued
7103	Bill payment by account owner's bank
7104	Bill payment by account owner's bank & check/cheque issued
7105	Bill payment by ACH & pre-defined payee details
7106	Bill payment by ACH & user-supplied payee details
7107	Tax payment, commercial account owner

Fields

Financial transaction types (6000 – 9999):	
7108	Payroll payment, commercial account owner
7109	ACH pre-note
7110	Child support payment
7111	Healthcare benefit
7112	Electronic check authorization
7113	Electronic benefit transfer
7114	Authenticated collection
8000-8099	Reserved for use in PostCard
8100-8199	Reserved for use in adjustment processing
8100	Transaction documentation retrieval request
8101	Chargeback
8102	Chargeback reversal
8103	Representment
8104	Arbitration chargeback
8105	Fee collection
8106	Funds disbursement
8107	Administration text message
8108	Retrieval confirmation
8109	Rejection
8110	Arbitration chargeback reversal
8111	Representment reversal
8112	Fee collection reversal
8113	Funds disbursement reversal
8114	Retrieval request reversal

Fields

Financial transaction types (6000 – 9999):	
8115	Adjustment
9000-9999	Reserved for client-specific use

Note: Please refer ***Transaction Manager Interface Specification*** for updated Extended Transaction Type.

The Extended transaction type field should be used as follows:

Message Type	Transaction Type	Extended Transaction Type	Transaction Manager / PostCard stand-in
06xx	90 / 92	Administration transaction types(1000-5999)	Defined per transaction type in field 3 for 0600 messages.
06xx	91	Administration transaction types(1000-5999)	<p>Defined per extended transaction type in field 127.33 for 0600 messages (PostCard stand-in only supported for extended transaction type 3000 if it is an EMV transaction and PostCard is configured to do PIN verification and to send issuer scripts).</p> <p>If field 127.33 is not present, no stand-in will be done, except in the following cases:</p> <ol style="list-style-type: none"> 1. PostCard can do stand-in for an EMV PIN unblock transaction (message reason code 6800) if it is configured to do PIN verification and to send issuer scripts. 2. Transaction Manager can do stand-in for a Positive Balances sink node. 3. Transaction Manager can do stand-in for an acquirer sink node when the sink node is not available. <p>This is necessary to maintain backwards compatibility.</p>
01xx / 02xx / 04xx / 9xxx	Non-general transaction types in the range 00-59	Financial transaction types (6000-9999)	Defined per transaction type in field 3 for 0100 and 0200 messages.
01xx / 02xx /	12 / 25 / 32 / 42 / 52	Financial transaction	Stand-in is not performed for these transaction types.

Fields

Message Type	Transaction Type	Extended Transaction Type	Transaction Manager / PostCard stand-in
04xx / 9xxx		types (6000-9999)	

Field 127.34 - Account Type Qualifiers

Format

n2

Description

This is a Postillion specific addition to the ISO 8583 standard. This field contains the 'From' and 'To' account type qualifiers for the account types specified in the processing code (field 30). An account type qualifier is an indication of whether the primary, secondary or tertiary account of a specific type should be used.

This field consists of two subfields:

- Account Type Qualifier which qualifies the "From" Account Type (position 1)
- Account Type Qualifier which qualifies the "To" Account Type (position 2)

Account type qualifier	
0	Unspecified
1	Primary account
2	Secondary account
3	Tertiary account

Field 127.35 - Acquirer Network ID

Format

ans..11, LLVAR

Description

This is a Postilion specific addition to the ISO 8583 standard. Contains the ID of the network that the acquirer belongs to, that switched the transaction from the acquirer.

Field 127.36 – Customer ID**Format**

ans..25, LLVAR

Description

This is a Postilion specific addition to the ISO 8583 standard. Contains the customer Id that uniquely identifies a customer to the financial institution where they hold an account or accounts.

Field 127.37 – Extended Response Code**Format**

an4

Description

This is a Postilion specific addition to the ISO 8583 standard.

There are currently no standard Postilion values for extended transaction types. The following standard ranges are currently defined for the Extended Response Code Field:

Extended Response Code	
0000-0999	Indicates that a transaction has been approved. Used in financial messages (0110, 0210, 0120, 0220, 9120, 9220)
1000-1999	Used to indicate that a transaction has been processed for authorization or verification by or on behalf of the card issuer and has been denied (not requiring a card pick-up). Used in financial messages (0110, 0210, 0120, 0220, 9120, 9220)
2000-2999	Used to indicate that a transaction has been processed for authorization or verification by or on behalf of the card issuer and has been denied, requiring the card to be picked up. Used in financial messages (0110, 0210, 0120, 0220, 9120, 9220)
3000-3999	Used to indicate the result of a file action. Used in file update messages (0310, 0320, 0330, 0322, 0332, 9320, 9330)

Fields

Extended Response Code	
4000-4999	Used to indicate the result of a reversal or chargeback Used in reversal messages (0410, 0420, 9420)
5000-5999	Used to indicate the result of a reconciliation Used in reconciliation messages (0510, 0512, 0530, 0532)
6000-6999	Used to indicate the result of an administrative activity Used in administration messages (0610, 0620, 0630, 9620)
8000-8999	Used to indicate the result of a network management activity Used in network management messages (0810)
9102-9299	Used to indicate that a transaction could not be processed Used in request response and advice response messages

The following region-specific ranges are currently defined for the Extended Response Code Field:

Extended Response Code	
A000-A399	Indicates that a transaction has been approved.
B000-B399	Used to indicate that a transaction has been processed for authorization or verification by or on behalf of the card issuer and has been denied (not requiring a card pick-up).
C000-C399	Used to indicate that a transaction has been processed for authorization or verification by or on behalf of the card issuer and has been denied, requiring the card to be picked up.
D000-D399	Used to indicate the result of a file action.
E000-E399	Used to indicate the result of a reversal or chargeback.
F000-F399	Used to indicate the result of a reconciliation.
G000-G399	Used to indicate the result of an administrative activity.
H000-H399	Used to indicate the result of a network management activity.
K000-K399	Used to indicate that a transaction could not be processed.

The following client-specific ranges are currently defined for the Extended Response Code Field:

Fields

Extended Response Code	
A400-A999	Indicates that a transaction has been approved.
B400-B999	Used to indicate that a transaction has been processed for authorization or verification by or on behalf of the card issuer and has been denied (not requiring a card pick-up).
C400-C999	Used to indicate that a transaction has been processed for authorization or verification by or on behalf of the card issuer and has been denied, requiring the card to be picked up.
D400-D999	Used to indicate the result of a file action.
E400-E999	Used to indicate the result of a reversal or chargeback.
F400-F999	Used to indicate the result of a reconciliation.
G400-G999	Used to indicate the result of an administrative activity.
H400-H999	Used to indicate the result of a network management activity.
K400-K999	Used to indicate that a transaction could not be processed.

Field 127.38 - Additional POS Data Code

Format

an..99, LLVAR

Description

This is a Postilion specific addition to the ISO 8583 standard.

This field is used to extend the existing POS Data Code field by providing additional information about conditions at the Point-of-Service. The field currently contains the following sub-field:

- *The CVV2 availability indicator (position 1). This sub-field is based on Visa's field 126.10, position 1 and applies to card-not-present transactions. It is used to explain why a CVV2 value is not provided by the merchant, usually in situations where the card does have a CVV2 value.*
-

CVV2 Availability Indicator

0	CVV2 value not provided by merchant
---	-------------------------------------

CVV2 Availability Indicator	
1	CVV2 value is present but illegible
9	No CVV2 value on card

Although this field currently only contains one sub-field, provision has been made for future additions by defining it as a variable length field with a maximum length of 99 digits.

Field 127.39 - Original Response Code

Format

an2

Description

This is a Postilion specific addition to the ISO 8583 standard. Contains the response code of the original response message. Used when responding to duplicate transactions.

Field 127.40 - Transaction Reference

Format

ans..512

Description

This is a Realtime specific addition to the ISO 8583 standard. Contains a list of transaction references, that can be used to match linked transactions in addition to the switch key.

Data Format

The physical layout of the field is as follows:

1 byte length indicator of the key length indicator
Length indicator of the key

Fields

Key
1 byte length indicator of the value length indicator
Length indicator of the value
Value

The table above describes the physical layout of a single key/value pair, it is therefore repeated for each key/value pair in the field.

Fields

The following subfields are defined:

Key	Value Format	Description
Mn (with n between 0 and 11)	ANS..32	<p>Each entry contains a <i>matching</i> reference which will be stored for this transaction. These <i>matching</i> transaction references can be used in linked transactions to indicate this as the original transaction in addition to the Switch Key (127.2).</p> <p>Up to 12 <i>matching</i> transaction references can be specified, such that when combined with original references, the total number of references does not exceed 12.</p> <p>The transaction reference values must not contain comma (',') characters.</p>
On (with n between 0 and 11)	ANS..32	<p>Each entry contains an <i>original</i> reference which is used to link this transaction to an original. <i>Original</i> transaction references are matched to <i>matching</i> transaction references previously stored.</p> <p>Up to 12 <i>original</i> transaction references can be specified, such that when combined with matching references, the total number of references does not exceed 12.</p> <p>The transaction reference values must not contain comma (',') characters.</p>
PrioritizeOriginalRefs	n1	<p>A flag indicating whether or not the original references specified in this field should be considered to be a <i>prioritized</i> list in which a reference with a smaller index is treated with a higher priority than one with a greater index. For example, the original reference O0 will be treated with a higher priority than the original reference O1.</p> <p>A value of 1 in this subfield indicates that the original references should be considered to be a prioritized list. Any other value indicates that the original references should all be considered to be of equal priority.</p> <p>Note: If not specified, Transaction Manager will treat the original references in this field as a non-prioritized list.</p>

Field 127.41 - Originating Remote Address

Format

ans..99, LLVAR

Description

This is a Realtime specific addition to the ISO 8583 standard. Contains an indication of the address of the remote entity that this request message originated from. This field can only be included in request messages sent to Transaction Manager. Transaction Manager will not forward this field to a Sink Node but will include it in the response message to the Source Node if it was included in the request message.

This field will only be included in a response to a linked/duplicate request message if the linked/duplicate message contains a value for the field. That is, the value from the original request message is not used in the absence of the field in the linked/duplicate request message.

Field 127.42 - Transaction Number

Format

n..20, LLVAR

Description

This is a Realtime specific addition to the ISO 8583 standard.

This field contains the transaction number of the transaction to which this message is associated. This field can only be included in response messages sent from Transaction Manager.

Note: The transaction number will not be present in the response messages if the transaction has not been stored in the database. For example, this field is not sent in format failure responses or responses to messages queued for delivery to an active/active partner.

Field 127.43 – Routing Network ID

Format

n4

Description

This is a Realtime specific addition to the ISO 8583 standard.

This field is set if Transaction Manager used Advanced Least Cost Routing to route this message. It contains the ID of the network that was selected for transaction routing.

Fields

When processing transactions for multiple networks, the upstream entity can use this ID to identify the destination network for a transaction that represents the lowest cost, as calculated by Transaction Manager.

A list of possible network IDs is given below:

Possible Network IDs	
0001	Accel
0002	AFFN – Armed Forces Financial Network
0003	Alaska Option
0004	ATH – A Toda Hora
0005	American Express
0006	CU48 – Credit Union 48
0007	Discover
0008	Interlink/PAVD – PIN-Authenticated Visa Debit
0009	Jeanie
0010	Maestro
0011	Mastercard
0012	NETS – Nebraska Electronic Transfer System
0013	NYCE – New York Currency Exchange
0014	Pulse
0015	Shazam
0016	Star
0017	Visa

Field 127.44 – Extended Card Acceptor Terminal ID**Format**

ans..25, LLVAR

Description

This is a Realtime specific addition to the ISO 8583 standard.

Contains the full length Card Acceptor Terminal ID value. This field will be populated if Transaction Manager has been configured to send a different value in field 41 to the Sink Node and the length of the value exceeds the maximum length for field 41. The first 8 characters of the mapped Card Acceptor Terminal ID will be placed in field 41 and the full length value will be placed in field 127.44.

Field 127.45 – Extended Card Acceptor ID Code**Format**

ans..25, LLVAR

Description

This is a Realtime specific addition to the ISO 8583 standard.

Contains the full length Card Acceptor ID Code value. This field will be populated if Transaction Manager has been configured to send a different value in field 42 to the Sink Node and the length of the value exceeds the maximum length for field 42. The first 15 characters of the mapped Card Acceptor ID Code will be placed in field 42 and the full length value will be placed in field 127.45.

Field 127.46 – Original Card Acceptor Terminal ID**Format**

ans8

Description

This is a Realtime specific addition to the ISO 8583 standard.

Contains the Card Acceptor Terminal ID received from the Source Node. Used only when Transaction Manager is configured to send a different Card Acceptor Terminal ID value to the Sink Node.

Field 127.47 – Original Card Acceptor ID Code

Format

ans15

Description

This is a Realtime specific addition to the ISO 8583 standard.

Contains the Card Acceptor ID Code received from the Source Node. Used only when Transaction Manager is configured to send a different Card Acceptor ID Code value to the Sink Node.

Field 127.48 – Dynamic Currency Conversion Status Code

Format

ans..99, LLLVAR

Description

This is a Realtime specific addition to the ISO 8583 standard.

Contains details related to Dynamic Currency Conversion (DCC) processing for the transaction. This field consists of the following sub-fields:

DCC Allowed Indicator (Position 1)	
Y	DCC is allowed for this transaction.
N	DCC is not allowed for this transaction.
U	The flag has not been set.

DCC Available Indicator (Position 2)	
Y	A DCC offer has been retrieved successfully for this transaction.
N	A DCC offer could not be retrieved for this transaction.
U	The flag has not been set.

Fields

DCC Accepted Indicator (Position 3)	
Y	The DCC offer has been accepted for this transaction. For a sale transaction, this indicates that the cardholder has accepted the DCC offer. For a refund, this indicates that the merchant is using the DCC rates returned for the transaction.
N	The DCC offer has not been accepted.
U	The flag has not been set.

Field 127.49 – Card Acceptor Additional Data

Format

b..999, LLLVAR

Description

This is a Realtime specific addition to the ISO 8583 standard.

This field contains additional data relating to the card acceptor. Each subfield has its own format and can be of variable or fixed length. This field uses a bitmap message structure to represent data. Sub-fields 5 and above are only supported on RTFW version 5.6.

Sub-fields

Realtime currently defines the following sub-fields:

Field number	Field name	Format	Condition	Description	Present in message
2	Card Acceptor Phone Number.	ans..16	Present in the message if configured at the card acceptor level in Transaction Manager.	A phone number for the Card Acceptor.	0100, 0120, 0200, 0202, 0220, 0300, 0320, 0400, 0420, 0600, 0620, 9120, 9220, 9320, 9420, 9620
3	Street Address	ans..48	Present in the message if configured at the card acceptor level in Transaction Manager.	A street address associated with the card acceptor.	0100, 0120, 0200, 0202, 0220, 0300, 0320, 0400, 0420, 0600, 0620, 9120, 9220, 9320, 9420, 9620

Fields

Field number	Field name	Format	Condition	Description	Present in message
4	Retailer Phone Number	ans..16	Present in the message if configured at the card acceptor level in Transaction Manager.	A phone number for the retailer associated with the card acceptor.	0100, 0120, 0200, 0202, 0220, 0300, 0320, 0400, 0420, 0600, 0620, 9120, 9220, 9320, 9420, 9620
5	Country Subdivision Code	ans3	Present in the message if configured at the card acceptor level in Transaction Manager.	A state or province code for the retailer associated with the card acceptor.	0100, 0120, 0200, 0202, 0220, 0300, 0320, 0400, 0420, 0600, 0620, 9120, 9220, 9320, 9420, 9620
6	URL	ans..255	Present in the message if configured at the card acceptor level in Transaction Manager.	A website address for the retailer associated with the card acceptor. This field should be present for e-commerce transactions if available.	0100, 0120, 0200, 0202, 0220, 0300, 0320, 0400, 0420, 0600, 0620, 9120, 9220, 9320, 9420, 9620
7	Customer Service Phone Number	ans..16	Present in the message if configured at the card acceptor level in Transaction Manager.	A customer service phone number for the retailer associated with the card acceptor.	0100, 0120, 0200, 0202, 0220, 0300, 0320, 0400, 0420, 0600, 0620, 9120, 9220, 9320, 9420, 9620
8	Additional Contact Information	ans..25	Present in the message if configured at the card acceptor level in Transaction Manager.	May contain additional information, such as secondary phone numbers, customer service operation	0100, 0120, 0200, 0202, 0220, 0300, 0320, 0400, 0420, 0600, 0620, 9120, 9220, 9320, 9420, 9620

Fields

Field number	Field name	Format	Condition	Description	Present in message
9	Tax ID	ans..21	Present in the message if configured at the card acceptor level in Transaction Manager.	hours, and contact name. A tax ID for the retailer associated with the card acceptor.	0100, 0120, 0200, 0202, 0220, 0300, 0320, 0400, 0420, 0600, 0620, 9120, 9220, 9320, 9420, 9620
10	Partner ID Code	ans..6	Present in the message if received from the source.	A partner ID established between the card acceptor and the issuer.	0100, 0120, 0200, 0202, 0220, 0300, 0320, 0400, 0420, 0600, 0620, 9120, 9220, 9320, 9420, 9620
11	Service Location City Name	ans..13	Present in the message if received from the source.	The city of the location of the physical interaction with the customer.	0100, 0120, 0200, 0202, 0220, 0300, 0320, 0400, 0420, 0600, 0620, 9120, 9220, 9320, 9420, 9620
12	Service Location Country Subdivision Code	ans3	Present in the message if received from the source.	The state or province of the location of the physical interaction with the customer.	0100, 0120, 0200, 0202, 0220, 0300, 0320, 0400, 0420, 0600, 0620, 9120, 9220, 9320, 9420, 9620
13	Service Location Country Code	ans3	Present in the message if received from the source.	The country code of the location of the physical interaction with the customer.	0100, 0120, 0200, 0202, 0220, 0300, 0320, 0400, 0420, 0600, 0620, 9120, 9220, 9320, 9420, 9620

Fields

Field number	Field name	Format	Condition	Description	Present in message
14	Service Location Postal Code	ans..10	Present in the message if received from the source.	The postal code of the location of the physical interaction with the customer.	0100, 0120, 0200, 0202, 0220, 0300, 0320, 0400, 0420, 0600, 0620, 9120, 9220, 9320, 9420, 9620

Field 127.59 – Payment Token Identifier**Format**

an..28, LLVAR

Description

This is a Realtime specific addition to the ISO 8583 standard.

This field represents a payment identifier where Field 2 (PAN), Field 35 (Track2) and Field 102/103 (Account Identifier) are not appropriate, either due to limiting field formats/lengths, or not being an account-based transaction.

This field can represent any payment identifier, for example:

- card numbers longer than 19 numeric digits
- gift cards
- voucher numbers
- loyalty card numbers
- fleet card numbers

This field must not be confused with the type of tokens generated by the Postilion Token Server.

For linked transactions, this field should either be populated with the same value as the original, or not set. If this field is not set for a linked transaction, Transaction Manager will copy the value from the original transaction.

Field 128 - MAC Extended

Format

b8 (Hex 16)

Description

The purpose of the MAC value is to verify that sensitive information in a message has not been modified between leaving the source and arriving at the destination. The MAC value is based upon the values of the sensitive fields of the message and a Cryptographic Key called a MAC Working key or MWK.

The Postilion PostBridge MAC Configuration Console can be used to configure which fields should be included in the MAC. The console can also be used to configure which MWK(s) should be used to calculate the MAC. (Please note: This console will only be used to configure which *existing* MWK(s) will be used. The actual MWK itself must already be configured on the Postilion system using the Hardware Security Module Configuration Console.)

Static Key

If the current system uses static MAC Working Keys (MWK) this field will contain the MAC value for the message formatted as a 4 digit binary value, space filled to the right.

E.g. if the MAC value is '0000' the field will contain:

'0000 '

Dynamic Keys

If the current system uses dynamically exchanges MWK's this will contain the MAC value for the message formatted as a 4 digit binary value, follow by the key number used to generate the MAC value, spaced filled to the right. Valid values for the key number are '1' and '2' for MWK 1 and 2 respectively.

For a MAC value of '0000', which was calculated using MWK 2 the field will contain:

'0002 '

MACing is not allowed on *Network Management Requests / Responses* (0800/0810) but a MAC Key Exchange Network Management Request will contain the key number of the key which should be exchanged in position 5 of this field. The rest of the field will be space filled.

If MWK 2 is to be exchanged the 0800 and 0810 will contain:

' 2 '

Refer to the [MAC Key Management](#) section for more information on this topic.

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XML schemas

Iso8583PostXml

The PostBridge interface supports the processing of ISO 8583 messages in XML format. Messages sent to the interface in XML format should be formatted according to the below DTD/XSD.

Iso8583PostXml DTD

```
<?xml version="1.0"?>
<!ELEMENT Iso8583PostXml      (MsgType, Fields)>
<!ELEMENT MsgType (#PCDATA)>
<!ELEMENT Fields (
    Field_002?,
    Field_003?,
    Field_004?,
    Field_005?,
    Field_007?,
    Field_009?,
    Field_011?,
    Field_012?,
    Field_013?,
    Field_014?,
    Field_015?,
    Field_016?,
    Field_018?,
    Field_022?,
    Field_023?,
    Field_025?,
    Field_026?,
    Field_027?,
    Field_028?,
    Field_029?,
    Field_030?,
    Field_031?,
    Field_032?,
    Field_033?,
    Field_035?,
    Field_037?,
    Field_038?,
    Field_039?,
    Field_040?,
    Field_041?,
    Field_042?,
    Field_043?,
    Field_044?,
    Field_045?,
    Field_048?,
    Field_049?,
    Field_050?,
    Field_052?,
    Field_053?,
    Field_054?,
    Field_056?,
```

Fields

```
Field_057?,  
Field_058?,  
Field_059?,  
Field_066?,  
Field_067?,  
Field_070?,  
Field_073?,  
Field_074?,  
Field_075?,  
Field_076?,  
Field_077?,  
Field_078?,  
Field_079?,  
Field_080?,  
Field_081?,  
Field_082?,  
Field_083?,  
Field_084?,  
Field_085?,  
Field_086?,  
Field_087?,  
Field_088?,  
Field_089?,  
Field_090?,  
Field_091?,  
Field_095?,  
Field_097?,  
Field_098?,  
Field_100?,  
Field_101?,  
Field_102?,  
Field_103?,  
Field_118?,  
Field_119?,  
Field_123?,  
Field_125?,  
Field_127_002?,  
Field_127_003?,  
Field_127_004?,  
Field_127_005?,  
Field_127_006?,  
Field_127_007?,  
Field_127_008?,  
Field_127_009?,  
Field_127_010?,  
Field_127_011?,  
Field_127_012?,  
Field_127_013?,  
Field_127_014?,  
Field_127_015?,  
Field_127_016?,  
Field_127_017?,  
Field_127_018?,  
Field_127_019?,  
Field_127_020?,  
Field_127_021?,
```

Fields

```
Field_127_022?,  
Field_127_023?,  
Field_127_024?,  
Field_127_025?,  
Field_127_026?,  
Field_127_027?,  
Field_127_028?,  
Field_127_029?,  
Field_127_030?,  
Field_127_031?,  
Field_127_032?,  
Field_127_033?,  
Field_127_034?,  
Field_127_035?,  
Field_127_039?,  
Field_127_040?,  
Field_127_041?,  
Field_127_042?  
)>  
<!ELEMENT Field_002      (#PCDATA)>  
<!ELEMENT Field_003      (#PCDATA)>  
<!ELEMENT Field_004      (#PCDATA)>  
<!ELEMENT Field_005      (#PCDATA)>  
<!ELEMENT Field_007      (#PCDATA)>  
<!ELEMENT Field_009      (#PCDATA)>  
<!ELEMENT Field_011      (#PCDATA)>  
<!ELEMENT Field_012      (#PCDATA)>  
<!ELEMENT Field_013      (#PCDATA)>  
<!ELEMENT Field_014      (#PCDATA)>  
<!ELEMENT Field_015      (#PCDATA)>  
<!ELEMENT Field_016      (#PCDATA)>  
<!ELEMENT Field_018      (#PCDATA)>  
<!ELEMENT Field_022      (#PCDATA)>  
<!ELEMENT Field_023      (#PCDATA)>  
<!ELEMENT Field_025      (#PCDATA)>  
<!ELEMENT Field_026      (#PCDATA)>  
<!ELEMENT Field_027      (#PCDATA)>  
<!ELEMENT Field_028      (#PCDATA)>  
<!ELEMENT Field_029      (#PCDATA)>  
<!ELEMENT Field_030      (#PCDATA)>  
<!ELEMENT Field_031      (#PCDATA)>  
<!ELEMENT Field_032      (#PCDATA)>  
<!ELEMENT Field_033      (#PCDATA)>  
<!ELEMENT Field_035      (#PCDATA)>  
<!ELEMENT Field_037      (#PCDATA)>  
<!ELEMENT Field_038      (#PCDATA)>  
<!ELEMENT Field_039      (#PCDATA)>  
<!ELEMENT Field_040      (#PCDATA)>  
<!ELEMENT Field_041      (#PCDATA)>  
<!ELEMENT Field_042      (#PCDATA)>  
<!ELEMENT Field_043      (#PCDATA)>  
<!ELEMENT Field_044      (#PCDATA)>  
<!ELEMENT Field_045      (#PCDATA)>  
<!ELEMENT Field_048      (#PCDATA)>  
<!ELEMENT Field_049      (#PCDATA)>  
<!ELEMENT Field_050      (#PCDATA)>
```

Fields

```
<!ELEMENT Field_052      (#PCDATA)>
<!ELEMENT Field_053      (#PCDATA)>
<!ELEMENT Field_054      (#PCDATA)>
<!ELEMENT Field_056      (#PCDATA)>
<!ELEMENT Field_057      (#PCDATA)>
<!ELEMENT Field_058      (#PCDATA)>
<!ELEMENT Field_059      (#PCDATA)>
<!ELEMENT Field_066      (#PCDATA)>
<!ELEMENT Field_067      (#PCDATA)>
<!ELEMENT Field_070      (#PCDATA)>
<!ELEMENT Field_073      (#PCDATA)>
<!ELEMENT Field_074      (#PCDATA)>
<!ELEMENT Field_075      (#PCDATA)>
<!ELEMENT Field_076      (#PCDATA)>
<!ELEMENT Field_077      (#PCDATA)>
<!ELEMENT Field_078      (#PCDATA)>
<!ELEMENT Field_079      (#PCDATA)>
<!ELEMENT Field_080      (#PCDATA)>
<!ELEMENT Field_081      (#PCDATA)>
<!ELEMENT Field_082      (#PCDATA)>
<!ELEMENT Field_083      (#PCDATA)>
<!ELEMENT Field_084      (#PCDATA)>
<!ELEMENT Field_085      (#PCDATA)>
<!ELEMENT Field_086      (#PCDATA)>
<!ELEMENT Field_087      (#PCDATA)>
<!ELEMENT Field_088      (#PCDATA)>
<!ELEMENT Field_089      (#PCDATA)>
<!ELEMENT Field_090      (#PCDATA)>
<!ELEMENT Field_091      (#PCDATA)>
<!ELEMENT Field_095      (#PCDATA)>
<!ELEMENT Field_097      (#PCDATA)>
<!ELEMENT Field_098      (#PCDATA)>
<!ELEMENT Field_100      (#PCDATA)>
<!ELEMENT Field_101      (#PCDATA)>
<!ELEMENT Field_102      (#PCDATA)>
<!ELEMENT Field_103      (#PCDATA)>
<!ELEMENT Field_118      (#PCDATA)>
<!ELEMENT Field_119      (#PCDATA)>
<!ELEMENT Field_123      (#PCDATA)>
<!ELEMENT Field_125      (#PCDATA)>
<!ELEMENT Field_127_002  (#PCDATA)>
<!ELEMENT Field_127_003  (#PCDATA)>
<!ELEMENT Field_127_004  (#PCDATA)>
<!ELEMENT Field_127_005  (#PCDATA)>
<!ELEMENT Field_127_006  (#PCDATA)>
<!ELEMENT Field_127_007  (#PCDATA)>
<!ELEMENT Field_127_008  (#PCDATA)>
<!ELEMENT Field_127_009  (#PCDATA)>
<!ELEMENT Field_127_010  (#PCDATA)>
<!ELEMENT Field_127_011  (#PCDATA)>
<!ELEMENT Field_127_012  (#PCDATA)>
<!ELEMENT Field_127_013  (#PCDATA)>
<!ELEMENT Field_127_014  (#PCDATA)>
<!ELEMENT Field_127_015  (#PCDATA)>
<!ELEMENT Field_127_016  (#PCDATA)>
<!ELEMENT Field_127_017  (#PCDATA)>
```

Fields

```
<!ELEMENT Field_127_018 (#PCDATA)>
<!ELEMENT Field_127_019 (#PCDATA)>
<!ELEMENT Field_127_020 (#PCDATA)>
<!ELEMENT Field_127_021 (#PCDATA)>
<!ELEMENT Field_127_022 (#PCDATA)>
<!ELEMENT Field_127_023 (#PCDATA)>
<!ELEMENT Field_127_024 (#PCDATA)>
<!ELEMENT Field_127_025 (#PCDATA)>
<!ELEMENT Field_127_026 (#PCDATA)>
<!ELEMENT Field_127_027 (#PCDATA)>
<!ELEMENT Field_127_028 (#PCDATA)>
<!ELEMENT Field_127_029 (#PCDATA)>
<!ELEMENT Field_127_030 (#PCDATA)>
<!ELEMENT Field_127_031 (#PCDATA)>
<!ELEMENT Field_127_032 (#PCDATA)>
<!ELEMENT Field_127_033 (#PCDATA)>
<!ELEMENT Field_127_034 (#PCDATA)>
<!ELEMENT Field_127_035 (#PCDATA)>
<!ELEMENT Field_127_039 (#PCDATA)>
<!ELEMENT Field_127_040 (#PCDATA)>
<!ELEMENT Field_127_041 (#PCDATA)>
<!ELEMENT Field_127_042 (#PCDATA)>
```

Fields

Iso8583PostXml XSD

```
<?xml version="1.0"?>
<xsd:schema xmlns:xsd="http://www.w3.org/2001/XMLSchema">
    <xsd:element name="Iso8583PostXml">
        <xsd:complexType>
            <xsd:sequence>
                <xsd:element ref="MsgType"/>
                <xsd:element ref="Fields"/>
            </xsd:sequence>
        </xsd:complexType>
    </xsd:element>
    <xsd:element name="MsgType" type="xsd:string"/>
    <xsd:element name="Fields">
        <xsd:complexType>
            <xsd:sequence>
                <xsd:element ref="Field_002" minOccurs="0" maxOccurs="1"/>
                <xsd:element ref="Field_003" minOccurs="0" maxOccurs="1"/>
                <xsd:element ref="Field_004" minOccurs="0" maxOccurs="1"/>
                <xsd:element ref="Field_005" minOccurs="0" maxOccurs="1"/>
                <xsd:element ref="Field_007" minOccurs="0" maxOccurs="1"/>
                <xsd:element ref="Field_009" minOccurs="0" maxOccurs="1"/>
                <xsd:element ref="Field_011" minOccurs="0" maxOccurs="1"/>
                <xsd:element ref="Field_012" minOccurs="0" maxOccurs="1"/>
                <xsd:element ref="Field_013" minOccurs="0" maxOccurs="1"/>
                <xsd:element ref="Field_014" minOccurs="0" maxOccurs="1"/>
                <xsd:element ref="Field_015" minOccurs="0" maxOccurs="1"/>
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                <xsd:element ref="Field_023" minOccurs="0" maxOccurs="1"/>
                <xsd:element ref="Field_025" minOccurs="0" maxOccurs="1"/>
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                <xsd:element ref="Field_040" minOccurs="0" maxOccurs="1"/>
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Fields

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<xsd:element ref="Field_056" minOccurs="0" maxOccurs="1"/>
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maxOccurs="1"/>
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maxOccurs="1"/>
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maxOccurs="1"/>
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```

Fields

```
maxOccurs="1"/>
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maxOccurs="1"/>
    <xsd:element ref="Field_127_012" minOccurs="0"
maxOccurs="1"/>
    <xsd:element ref="Field_127_013" minOccurs="0"
maxOccurs="1"/>
    <xsd:element ref="Field_127_014" minOccurs="0"
maxOccurs="1"/>
    <xsd:element ref="Field_127_015" minOccurs="0"
maxOccurs="1"/>
    <xsd:element ref="Field_127_016" minOccurs="0"
maxOccurs="1"/>
    <xsd:element ref="Field_127_017" minOccurs="0"
maxOccurs="1"/>
    <xsd:element ref="Field_127_018" minOccurs="0"
maxOccurs="1"/>
    <xsd:element ref="Field_127_019" minOccurs="0"
maxOccurs="1"/>
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maxOccurs="1"/>
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maxOccurs="1"/>
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maxOccurs="1"/>
    <xsd:element ref="Field_127_023" minOccurs="0"
maxOccurs="1"/>
    <xsd:element ref="Field_127_024" minOccurs="0"
maxOccurs="1"/>
    <xsd:element ref="Field_127_025" minOccurs="0"
maxOccurs="1"/>
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maxOccurs="1"/>
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maxOccurs="1"/>
    <xsd:element ref="Field_127_029" minOccurs="0"
maxOccurs="1"/>
    <xsd:element ref="Field_127_030" minOccurs="0"
maxOccurs="1"/>
    <xsd:element ref="Field_127_031" minOccurs="0"
maxOccurs="1"/>
    <xsd:element ref="Field_127_032" minOccurs="0"
maxOccurs="1"/>
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maxOccurs="1"/>
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maxOccurs="1"/>
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maxOccurs="1"/>
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maxOccurs="1"/>
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maxOccurs="1"/>
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maxOccurs="1"/>
```

Fields

```
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maxOccurs="1"/>
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    <xsd:element ref="Field_127_041" minOccurs="0"
maxOccurs="1"/>
    <xsd:element ref="Field_127_042" minOccurs="0"
maxOccurs="1"/>
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</xsd:element>
<xsd:element name="Field_002" type="xsd:string"/>
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<xsd:element name="Field_037" type="xsd:string"/>
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<xsd:element name="Field_040" type="xsd:string"/>
<xsd:element name="Field_041" type="xsd:string"/>
<xsd:element name="Field_042" type="xsd:string"/>
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<xsd:element name="Field_058" type="xsd:string"/>
<xsd:element name="Field_059" type="xsd:string"/>
<xsd:element name="Field_066" type="xsd:string"/>
```

Fields

Fields

```
<xsd:element name="Field_127_026" type="xsd:string"/>
<xsd:element name="Field_127_027" type="xsd:string"/>
<xsd:element name="Field_127_028" type="xsd:string"/>
<xsd:element name="Field_127_029" type="xsd:string"/>
<xsd:element name="Field_127_030" type="xsd:string"/>
<xsd:element name="Field_127_031" type="xsd:string"/>
<xsd:element name="Field_127_032" type="xsd:string"/>
<xsd:element name="Field_127_033" type="xsd:string"/>
<xsd:element name="Field_127_034" type="xsd:string"/>
<xsd:element name="Field_127_035" type="xsd:string"/>
<xsd:element name="Field_127_036" type="xsd:string"/>
<xsd:element name="Field_127_037" type="xsd:string"/>
<xsd:element name="Field_127_038" type="xsd:string"/>
<xsd:element name="Field_127_039" type="xsd:string"/>
<xsd:element name="Field_127_040" type="xsd:string"/>
<xsd:element name="Field_127_041" type="xsd:string"/>
<xsd:element name="Field_127_042" type="xsd:string"/>
</xsd:schema>
```

ICC Data

IccData (field 127.25) is formatted as an XML document, as per a DTD. This XML document has an outer tag (IccData), and 2 primary inner tags (IccRequest and IccResponse). The IccRequest tag is used in request messages, and the IccResponse tag is used in response messages.

ICC Request

Field	Format	Condition	Description
AmountAuthorized	n12	Conditional	The amount of the transaction.
AmountOther	n12	Conditional	Secondary amount associated with the transaction, representing a cash back amount.
ApplicationIdentifier	ans..32	Optional	Identifies the application on the ICC as described in ISO/IEC 7816-5. (Field value: translate 16 byte binary EMV value to 32 byte hex string.)
ApplicationInterchangeProfile	ans4	Conditional	Indicates the capabilities of the ICC to support specific functions in the application. (Field value: translate 2 byte binary EMV value to 4 byte hex string.)
ApplicationTransactionCounter	ans4	Conditional	Counter maintained by the application in the ICC. (Incrementing the ATC is managed by the ICC). (Field value: translate 2 byte binary EMV value to 4 byte hex string.)
ApplicationUsageControl	ans4	Optional	Indicates the issuer's specified restrictions on the geographic usage and services allowed for the application.

Fields

Field	Format	Condition	Description
			(Field value: translate 2 byte binary EMV value to 4 byte hex string.)
AuthorizationResponseCode	an2	Optional	Code returned by the issuer or generated by the terminal if it did not receive an online response from the issuer.
CardAuthenticationReliabilityIndicator	n1	Optional	May be set and sent by the acquirer when the acquirer or issuer is inactive for card authentication.
CardAuthenticationResultsCode	ans1	Optional	An issuer-supplied code indicating card authentication results.
ChipConditionCode	n1	Optional	Indicates the status of last chip attempt at the terminal. 0 Magnetic stripe read, service code does not begin with 2 or 6 1 Magnetic stripe read, service code begins with 2 or 6, last transaction was a successful IC read or not an IC transaction 2 Magnetic stripe read, service code begins with 2 or 6, last transaction was an unsuccessful IC read
Cryptogram	ans16	Conditional	The cryptogram generated by the ICC. Consists of one of the following: Authorization Request Cryptogram (ARQC) for an authorization request, Application Authentication Cryptogram (AAC) for a declined transaction, or Transaction Certificate (TC) for an approved transaction. (Field value: translate 8 byte binary EMV value to 16 byte hex string.)
CryptogramInformationData	ans2	Conditional	Indicates the type of cryptogram returned by the ICC (ARQC, AAC or TC) and the actions to be performed by the terminal. (Field value: translate 1 byte binary EMV value to 2 byte hex string.)
CvmList	ans..504	Optional	Identifies the cardholder verification methods (CVMs) supported by the application. (Field value: translate 252 byte binary EMV value to 504 byte hex string.)
CvmResults	ans6	Optional	Cardholder verification method (CVM) results indicating the results of the last CVM performed. (Field value: translate 3 byte binary EMV value to 6 byte hex string.)

Fields

Field	Format	Condition	Description
InterfaceDeviceSerialNumber	an8	Conditional	A unique and permanent serial number assigned to the interface device (IFD) by the terminal manufacturer
IssuerActionCode		Optional	Card parameters that instruct the terminal about actions to take under various conditions.
Default	ans10	Conditional	Specifies the issuer's conditions that cause a transaction to be rejected if it might have been approved online, but the terminal is unable to process the transaction online. (Field value: translate 5 byte binary EMV value to 10 byte hex string.)
Denial	ans10	Conditional	Specifies the issuer's conditions that cause the denial of a transaction without attempt to go online. (Field value: translate 5 byte binary EMV value to 10 byte hex string.)
Online	ans10	Conditional	Specifies the issuer's conditions that cause a transaction to be transmitted online. (Field value: translate 5 byte binary EMV value to 10 byte hex string.)
IssuerApplicationData	ans..64	Conditional	Proprietary application data for transmission from the ICC to the issuer. May contain the following subfields: Scheme Discretionary Data, Issuer Discretionary Data, Derivation Key Index, Cryptogram Version Number, Card Verification Results, DAC. The layout of this field is specific to the issuer. (Field value: translate 32 byte binary EMV value to 64 byte hex string.)
IssuerScriptResults	ans..	Optional	Indicates the result of the terminal script processing. (Field value: translate binary EMV value to hex string.)
TerminalApplicationVersionNumber	ans4	Optional	Version number assigned by the payment system for the application.
TerminalCapabilities	ans6	Optional	Indicates the card data input, CVM, and security capabilities of the terminal. (Field value: translate 3 byte binary EMV value to 6 byte hex string.)
TerminalCountryCode	n3	Conditional	Indicates the country of the terminal, represented according to ISO 3166.

Fields

Field	Format	Condition	Description
TerminalType	n2	Optional	Indicates the environment of the terminal, its communications capability, and its operational control.
TerminalVerificationResult	ans10	Conditional	Status of the different functions as seen from the terminal. (Field value: translate 5 byte binary EMV value to 10 byte hex string.)
TransactionCategoryCode	ans1	Optional	Defines the type of transaction for which authorization is being requested. Used in risk management.
TransactionCurrencyCode	n3	Conditional	Indicates the currency code of the transaction according to ISO 4217.
TransactionDate	n6	Conditional	The local date (in YYMMDD format) on which the transaction was authorized.
TransactionSequenceCounter	n..8	Optional	Counter maintained by the terminal and incremented by one for each transaction.
TransactionType	n2	Conditional	Indicates the type of the transaction, represented by the first two digits of the ISO 8583:1997 Processing Code.
UnpredictableNumber	ans8	Conditional	Value to provide uniqueness to the generation of the cryptogram. (Field value: translate 4 byte binary EMV value to 8 byte hex string.)

ICC Response

Field	Format	Condition	Description
ApplicationTransactionCounter	ans4	Conditional	Counter maintained by the application in the ICC. (Incrementing the ATC is managed by the ICC). (Field value: translate 2 byte binary EMV value to 4 byte hex string.)
CardAuthenticationResultsCode	ans1	Optional	An issuer-supplied code indicating card authentication results.
IssuerAuthenticationData	ans32	Optional	Data sent to the ICC for online issuer authentication. May contain the following subfields: Authorization Response Cryptogram (ARPC), Authorization Response Code. The layout of this field is specific to the issuer. (Field value: translate binary EMV value to hex string.)

Fields

Field	Format	Condition	Description
IssuerScriptTemplate1	ans..	Optional	A command from the issuer for transmission to the ICC. This script is processed by the terminal before sending the second GENERATE AC command to the ICC. (Field value: translate 16 byte binary EMV value to 32 byte hex string.)
IssuerScriptTemplate2	ans..	Optional	A command from the issuer for transmission to the ICC. This script is processed by the terminal after sending the second GENERATE AC command to the ICC. (Field value: translate 16 byte binary EMV value to 32 byte hex string.)
PostilionPrivateICCResponseData		Optional	This field is added so as to distinguish between standard EMV response data and additional Realtime-specific response data elements
ResponseCode	an2	Optional	This field contains the Realtime response code used when generating the Authorization Response Cryptogram (ARPC)
CVRAuthenticationResults	an8	Optional	This field is computed as the hexadecimal equivalent of the bitwise AND between the Card Verification Results, in field IssuerApplicationData in IccRequest in field 127.25 (ICC data), and the CVR decision mask configured for the associated card program.
TVRAuthenticationResults	an10	Optional	This field is computed as the hexadecimal equivalent of the bitwise AND between the Terminal Verification Results, in field IssuerApplicationData in IccRequest in field 127.25 (ICC data), and the TVR decision mask configured for the associated card program.

ICCData DTD

```
<?xml version="1.0"?>

<!ELEMENT IccData (
  IccRequest?,
  IccResponse?
)>

<!ELEMENT IccRequest (
  AmountAuthorized?,
  AmountOther?,
  ApplicationIdentifier?,
  ApplicationInterchangeProfile?,
  ApplicationTransactionCounter?,
  ApplicationUsageControl?,
  AuthorizationResponseCode?,
  CardAuthenticationReliabilityIndicator?,
  CardAuthenticationResultsCode?,
  ChipConditionCode?,
  Cryptogram?,
  CryptogramInformationData?,
  CvmList?,
  CvmResults?,
  InterfaceDeviceSerialNumber?,
  IssuerActionCode?,
  IssuerApplicationData?,
  IssuerScriptResults?,
  TerminalApplicationVersionNumber?,
  TerminalCapabilities?,
  TerminalCountryCode?,
  TerminalType?,
  TerminalVerificationResult?,
  TransactionCategoryCode?,
  TransactionCurrencyCode?,
  TransactionDate?,
  TransactionSequenceCounter?,
  TransactionType?,
  UnpredictableNumber?
)>

<!ELEMENT IccResponse (
  ApplicationTransactionCounter?,
  CardAuthenticationResultsCode?,
  IssuerAuthenticationData?,
  IssuerScriptTemplate1?,
  IssuerScriptTemplate2?
)>

<!ELEMENT AmountAuthorized (#PCDATA)>
<!ELEMENT AmountOther (#PCDATA)>
<!ELEMENT ApplicationAuthenticationCryptogram (#PCDATA)>
<!ELEMENT ApplicationIdentifier (#PCDATA)>
<!ELEMENT ApplicationInterchangeProfile (#PCDATA)>
<!ELEMENT ApplicationTransactionCounter (#PCDATA)>
<!ELEMENT ApplicationUsageControl (#PCDATA)>
```

Fields

```
<!ELEMENT AuthorizationRequestCryptogram (#PCDATA)>
<!ELEMENT AuthorizationResponseCode (#PCDATA)>
<!ELEMENT CardAuthenticationReliabilityIndicator (#PCDATA)>
<!ELEMENT CardAuthenticationResultsCode (#PCDATA)>
<!ELEMENT CryptogramInformationData (#PCDATA)>
<!ELEMENT CvmList (#PCDATA)>
<!ELEMENT CvmResults (#PCDATA)>
<!ELEMENT InterfaceDeviceSerialNumber (#PCDATA)>
<!ELEMENT IssuerActionCode (
    Default?,
    Denial?,
    Online?
)>
    <!ELEMENT Default (#PCDATA)>
    <!ELEMENT Denial (#PCDATA)>
    <!ELEMENT Online (#PCDATA)>
<!ELEMENT IssuerApplicationData (#PCDATA)>
<!ELEMENT IssuerAuthenticationData (#PCDATA)>
<!ELEMENT IssuerScriptResults (#PCDATA)>
<!ELEMENT IssuerScriptTemplate1 (#PCDATA)>
<!ELEMENT IssuerScriptTemplate2 (#PCDATA)>
<!ELEMENT TerminalApplicationVersionNumber (#PCDATA)>
<!ELEMENT TerminalCapabilities (#PCDATA)>
<!ELEMENT TerminalCountryCode (#PCDATA)>
<!ELEMENT TerminalType (#PCDATA)>
<!ELEMENT TerminalVerificationResult (#PCDATA)>
<!ELEMENT TransactionCategoryCode (#PCDATA)>
<!ELEMENT TransactionCertificate (#PCDATA)>
<!ELEMENT TransactionCurrencyCode (#PCDATA)>
<!ELEMENT TransactionDate (#PCDATA)>
<!ELEMENT TransactionSequenceCounter (#PCDATA)>
<!ELEMENT TransactionType (#PCDATA)>
<!ELEMENT UnpredictableNumber (#PCDATA)>
<!ELEMENT PostilionPrivateIccResponseData (
    ResponseCode?,
    CVRAuthenticationResults?,
    TVRAuthenticationResults?
)>
    <!ELEMENT ResponseCode (#PCDATA)>
    <!ELEMENT CVRAuthenticationResults (#PCDATA)>
    <!ELEMENT TVRAuthenticationResults (#PCDATA)>
```

Fields

StatementData

The fields described below are used to send StatementData information. The key value of this structure is "StatementData", and the top level element is "StatementData".

Field	Type (element or attribute)	Condition	Format	Description
Request	Element	Optional		This aggregate wraps the information required to request a statement from the host.
RequestRange	Element	Optional		The RequestRange aggregate wraps information that delimits the transactions to be returned in the <TransactionList/> aggregate.
StartDate	Attribute	Optional	n8	Transactions occurring prior to this date should not be included in the statement transaction list.
EndDate	Attribute	Optional	n8	Transactions occurring after this date should not be included in the statement transaction list.
TransactionCount	Attribute	Optional	n4	The maximum number of transactions to be included in the transaction list.
LastBlockReference	Attribute	Optional	ans..16	This token is returned in the <TransactionList/> aggregate if all the transactions that fall within the specified range could not be sent in a single message (i.e. the value for <isComplete/> is set to Y). To receive the remaining transactions in the range, the client should include the token in another request that otherwise has the same range as the initial request.
NextBlock	Attribute	Optional	ans..16	Back if the block before the block identified by the LastBlockReference field is requested or Forward if the block after the block identified by the LastBlockReference field is requested.
Response	Element	Optional		Present for 0110/0210.
ResponseRange	Attribute	Mandatory		The ResponseRange aggregate wraps information that delimits the transactions to be returned in the <TransactionList/> aggregate.
StartDate	Attribute	Optional	n8	The posting date of the first transaction included in the statement. The format should be CCYYMMDD.

Fields

Field	Type (element or attribute)	Condition	Format	Description
EndDate	Attribute	Optional	n8	The posting date of the last transaction included in the statement. The format should be CCYYMMDD.
TransactionCount	Attribute	Mandatory	n4	The actual number of transactions included in the response.
BlockReference	Attribute	Optional	ans..16	This token is returned in the <TransactionList/> aggregate if all the transaction that fall within the specified range could not be sent in a single message (i.e. the value for <isComplete/> is set to Y). To receive the remaining transactions in the range, the client should include the token in another request that otherwise has the same range as the initial request.
CurrencyCode	Element	Optional		Postilion numeric currency code - to cater for multiple languages. This is the currency of the account for which the statement is returned.
TransactionList	Element	Optional		
Transaction	Element	One or more		
TransactionType	Attribute	Optional		Postilion numeric transaction type.
FromAccountType	Attribute	Optional		Postilion numeric account type. This is the type of the account from which funds were transferred to this account.
FromAccountID	Attribute	Optional		The ID of the account from which funds were transferred to this account.
ToAccountType	Attribute	Optional		Postilion numeric account type. This is the type of the account to which funds were transferred from this account.
ToAccountID	Attribute	Optional		The ID of the account to which funds were transferred from this account.
TransactionDate	Attribute	Optional		The date at which the transaction was performed originally. The format should be CCYYMMDD. The time can optionally be appended to the date in the format hhmmss.
PostDate	Attribute	Mandatory		The date at which the transaction was posted against the account. The format should be CCYYMMDD. The time can optionally be appended to the date in the format hhmmss.

Fields

Field	Type (element or attribute)	Condition	Format	Description
TransactionAmount	Element	Mandatory		
Amount	Attribute	Mandatory		
Sign	Attribute	Mandatory		C for credit, D for debit.
Currency Code	Attribute	Mandatory		Postilion numeric currency code. This is the currency in which the transaction was done originally.
PostAmount	Element	Mandatory		The transaction amount in currency of the account.
Amount	Attribute	Mandatory		
Sign	Attribute	Mandatory		C for credit, D for debit.
Surcharge	Element	Optional		The transaction surcharge amount. The currency is the original transaction currency.
Amount	Attribute	Mandatory		
Sign	Attribute	Mandatory		C for credit, D for debit.
Fee	Element	One or more		A transaction fee charged by the issuer. The currency is the currency of the account.
FeeDescription	Attribute	Optional		
Amount	Attribute	Mandatory		
Sign	Attribute	Mandatory		C for credit, D for debit.
Description	Attribute	Optional		
ReferenceNumber	Attribute	Optional		
Balance	Element	Optional		This aggregate wraps information pertaining to a balance of the account.
BalanceType	Attribute	Mandatory		Postilion numeric amount type. The value of this tag must contain the type of balance that is being reported (e.g. LedgerBalance).
Amount	Attribute	Mandatory		
Sign	Attribute	Mandatory		C for credit, D for debit.

Fields

Field	Type (element or attribute)	Condition	Format	Description
IsComplete	Attribute	Optional		Y if there are no more transactions that fall within the range specified in the statement request message, N otherwise.
OpeningBalance	Element	Optional		Wraps information about the account's opening balances.
Balance	Element	One or more		This aggregate wraps information pertaining to a balance of the account.
Balance Type	Attribute	Optional		The value of this tag must contain a description of the type of balance that is being reported (e.g. LedgerBalance).
Amount	Attribute	Mandatory		The numerical value of the transaction (i.e. the quantity of funds).
Sign	Attribute	Mandatory		C for credit, D for debit.
OpeningBalance	Element	Optional		This aggregate wraps one or more types of closing balances for the account.
Balance	Element	One or more		This aggregate wraps information pertaining to a balance of the account.
Balance Type	Attribute	Mandatory		The value of this tag must contain a description of the type of balance that is being reported (e.g. LedgerBalance).
Amount	Attribute	Mandatory		The numerical value of the transaction (i.e. the quantity of funds).
Sign	Attribute	Mandatory		C for credit, D for debit.

Fields

StatementData DTD

```
<!ELEMENT StatementData (Request | Response)>
<!ELEMENT Request (RequestRange?)>
<!ELEMENT RequestRange (
  StartDate?,
  EndDate?,
  TransactionCount?,
  LastBlockReference?,
  NextBlock?)>
<!ELEMENT Response  (
  ResponseRange,
  CurrencyCode?,
  TransactionList?,
  OpeningBalance?,
  ClosingBalance?
)>
<!ELEMENT ResponseRange (
  StartDate?,
  EndDate?,
  TransactionCount,
  BlockReference?
)>
<!ELEMENT TransactionList  (Transaction+, IsComplete)>
<!ELEMENT Transaction  (
  TransactionType?,
  FromAccountType?,
  FromAccountID?,
  ToAccountType?,
  ToAccountID?,
  TransactionDate?,
  PostDate?,
  TransactionAmount?,
  PostAmount,
  Surcharge?,
  Fee|,
  Description?,
  ReferenceNumber?,
  Balance?
)>
<!ELEMENT OpeningBalance      (Balance*)>
<!ELEMENT ClosingBalance     (Balance*)>
<!ELEMENT TransactionAmount  (Amount, Sign, CurrencyCode)>
<!ELEMENT PostAmount          (Amount, Sign)>
<!ELEMENT Surcharge           (Amount, Sign)>
<!ELEMENT Fee                 (FeeDescription?, Amount, Sign)>
<!ELEMENT Balance              (BalanceType, Amount, Sign)>

<!ELEMENT StartDate          (#PCDATA)>
<!ELEMENT EndDate            (#PCDATA)>
<!ELEMENT TransactionCount   (#PCDATA)>
<!ELEMENT LastBlockReference (#PCDATA)>
<!ELEMENT NextBlockReference (#PCDATA)>
<!ELEMENT LastBlockReference (#PCDATA)>
<!ELEMENT NextBlock          (#PCDATA)>
<!ELEMENT BlockReference     (#PCDATA)>
```

Fields

```
<!ELEMENT CurrencyCode      (#PCDATA) >
<!ELEMENT TransactionType (#PCDATA) >
<!ELEMENT FromAccountType (#PCDATA) >
<!ELEMENT FromAccountID   (#PCDATA) >
<!ELEMENT ToAccountType   (#PCDATA) >
<!ELEMENT ToAccountID     (#PCDATA) >
<!ELEMENT TransactionDate (#PCDATA) >
<!ELEMENT PostDate        (#PCDATA) >
<!ELEMENT Amount           (#PCDATA) >
<!ELEMENT Sign             (#PCDATA) >
<!ELEMENT FeeDescription  (#PCDATA) >
<!ELEMENT Description     (#PCDATA) >
<!ELEMENT ReferenceNumber (#PCDATA) >
<!ELEMENT BalanceType     (#PCDATA) >
<!ELEMENT IsComplete       (#PCDATA) >
```

Fields

CardManagementUpdateData

The fields described below are used to send CardManagementUpdateData information. The key value of this structure is "CardManagementUpdateData", and the top level element is "CardManagementUpdateData".

Field	Type (element or attribute)	Condition	Description
Request	Element	Optional	The Request aggregate wraps the information required to request a card management update from the host. This record must be present for a request message
Card	Element	Mandatory	The Card aggregate wraps the information about the card involved in the request.
PAN	Attribute	Mandatory	The PAN of the card involved. If this field is present, field 2 need not be present, but if field 2 is present, the values must be the same.
SequenceNumber	Attribute	Optional	The sequence number of the card involved. If this field is present, field 23 need not be present, but if field 23 is present, the values must be the same. If this field is not present, field 23 may not be present.
ExpiryDate	Attribute	Optional	The expiry date of the card involved.
CardActive	Attribute	Optional	Is this card currently marked as active? Y for Yes, N for No.
HoldResponseCode	Attribute	Optional	The hold response code to use. If this field is present, but empty, the hold response code will be cleared.
PINCodeSecure	Attribute	Optional	PIN offset/PVV for the secure PIN.
PINCodeInsecure	Attribute	Optional	The insecure PIN block.

Fields

CardManagementUpdateData DTD

```
<!ELEMENT CardManagementUpdateData (Request)>
<!ELEMENT Request (Card?)>
<!ELEMENT Card (
  PAN,
  SequenceNumber,
  ExpiryDate?,
  CardActive?,
  HoldResponseCode?,
  PINCodeSecure?,
  PINCodeInsecure?)>
<!ELEMENT PAN      (#PCDATA)>
<!ELEMENT SequenceNumber (#PCDATA)>
<!ELEMENT ExpiryDate (#PCDATA)>
<!ELEMENT CardActive (#PCDATA)>
<!ELEMENT HoldResponseCode (#PCDATA)>
<!ELEMENT PINCodeSecure (#PCDATA)>
<!ELEMENT PINCodeInsecure (#PCDATA)>
```

CardManagementUpdateLoad

The fields described below are used to send CardManagementUpdateLoad information. The key value of this structure is "CardManagementUpdateLoad", and the top level element is "CardManagementUpdateLoad".

Field	Type (element or attribute)	Condition	Description
Request	Element	Optional	The Request aggregate wraps the information required to request a card management update from the host. This record must be present for a request message
FileFormat	Attribute	Mandatory	<i>display_name</i> in <i>pc_custom_classes</i> where <i>category</i> is <i>PostCard_UpdateLoad</i> . Only the standard PostCard file formats are allowed: <i>Standard</i> , <i>Standard 2</i> , etc.
FileList	Element	Mandatory	This aggregate wraps one or more file items
File	Element	One or more	
FileName	Attribute	Mandatory	CARDS, CARDOVERRIDELIMITS, ACCOUNTS, ACCOUNTOVERRIDELIMITS, CARDACCOUNTS, ACCOUNTBALANCES, or STATEMENTS
FileRowList	Element	Optional	This aggregate wraps one or more file row items

Fields

Field	Type (element or attribute)	Condition	Description
FileRow	Attribute	One or more	<p>The fields in a row are separated by commas. Database table columns with a type of datetime correspond to fields in a row with the following formatting: YYYY-MM-DD hh:mm:ss (exactly 19 characters). Database table columns with a type of int or numeric correspond to fields in a row that can contain negative numbers, which are indicated by a minus sign ('-') in front of the number.</p> <p>A row must be preceded by either U (update) or D (delete), followed by a comma.</p> <p>U applies to rows to be inserted as well as to rows to be updated. For rows which are to be deleted, only the key information needs to be provided (such as the PAN, sequence number and expiry date for cards, or the account ID and account type for accounts). Note that cascading deletes are not supported. In order to maintain database integrity, all applicable rows must be deleted explicitly.</p> <p>Rows which are to be updated or inserted may contain fields where the current value of the field should be deleted (set to null). To indicate this, the field should be empty, i.e. the length should be zero. Rows which are to be updated may contain fields where the current value of the field should be retained. To indicate this, the field should contain an asterisk ('*').</p>
Response	Element	Optional	This record will be present for a response message if the response code is 27 or 29.
FileFormat	Attribute	Mandatory	Echoed from <i>Request</i> .
FileList	Element	Mandatory	This aggregate wraps one or more file items
File	Element	One or more	The file rows that caused the error will be echoed from <i>Request</i> .
FileName	Attribute	Mandatory	Echoed from <i>Request</i> .
FileRowList	Element	Mandatory	This aggregate wraps one or more file row items
FileRow	Attribute	One or more	The file rows that caused the error will be echoed from <i>Request</i> .

CardManagementUpdateLoad DTD

```
<!ELEMENT CardManagementUpdateLoad (
    Request?,
    Response?)>
<!ELEMENT Request (
    FileFormat,
    FileList)>
<!ELEMENT Response (
    FileFormat,
    FileList)>
<!ELEMENT FileList      (File+)>
<!ELEMENT File (
    FileName,
    FileRowList)>
<!ELEMENT FileRowList  (FileRow+)>
<!ELEMENT FileRow      (#PCDATA)>
<!ELEMENT FileName     (#PCDATA)>
<!ELEMENT FileFormat   (#PCDATA)>
```

PrepaidMerchandise

The fields described below are used to send PrepaidMerchandise information. The key value of this structure is "PrepaidMerchandise", and the top level element is "PrepaidMerchandise".

This DTD caters for telephone prepay and electricity prepay. There are three modes of prepay:

- **Anonymous voucher:** A product and tender is sent up and a PIN (activation code) is sent back, which is keyed in on the device by the consumer. Reversals are generally not supported here.
- **Electronic top-up:** The consumer/device information is sent up along with the product and the tender and the top-up is done by the service provider.
- **Consumer-specific voucher:** The consumer/device information is sent up along with the product and the tender and a PIN (that typically incorporates consumer/device information) is sent back, which is keyed in on the device by the consumer.

The DTD is to be used in the non-financial leg of a prepay transaction with message type 0100/0200/0220/0400/0420 and transaction type 28 (*Merchandise dispatch/top-up*), or message type 0200 and transaction type 02 (*Debit adjustment*). The extended transaction type should be 6401 (*Prepay - Anonymous voucher*), 6402 (*Prepay - Consumer-specific voucher*) or 6403 (*Prepay - Electronic top-up*).

Fields

Field	Type (element or attribute)	Condition	Format	Description
Request	Element	Optional		Present for 0100/0200.
Product	Element	Optional		
NetworkID	Attribute	Optional	ans..12	The network that must authorize.
ProductID	Attribute	Optional	ans..50	The code of the merchandise.
Type	Attribute	Optional	ans..30	Valid values: <i>TELEPHONE PREPAY</i> <i>CALLING PLAN</i> <i>ELECTRICITY</i> <i>OTHER</i>
UserID	Attribute	Optional	ans..40	For telephone prepay, this contains the telephone number (MSISDN).
Track2	Attribute	Optional	ans..37	The track 2 of the merchandise card issued by the service provider.
Tender	Element	Optional		
Amount	Attribute	Optional	n..12	The requested amount (in the minor denomination).
Type	Attribute	Optional	n2	Valid values: 00 None 10 Cash 20 Check/Cheque 30 Credit card 40 Debit card 50 Voucher 60 Auto cash 99 Other
SerialNumber	Attribute	Optional	ans..40	If the merchandise is purchased using a voucher, this field can be used to store the voucher's serial number.
Response	Element	Optional		Present for 0110/0210.
TransactionSeqNo	Attribute	Mandatory	n..8	Assigned by the merchandise host.
ResponseCode	Attribute	Optional	ans..12	Valid values: A0 Prepay transaction failed A1 Prepay transaction rejected A2 Invalid telephone number A3 Prepay account limit reached

Fields

Field	Type (element or attribute)	Condition	Format	Description
				A4 Prepay system unavailable N0 to ZZ Reserved for client-specific use All other values are reserved for future Postilion use.
ResponseMessage	Attribute	Optional	ans..200	An explanation of the response code.
Product	Element	Optional		
NetworkID	Attribute	Optional	ans..12	Copied from request.
ProductID	Attribute	Optional	ans..50	Copied from request.
Type	Attribute	Optional	ans..30	Copied from request.
UserID	Attribute	Optional	ans..40	Copied from request.
Track2	Attribute	Optional	ans..37	Copied from request.
Tender	Element	Optional		
Amount	Attribute	Optional	n..12	Copied from request.
Type	Attribute	Optional	n2	Copied from request.
SerialNumber	Attribute	Optional	ans..40	Copied from request.
MerchandiseItem	Element	Optional		
PIN	Attribute	Optional	ans..255	The activation code to be keyed in on the device by the consumer. This field may contain multiple values separated by commas.
ItemSerialNumber	Attribute	Optional	ans..20	The serial number of the merchandise, for example a voucher serial number.
ExpiryDate	Attribute	Optional	YYYYMM DD	The expiry date of the merchandise.
Amount	Attribute	Optional	n..12	The approved amount (in the minor denomination).
TaxAmount	Attribute	Optional	n..12	The tax amount (in the minor denomination).
NetworkName	Attribute	Optional	ans..50	The network that authorized.
ProductName	Attribute	Optional	ans..50	The name of the merchandise.

Fields

Field	Type (element or attribute)	Condition	Format	Description
ItemMessage	Attribute	Optional	ans..250	A message associated with the merchandise, for example instructions on how to load the PIN. Line breaks are denoted by ' '.
DescriptiveValue	Attribute	Optional	ans..80	A description of the merchandise.
TariffIndex	Attribute	Optional	ans..12	The code for the tariff that was applied.
Token	Element	Zero or more		A list of additional values supplied to the customer. For example, this can be used to supply: - A new key - A new key revision number - The electricity supply group code
Description	Attribute	Mandatory	ans..25	
Value	Attribute	Mandatory	ans..25	
MerchandiseIssuer	Element	Optional		The network or service provider is typically the same as the merchandise issuer (compare the <i>NetworkName</i> field with the <i>MerchandiseIssuer.Name</i> field and the <i>NetworkID</i> field with the <i>MerchandiseIssuer.Id</i> field), but these fields have been defined separately for legacy reasons.
Name	Attribute	Optional	ans..50	Can be used for printing on the receipt.
Id	Attribute	Optional	ans..12	Can be used for printing on the receipt.
ContactNumber	Attribute	Optional	ans..25	Can be used for printing on the receipt.
RegistrationNumber	Attribute	Optional	ans..20	For example the VAT registration number. Can be used for printing on the receipt.
QuantityItem	Element	Zero or more		Used to return balance information, for example the available number of minutes of airtime and talktime.
ProductCode	Attribute	Optional	ans..12	The code of the balance type.
ProductName	Attribute	Optional	ans..20	The name of the balance type.
Quantity	Attribute	Optional	ans..255	The balance.
QuantityDescription	Attribute	Optional	ans..50	A description of the balance.
ExpiryDate	Attribute	Optional	YYYYMM DD	The expiry date of the balance.

Fields

Field	Type (element or attribute)	Condition	Format	Description
Consumer	Element	Optional		
Id	Attribute	Optional	ans..40	For example a meter serial number.
Name	Attribute	Optional	ans..40	
Address	Attribute	Optional	ans..40	
AdviceRequest	Element	Optional		Present for 0220.
TransactionSeqNo	Attribute	Mandatory	n..8	Copied from response.
ReversalRequest	Element	Optional		Present for 0400/0420 and 0200 with transaction type 02.
TransactionSeqNo	Attribute	Mandatory	n..8	Copied from response.
ReversalResponse	Element	Optional		Present for 0410 and 0210 with transaction type 02.
TransactionSeqNo	Attribute	Mandatory	n..8	Copied from reversal request.
ResponseCode	Attribute	Optional	ans..12	Valid values: A2 Invalid telephone number A4 Prepay system unavailable B0 Reversal processing failed B1 Original transaction not found B2 Reversal received too late B3 Reversal not allowed N0 to ZZ Reserved for client-specific use All other values are reserved for future Postilion use.
ResponseMessage	Attribute	Optional	ans..200	An explanation of the response code.

Fields

PrepaidMerchandise DTD

```
<!ELEMENT PrepaidMerchandise (  
    Request?,  
    Response?,  
    AdviceRequest?,  
    ReversalRequest?,  
    ReversalResponse?  
)>  
<!ELEMENT Request (Product?, Tender?)>  
<!ELEMENT Product ANY>  
<!ATTLIST Product NetworkID CDATA #IMPLIED>  
<!ATTLIST Product ProductID CDATA #IMPLIED>  
<!ATTLIST Product Type CDATA #IMPLIED>  
<!ATTLIST Product UserID CDATA #IMPLIED>  
<!ATTLIST Product Track2 CDATA #IMPLIED>  
  
<!ELEMENT Tender ANY>  
<!ATTLIST Tender Amount CDATA #IMPLIED>  
<!ATTLIST Tender Type CDATA #IMPLIED>  
<!ATTLIST Tender SerialNumber CDATA #IMPLIED>  
  
<!ELEMENT Response (  
    Product?,  
    Tender?,  
    MerchandiseItem?,  
    MerchandiseIssuer?,  
    QuantityItem*  
)>  
<!ATTLIST Response TransactionSeqNo CDATA #IMPLIED>  
<!ATTLIST Response ResponseCode CDATA #IMPLIED>  
<!ATTLIST Response ResponseMessage CDATA #IMPLIED>  
  
<!ELEMENT MerchandiseItem (Token*, MerchandiseIssuer?)>  
<!ATTLIST MerchandiseItem PIN CDATA #IMPLIED>  
<!ATTLIST MerchandiseItem ItemSerialNumber CDATA #IMPLIED>  
<!ATTLIST MerchandiseItem ExpiryDate CDATA #IMPLIED>  
<!ATTLIST MerchandiseItem Amount CDATA #IMPLIED>  
<!ATTLIST MerchandiseItem TaxAmount CDATA #IMPLIED>  
<!ATTLIST MerchandiseItem NetworkName CDATA #IMPLIED>  
<!ATTLIST MerchandiseItem ProductName CDATA #IMPLIED>  
<!ATTLIST MerchandiseItem ItemMessage CDATA #IMPLIED>  
<!ATTLIST MerchandiseItem DescriptiveValue CDATA #IMPLIED>  
<!ATTLIST MerchandiseItem TariffIndex CDATA #IMPLIED>  
  
<!ELEMENT Token ANY>  
<!ATTLIST Token Description CDATA #IMPLIED>  
<!ATTLIST Token Value CDATA #IMPLIED>  
  
<!ELEMENT MerchandiseIssuer ANY>  
<!ATTLIST MerchandiseIssuer Name CDATA #IMPLIED>  
<!ATTLIST MerchandiseIssuer Id CDATA #IMPLIED>  
<!ATTLIST MerchandiseIssuer ContactNumber CDATA #IMPLIED>  
<!ATTLIST MerchandiseIssuer RegistrationNumber CDATA #IMPLIED>  
  
<!ELEMENT QuantityItem ANY>
```

Fields

```
<!ATTLIST QuantityItem ProductCode    CDATA #IMPLIED>
<!ATTLIST QuantityItem ProductName   CDATA #IMPLIED>
<!ATTLIST QuantityItem Quantity      CDATA #IMPLIED>
<!ATTLIST QuantityItem QuantityDescription CDATA #IMPLIED>
<!ATTLIST QuantityItem ExpiryDate   CDATA #IMPLIED>

<!ELEMENT AdviceRequest ANY>
<!ATTLIST AdviceRequest TransactionSeqNo  CDATA #IMPLIED>

<!ELEMENT ReversalRequest      ANY>
<!ATTLIST ReversalRequest TransactionSeqNo      CDATA #IMPLIED>

<!ELEMENT ReversalResponse      ANY>
<!ATTLIST ReversalResponse TransactionSeqNo      CDATA #IMPLIED>
<!ATTLIST ReversalResponse ResponseCode     CDATA #IMPLIED>
<!ATTLIST ReversalResponse ResponseMessage   CDATA #IMPLIED>
```

PurchasingCardData

The fields described below are used to send PurchasingCardData information. The key value of this structure is "PurchasingCardData", and the top level element is "PurchasingCardData".

This DTD contains invoice data, including line item detail. Invoice data relating to the transaction as a whole is known as level 2 data and line item detail is known as level 3 data. This is required for purchases made with purchasing cards, which are typically issued to company employees for the purpose of covering business-related expenditure. However, invoice data can be useful for any purchase transaction.

This DTD is to be used in 0100/0120/0200/0220/0400/0420 messages with transaction type 00 (*Goods and services*) or 09 (*Goods and services with cash back*).

Field	Type (element or attribute)	Condition	Format	Description
CustomerCode	Attribute	Optional	ans..20	A code identifying the customer, supplied by the cardholder to the card acceptor.
CardAcceptorTaxId	Attribute	Optional	ans..20	The merchant's national tax number.
CardAcceptorVatNr	Attribute	Optional	ans..20	The card acceptor's VAT number, used to identify the card acceptor when reporting taxes.
CardAcceptorRefNr	Attribute	Optional	ans..20	A reference number supplied by the card acceptor to facilitate communication and record keeping.
CorporationVatNr	Attribute	Optional	ans..20	The merchant's VAT number.
CustomerVatNr	Attribute	Optional	ans..20	The customer's VAT number, used to identify the customer when reporting taxes.
MerchantOrderNumber	Attribute	Optional	ans..25	The merchant's purchase order number.
InvoiceNumber	Attribute	Optional	ans..20	A unique invoice number associated with this transaction, supplied by the card acceptor.
OrderDate	Attribute	Optional	YYYYMMDD	The date when the order was placed.
PurchaseDate	Attribute	Optional	YYYYMMDD	The date of the purchase/invoice.
CustomerBillingCode	Attribute	Optional	ans..20	A customer code supplied by the merchant.
PurchaseOrderNumber	Attribute	Optional	ans..22	The customer's purchase order number.

Fields

Field	Type (element or attribute)	Condition	Format	Description
TaxExempt	Attribute	Optional	a..5	Indicates whether the purchaser is tax exempt. Valid values: Y Yes N No TRUE FALSE
CommodityCode	Attribute	Optional	ans..20	A code assigned by the card acceptor, which best categorizes the goods/services purchased.
Description	Attribute	Optional	ans..40	A description of this purchase transaction.
DiscountAmount	Attribute	Optional	n12	The discount amount (in the minor denomination) of the total purchase.
ShippingAmount	Attribute	Optional	n12	The freight/shipping/delivery amount (in the minor denomination) to be paid on the total purchase.
DutyAmount	Attribute	Optional	n12	The duty amount (in the minor denomination) to be paid on the total purchase.
TaxCollected	Attribute	Optional	a..5	Indicates whether tax was collected. Valid values: Y Yes N No TRUE FALSE
TotalAmount	Attribute	Optional	n12	The total amount (in the minor denomination) of this purchase transaction.
Comment	Attribute	Optional	ans..40	A comment/note regarding this purchase transaction.
PrivateData	Attribute	Optional	ans..999	Any data proprietary to the system for this purchase.
LineItem	Element	Zero or more		A list of the items purchased.
ItemNumber	Attribute	Optional	n3	The line number of this item on the invoice.
ProductCode	Attribute	Optional	ans..20	The universal product code (UPC) of this item.

Fields

Field	Type (element or attribute)	Condition	Format	Description
CustomerCode	Attribute	Optional	ans..20	A customer-supplied code relating to this item.
CommodityCode	Attribute	Optional	ans..20	A merchant-supplied code or stock keeping unit (SKU) relating to this item.
VatReferenceNr	Attribute	Optional	ans..20	The reference number used to identify the VAT invoice or tax receipt.
Description	Attribute	Optional	ans..40	A description of this item.
Quantity	Attribute	Optional	n..12	The quantity of this item.
QuantityExponent	Attribute	Optional	n1	Indicates the number of places the decimal point shall be moved to the left, starting from the rightmost numeric digit of the <i>Quantity</i> value. If this field is not present, zero is assumed.
UnitOfMeasure	Attribute	Optional	ans..12	The unit of measure pertaining to the <i>Quantity</i> field, as defined by the card acceptor.
UnitPrice	Attribute	Optional	n..12	The price (in the minor denomination) of one unit of the product.
Discount	Attribute	Optional	a..5	Indicates whether a discount is given for this item. Valid values: Y Yes N No TRUE FALSE
DiscountRate	Attribute	Optional	ans5	The discount rate applied to this item. Three decimal places are implied.
DiscountAmount	Attribute	Optional	n12	The discount amount (in the minor denomination) applied to this item.
TotalAmount	Attribute	Optional	n12	The total amount (in the minor denomination) for this item.
TotalAmountType	Attribute	Optional	ans5	Indicates whether tax is included in or excluded from the <i>TotalAmount</i> field. Valid values: NET Tax amount excluded GROSS Tax amount included

Fields

Field	Type (element or attribute)	Condition	Format	Description
SupplyType	Attribute	Optional	n2	Valid values: 00 Goods 01 Services
Sign	Attribute	Optional	a1	This sign applies to the <i>TotalAmount</i> field of this item and to all the <i>TaxAmount</i> fields of this item. If this field is not present, <i>D</i> is assumed. Valid values: C Credit D Debit
PrivateData	Attribute	Optional	ans..999	Any data proprietary to the system for this item.
TaxAmount	Element	Zero or more		A list of the tax amounts applied to this item.
Type	Attribute	Optional	ans..6	Valid values for the first two characters: 00 Unknown 01 Federal/National sales tax 02 State sales tax 03 City sales tax 04 Local sales tax 05 Municipal tax 06 Other tax 10 Value added tax (VAT) 11 Goods and services tax (GST) 12 Provincial sales tax (PST) 20 Room tax 21 Occupancy tax 22 Energy tax The last 4 digits are optional and can be used to further clarify the type of tax.
Description	Attribute	Optional	ans..20	A description of the type of tax, e.g. 'Freight'.
Included	Attribute	Optional	a..5	Indicates whether this tax amount is included in the <i>TotalAmount</i> field of this item. Valid values: Y Yes

Fields

Field	Type (element or attribute)	Condition	Format	Description
				N No TRUE FALSE
Amount	Attribute	Optional	n12	A tax amount (in the minor denomination) applied to this item.
Rate	Attribute	Optional	n5	The rate of tax to be applied to calculate this tax amount.
RateExponent	Attribute	Optional	n1	The number of decimal places in the Rate field. If this field is not present, zero is assumed.
CardAcceptorTaxId	Attribute	Optional	ans..20	An ID number used by the card acceptor with the tax authority, in connection with this type of tax.
TaxAmount	Element	Zero or more		A list of the tax amounts applied to this transaction.
Type	Attribute	Optional	ans..6	Valid values for the first two characters: 00 Unknown 01 Federal/National sales tax 02 State sales tax 03 City sales tax 04 Local sales tax 05 Municipal sales tax 06 Other tax 10 Value added tax (VAT) 11 Goods and services tax (GST) 12 Provincial sales tax (PST) 20 Room tax 21 Occupancy tax 22 Energy tax The last 4 digits are optional and can be used to further clarify the type of tax.
Description	Attribute	Optional	ans..20	A description of the type of tax, e.g. 'Freight'.
Included	Attribute	Optional	a..5	Indicates whether this tax amount is included in the TotalAmount field of this purchase. Valid values: Y Yes

Fields

Field	Type (element or attribute)	Condition	Format	Description
				N No TRUE FALSE
Amount	Attribute	Optional	n12	A tax amount (in the minor denomination) applied to this purchase.
Rate	Attribute	Optional	n5	The rate of tax to be applied to calculate this tax amount.
RateExponent	Attribute	Optional	n1	The number of decimal places in the Rate field. If this field is not present, zero is assumed.
CardAcceptorTaxId	Attribute	Optional	ans..20	An ID number used by the card acceptor with the tax authority, in connection with this type of tax.
Contact	Element	Zero or more		Contains details about an authorized person to be contacted for shipping or billing purposes.
Type	Attribute	Mandatory	ans..10	Valid values: BILL_FROM BILL_TO SHIP_FROM SHIP_TO
PostalCode	Attribute	Optional	ans..10	The postal/ZIP code of the company or authorized person to contact.
Name	Attribute	Optional	ans..50	The name of the company or authorized person to contact.
Telephone	Attribute	Optional	ans..20	The telephone number of the company or authorized person to contact.
Address	Attribute	Optional	ans..50	The address of the company or authorized person to contact.
City	Attribute	Optional	ans..20	The city of the company or authorized person to contact.
State	Attribute	Optional	ans..20	The region/state code of the company or authorized person to contact.
Country	Attribute	Optional	an3	The ISO country code of the company or authorized person to contact.

Fields

Fields

PurchasingCardData DTD

```
<!ELEMENT PurchasingCardData (LineItem*, TaxAmount*, Contact*)>
<!ATTLIST PurchasingCardData CustomerCode CDATA #IMPLIED>
<!ATTLIST PurchasingCardData CardAcceptorTaxId CDATA #IMPLIED>
<!ATTLIST PurchasingCardData CardAcceptorVatNr CDATA #IMPLIED>
<!ATTLIST PurchasingCardData CardAcceptorRefNr CDATA #IMPLIED>
<!ATTLIST PurchasingCardData CorporationVatNr CDATA #IMPLIED>
<!ATTLIST PurchasingCardData CustomerVatNr CDATA #IMPLIED>
<!ATTLIST PurchasingCardData MerchantOrderNumber CDATA #IMPLIED>
<!ATTLIST PurchasingCardData InvoiceNumber CDATA #IMPLIED>
<!ATTLIST PurchasingCardData OrderDate CDATA #IMPLIED>
<!ATTLIST PurchasingCardData PurchaseDate CDATA #IMPLIED>
<!ATTLIST PurchasingCardData CustomerBillingCode CDATA #IMPLIED>
<!ATTLIST PurchasingCardData PurchaseOrderNumber CDATA #IMPLIED>
<!ATTLIST PurchasingCardData TaxExempt CDATA #IMPLIED>
<!ATTLIST PurchasingCardData CommodityCode CDATA #IMPLIED>
<!ATTLIST PurchasingCardData Description CDATA #IMPLIED>
<!ATTLIST PurchasingCardData DiscountAmount CDATA #IMPLIED>
<!ATTLIST PurchasingCardData ShippingAmount CDATA #IMPLIED>
<!ATTLIST PurchasingCardData DutyAmount CDATA #IMPLIED>
<!ATTLIST PurchasingCardData TaxCollected CDATA #IMPLIED>
<!ATTLIST PurchasingCardData TotalAmount CDATA #IMPLIED>
<!ATTLIST PurchasingCardData Comment CDATA #IMPLIED>
<!ATTLIST PurchasingCardData PrivateData CDATA #IMPLIED>

<!ELEMENT LineItem (TaxAmount*)>
<!ATTLIST LineItem ItemNumber CDATA #IMPLIED>
<!ATTLIST LineItem ProductCode CDATA #IMPLIED>
<!ATTLIST LineItem CustomerCode CDATA #IMPLIED>
<!ATTLIST LineItem CommodityCode CDATA #IMPLIED>
<!ATTLIST LineItem VatReferenceNr CDATA #IMPLIED>
<!ATTLIST LineItem Description CDATA #IMPLIED>
<!ATTLIST LineItem Quantity CDATA #IMPLIED>
<!ATTLIST LineItem QuantityExponent CDATA #IMPLIED>
<!ATTLIST LineItem UnitOfMeasure CDATA #IMPLIED>
<!ATTLIST LineItem UnitPrice CDATA #IMPLIED>
<!ATTLIST LineItem Discount CDATA #IMPLIED>
<!ATTLIST LineItem DiscountRate CDATA #IMPLIED>
<!ATTLIST LineItem DiscountAmount CDATA #IMPLIED>
<!ATTLIST LineItem TotalAmount CDATA #IMPLIED>
<!ATTLIST LineItem TotalAmountType CDATA #IMPLIED>
<!ATTLIST LineItem SupplyType CDATA #IMPLIED>
<!ATTLIST LineItem Sign CDATA #IMPLIED>
<!ATTLIST LineItem PrivateData CDATA #IMPLIED>

<!ELEMENT TaxAmount ANY>
<!ATTLIST TaxAmount Type CDATA #IMPLIED>
<!ATTLIST TaxAmount Description CDATA #IMPLIED>
<!ATTLIST TaxAmount Included CDATA #IMPLIED>
<!ATTLIST TaxAmount Amount CDATA #IMPLIED>
<!ATTLIST TaxAmount Rate CDATA #IMPLIED>
<!ATTLIST TaxAmount RateExponent CDATA #IMPLIED>
<!ATTLIST TaxAmount CardAcceptorTaxId CDATA #IMPLIED>

<!ELEMENT Contact ANY>
```

Fields

```
<!ATTLIST Contact Type    CDATA #IMPLIED>
<!ATTLIST Contact PostalCode CDATA #IMPLIED>
<!ATTLIST Contact Name    CDATA #IMPLIED>
<!ATTLIST Contact Telephone CDATA #IMPLIED>
<!ATTLIST Contact Address   CDATA #IMPLIED>
<!ATTLIST Contact City    CDATA #IMPLIED>
<!ATTLIST Contact State   CDATA #IMPLIED>
<!ATTLIST Contact Country  CDATA #IMPLIED>
```

Fields

FleetCardData

The fields described below are used to send FleetCardData information. The key value of this structure is "FleetCardData", and the top level element is "FleetCardData".

This DTD is based on the ISO 8583:2003 specification and can be used to report information regarding motor fuel and related purchases involving company-owned fleets of vehicles. It supersedes field 127.5 (Service station data). Field 127.5 can still be used, but using the FleetCardData DTD instead will be encouraged. Transaction Manager will not map values between these structures.

Note that the VehicleUsage field will be added to the existing DTD, since this subfield is present in field 127.5.

This DTD is to be used in 0100/0120/0200/0220/0400/0420 messages with transaction type 00 (*Goods and services*) or 09 (*Goods and services with cash back*).

Field	Type (element or attribute)	Condition	Format	Description
LineItem	Element	Zero or more		
OilBrandName	Attribute	Optional	n4	The acquirer's abbreviation for the brand name of the card acceptor's oil company.
ServiceType	Attribute	Optional	ans1	<p>The type of service received at the card acceptor location.</p> <p>Valid values:</p> <ul style="list-style-type: none"> 0 Reserved for future Postilion use 1 Self-service 2 Full service 3 Only non-fuel products purchased 4-7 Reserved for future Postilion use 8-9 Reserved for client-specific use
ProductCode	Attribute	Optional	an..15	A code which identifies a specific product as supplied by the card acceptor.
UnitPriceExTax	Attribute	Optional	n12	The price per unit (in the minor denomination) net of tax.
UnitPriceIncTax	Attribute	Optional	n12	The price per unit (in the minor denomination) inclusive of tax.
UnitOfMeasure	Attribute	Optional	ans..12	The unit of measure of the quantity purchased as defined by the card acceptor.
Quantity	Attribute	Optional	n..12	The quantity of goods purchased.
QtyMinorUnit	Attribute	Optional	n1	Indicates the number of places the decimal point shall be moved to the left, starting from

Fields

Field	Type (element or attribute)	Condition	Format	Description
				the rightmost numeric digit of the <i>Quantity</i> value.
ItemValueExTax	Attribute	Optional	n12	Total line amount (in the minor denomination) excluding tax.
ItemValueIncTax	Attribute	Optional	n12	Total line amount (in the minor denomination) including tax.
VehicleUsage	Attribute	Optional	a1	Valid values: P Private B Business
Odometer	Attribute	Optional	n8	The reading of the total distance travelled by the vehicle.
VehicleReg	Attribute	Optional	an17	The registration number of the rented or fleet vehicle.
DriverId	Attribute	Optional	n..17	The number assigned to the driver by the employer for purposes of tracking fuel purchases.
PromptCode	Attribute	Optional	n1	Contains a code read from a card that indicates terminal prompts that occur at the point-of-service. Valid values: 0 Reserved for future Postilion use 1 Prompts for identification number and odometer reading 2 Prompts for vehicle number and odometer reading 3 Prompts for driver number and odometer reading 4 Prompts for odometer reading only 5 No prompts issued 6-8 Reserved for future Postilion use 9 Reserved for client-specific use
DiscountAmount	Attribute	Optional	n12	The discount amount (in the minor denomination) on the total purchase.
TaxAmount	Attribute	Optional	n12	The total amount (in the minor denomination) of tax on the transaction.
PrivateData	Attribute	Optional	ans..999	Any data proprietary to the system for this item.

FleetCardData DTD

```
<!ELEMENT FleetCardData (LineItem*)>
<!ELEMENT LineItem ANY>
<!ATTLIST LineItem OilBrandName CDATA #IMPLIED>
<!ATTLIST LineItem ServiceType CDATA #IMPLIED>
<!ATTLIST LineItem ProductCode CDATA #IMPLIED>
<!ATTLIST LineItem UnitPriceExTax CDATA #IMPLIED>
<!ATTLIST LineItem UnitPriceIncTax CDATA #IMPLIED>
<!ATTLIST LineItem UnitOfMeasure CDATA #IMPLIED>
<!ATTLIST LineItem Quantity CDATA #IMPLIED>
<!ATTLIST LineItem QtyMinorUnit CDATA #IMPLIED>
<!ATTLIST LineItem ItemValueExTax CDATA #IMPLIED>
<!ATTLIST LineItem ItemValueIncTax CDATA #IMPLIED>
<!ATTLIST LineItem VehicleUsage CDATA #IMPLIED>
<!ATTLIST LineItem Odometer CDATA #IMPLIED>
<!ATTLIST LineItem VehicleReg CDATA #IMPLIED>
<!ATTLIST LineItem DriverId CDATA #IMPLIED>
<!ATTLIST LineItem PromptCode CDATA #IMPLIED>
<!ATTLIST LineItem DiscountAmount CDATA #IMPLIED>
<!ATTLIST LineItem TaxAmount CDATA #IMPLIED>
<!ATTLIST LineItem PrivateData CDATA #IMPLIED>
```

CheckData

The fields described below are used to send CheckData information. The key value of this structure is "CheckCardData", and the top level element is "CheckData".

Our current field 127.7 (Check data) format is identical to the format specified by the STAR network in the US . The eFunds and NYCE networks have similar formats. The current format has the following shortcomings:

- It has no field for the check type.
- It has no fields for the generic ID and ID type.
- It has no field to indicate that the ID was cross-checked with a second ID.
- When MICR information is present, customer identification information cannot be present as well.

Therefore a new CheckData DTD to be used with field 127.22 (Structured data) has been defined. Field 127.7 can still be used, but using the CheckData DTD instead will be encouraged. Transaction Manager will not map values between these structures.

PostCheck is a new Postillion product. It performs the role of a sink node authorizer for Transaction Manager and is therefore similar to PostCard in that sense. See the PostCheck Requirements and Functional Specifications for more information about PostCheck.

This DTD contains all the information needed by PostCheck, but it is not PostCheck-specific. It can be used to pass check data through Transaction Manager even if PostCheck is not involved.

Note that the DateOfBirth field will be added to the existing DTD, since this subfield is present in field 127.7.

This DTD is to be used in 0100/0120/0200/0220/0400/0420 messages with transaction type 03 (*Check cash/guarantee*) or 04 (*Check verification*).

Fields

Field	Type (element or attribute)	Condition	Format	Description
CheckType	Element	Optional	a1	The check type (typically entered manually). Valid values: P Personal L Payroll B Business G Government K Bank
CheckIDCard	Element	Optional	a1	Indicates whether the info in fields 2, 14, 23, 40 and 35 pertain to a check ID card or not. Valid values: Y Yes N No T True F False If not present, N is assumed.
IDCrossChecked	Element	Optional	a1	Indicates whether the original ID produced by the customer was cross checked with a second ID. Valid values: Y Yes N No T True F False If not present, N is assumed.
SupervisorID	Element	Optional	ans..24	The ID of the supervisor.
FormattedMICR	Element	Optional		
CheckNr	Element	Mandatory	n..6	The check number (from the MICR data).
TransitNr	Element	Mandatory	n..8	The code of the institution that issued the check (from the MICR data). In the US this is the ABA number, also called the routing-and-transit number.
TransitNrCheckDigit	Element	Optional	n1	The check digit of the institution code (from the MICR data).
AccountNr	Element	Mandatory	n..28	The account number (from the MICR data).
UnformattedMICR	Element	Optional	ans..65	The MICR data as present on the check, including the separator characters.
DriversLicense	Element	Optional		

Fields

Field	Type (element or attribute)	Condition	Format	Description
DriversLicenseNr	Element	Mandatory	ans..24	The driver's license number.
StateCode	Element	Optional	ans2	Driver's license numbers are unique per region code. In the US , driver's licenses are issued by states, so this will be the state code.
DateOfBirth	Element	Optional	YYYYMMDD	The date of birth of the driver.
GenericID	Element	Optional		
IDNr	Element	Mandatory	ans..24	The ID number of the customer.
IDType	Element	Mandatory	ans2	The ID type. Valid values: PP Passport ID Identity document SS Social security number NI National insurance number

CheckData DTD

```

CheckData - DTD
<!ELEMENT CheckData      (
    CheckType?,
    CheckIDCard?,
    IDCrossChecked?,
    SupervisorID?,
    FormattedMICR?,
    UnformattedMICR?,
    DriversLicense?,
    GenericID?
) >
<!ELEMENT CheckType      (#PCDATA) >
<!ELEMENT CheckIDCard    (#PCDATA) >
<!ELEMENT IDCrossChecked (#PCDATA) >
<!ELEMENT SupervisorID   (#PCDATA) >
<!ELEMENT FormattedMICR  (CheckNr, TransitNr, TransitNrCheckDigit?, AccountNr) >
<!ELEMENT CheckNr        (#PCDATA) >
<!ELEMENT TransitNr      (#PCDATA) >
<!ELEMENT TransitNrCheckDigit (#PCDATA) >
<!ELEMENT AccountNr     (#PCDATA) >
<!ELEMENT UnformattedMICR (#PCDATA) >
<!ELEMENT DriversLicense  (DriversLicenseNr, StateCode?, DateOfBirth?)>
<!ELEMENT DriversLicenseNr (#PCDATA) >
<!ELEMENT StateCode       (#PCDATA) >
<!ELEMENT DateOfBirth     (#PCDATA) >

```

Fields

```
<!ELEMENT GenericID      (IDNr, IDType)>
<!ELEMENT IDNr          (#PCDATA)>
<!ELEMENT IDType        (#PCDATA)>
```

AirlineItineraryData

The fields described below are used to send AirlineItineraryData information. The key value of this structure is "AirlineItineraryData", and the top level element is "AirlineItineraryData".

This DTD is based on the ISO 8583:2003 specification and can be used when card issuers need to provide travel reporting services to cardholders and their employers.

This DTD is to be used in 0100/0120/0200/0220/0400/0420 messages with transaction type 00 (*Goods and services*) or 09 (*Goods and services with cash back*).

Field	Type (element or attribute)	Condition	Format	Description
CarrierName	Element	Optional	an..19	The name of the airline carrier as defined by ATPCO (Airline Tariff Publishing Company).
TicketNr	Element	Optional	an..15	The ticket number as supplied by the airline.
PlanNr	Element	Optional	an2	The plan number as supplied by the airline.
InvoiceNr	Element	Optional	an6	The invoice number as supplied by the airline.
PassengerName	Element	Optional	ans..29	The name of the airline passenger.
CustomerRef	Element	Optional	ans.. 20	A cardholder supplied reference number.
TravelAgencyCode	Element	Optional	an8	The code of the travel agency which sold the airline ticket as defined by ATPCO.
TicketAgencyName	Element	Optional	an..25	The name of the ticket agency which sold the airline ticket.
TicketIssueAddress	Element	Optional	ans..16	The address at which the airline ticket was issued.
DateTicketIssue	Element	Optional	YYYYMMDD	The date on which the airline ticket was issued.
AmountTotalFare	Element	Optional	n12	The total airline ticket amount (in the minor denomination).
AmountTotalFees	Element	Optional	n12	The total fees (in the minor denomination) associated with an airline ticket.

Fields

Field	Type (element or attribute)	Condition	Format	Description
AmountTotalTaxes	Element	Optional	n12	The total taxes (in the minor denomination) associated with an airline ticket.
AmountOriginalInvoice	Element	Optional	n12	The amount (in the minor denomination) of the original invoice. Used to identify the original amount on a refund transaction.
OriginalCurrencyCode	Element	Optional	n3	The currency code of the original transaction. Used to identify the original currency in a refund transaction.
Leg	Element	Zero or more		
Nr	Element	Mandatory	n2	The number of this leg of the airline journey of a multi-flight booking.
CarrierCode	Element	Optional	an2	The code of the airline carrier as defined by ATPCO.
FlightNr	Element	Optional	ans5	The number assigned to this trip leg by the operating or marketing air carrier.
DepartureAirport	Element	Optional	an5	The airport from which this trip leg departs as defined by ATPCO.
StopOverCode	Element	Optional	an1	The code of the stop-over airport during an airline journey as defined by ATPCO.
DestinationCode	Element	Optional	an5	The code of the destination airport as defined by ATPCO.
DateOfTravel	Element	Optional	YYYYMMDD	The date of departure of the trip leg.
DepartureTime	Element	Optional	HHMM	The time of departure for this trip leg.
DepartureTimeSegmentCode	Element	Optional	as1	Indicates whether the departure time is in the morning or the afternoon/evening. Valid values: A a.m. P p.m.
ArrivalTime	Element	Optional	HHMM	The time of arrival for this trip leg.
ArrivalTimeSegmentCode	Element	Optional	as1	Indicates whether the arrival time is in the morning or the afternoon/evening. Valid values:

Fields

Field	Type (element or attribute)	Condition	Format	Description
				A a.m. P p.m.
ClassOfTravel	Element	Optional	an2	The class of the airline journey as defined by ATPCO.
CouponNr	Element	Optional	ans1	Identifies the coupon associated with this trip leg.
ConjunctionTicketNr	Element	Optional	an..15	The ticket that contains additional coupons on an itinerary that is more than four trip legs. A conjunction ticket is a ticket where all destinations are included on a single ticket.
ExchangeTicketNr	Element	Optional	an..15	The original airline ticket number replaced by a new ticket number.
FareBasisCode	Element	Optional	an..15	The basis for the calculation of the airline fare as defined by ATPCO.
AmountFare	Element	Optional	n12	The trip leg airline ticket amount (in the minor denomination).
AmountFees	Element	Optional	n12	The fees (in the minor denomination) associated with this trip leg.
AmountTaxes	Element	Optional	n12	The total tax amount (in the minor denomination) associated with this trip leg.
AmountDepartureTax	Element	Optional	n12	The tax amount (in the minor denomination) payable by the airline passenger on departure.
EndorsementsOrRestrictions	Element	Optional	ans..20	Any agency-added or government required notations, or restrictions such as non-refundable, that are applicable to this trip leg.

Fields

AirlineItineraryData DTD

```
<!ELEMENT AirlineItineraryData      (  
    CarrierName?,  
    TicketNr?,  
    PlanNr?,  
    InvoiceNr?,  
    PassengerName?,  
    CustomerRef?,  
    TravelAgencyCode?,  
    TicketAgencyName?,  
    TicketIssueAddress?,  
    DateTicketIssue?,  
    AmountTotalFare?,  
    AmountTotalFees?,  
    AmountTotalTaxes?,  
    AmountOriginalInvoice?,  
    OriginalCurrencyCode?,  
    Leg*)  
>  
<!ELEMENT CarrierName      (#PCDATA)>  
<!ELEMENT TicketNr        (#PCDATA)>  
<!ELEMENT PlanNr          (#PCDATA)>  
<!ELEMENT InvoiceNr       (#PCDATA)>  
<!ELEMENT PassengerName   (#PCDATA)>  
<!ELEMENT CustomerRef     (#PCDATA)>  
<!ELEMENT TravelAgencyCode (#PCDATA)>  
<!ELEMENT TicketAgencyName (#PCDATA)>  
<!ELEMENT TicketIssueAddress (#PCDATA)>  
<!ELEMENT DateTicketIssue (#PCDATA)>  
<!ELEMENT AmountTotalFare (#PCDATA)>  
<!ELEMENT AmountTotalFees (#PCDATA)>  
<!ELEMENT AmountTotalTaxes (#PCDATA)>  
<!ELEMENT AmountOriginalInvoice (#PCDATA)>  
<!ELEMENT OriginalCurrencyCode (#PCDATA)>  
<!ELEMENT Leg             (  
    Nr,  
    CarrierCode?,  
    FlightNr?,  
    DepartureAirport?,  
    StopOverCode?,  
    DestinationCode?,  
    DateOfTravel?,  
    DepartureTime?,  
    DepartureTimeSegmentCode?,  
    ArrivalTime?,  
    ArrivalTimeSegmentCode?,  
    ClassOfTravel?,  
    CouponNr?,  
    ConjunctionTicketNr?,  
    ExchangeTicketNr?,  
    FareBasisCode?,  
    AmountFare?,  
    AmountFees?,  
    AmountTaxes?,  
    AmountDepartureTax?,
```

Fields

```
    EndorsementsOrRestrictions?  
)>  
<!ELEMENT Nr          (#PCDATA) >  
<!ELEMENT CarrierCode (#PCDATA) >  
<!ELEMENT FlightNr   (#PCDATA) >  
<!ELEMENT DepartureAirport (#PCDATA) >  
<!ELEMENT StopOverCode (#PCDATA) >  
<!ELEMENT DestinationCode (#PCDATA) >  
<!ELEMENT DateOfTravel (#PCDATA) >  
<!ELEMENT DepartureTime (#PCDATA) >  
<!ELEMENT DepartureTimeSegmentCode (#PCDATA) >  
<!ELEMENT ArrivalTime   (#PCDATA) >  
<!ELEMENT ArrivalTimeSegmentCode (#PCDATA) >  
<!ELEMENT ClassOfTravel (#PCDATA) >  
<!ELEMENT CouponNr     (#PCDATA) >  
<!ELEMENT ConjunctionTicketNr (#PCDATA) >  
<!ELEMENT ExchangeTicketNr (#PCDATA) >  
<!ELEMENT FareBasisCode (#PCDATA) >  
<!ELEMENT AmountFare   (#PCDATA) >  
<!ELEMENT AmountFees   (#PCDATA) >  
<!ELEMENT AmountTaxes  (#PCDATA) >  
<!ELEMENT AmountDepartureTax (#PCDATA) >  
<!ELEMENT EndorsementsOrRestrictions (#PCDATA) >
```

Fields

VehicleRentalData

The fields described below are used to send VehicleRentalData information. The key value of this structure is "VehicleRentalData", and the top level element is "VehicleRentalData".

This DTD is based on the ISO 8583:2003 specification and can be used to provide vehicle rental reporting services to cardholders and their employers.

This DTD is to be used in 0100/0120/0200/0220/0400/0420 messages with transaction type 00 (*Goods and services*) or 09 (*Goods and services with cash back*).

Field	Type (element or attribute)	Condition	Format	Description
RentalAgreementRef	Element	Optional	ans..25	The reference number on the vehicle rental agreement form.
RenterName	Element	Optional	ans..29	The name of the person making the vehicle rental agreement.
RentalLocationID	Element	Optional	ans10	The agency code, phone number or other abbreviation used to identify the location from which the vehicle was rented.
RentalAddress	Element	Optional	ans..26	The address from where the vehicle was rented.
RentalCity	Element	Optional	ans..18	The city in which the vehicle was rented.
RentalStateOrRegion	Element	Optional	ans3	The state or province within the country in which the vehicle was rented.
RentalCountry	Element	Optional	ans3	The country in which the vehicle was rented.
RentalDate	Element	Optional	YYYYMM DD	The date from which the vehicle rental starts.
RentalTime	Element	Optional	HHMM	The time from which the vehicle rental starts.
RentalClassIdentifier	Element	Optional	ans4	The classification defined by the acquirer of the vehicle rented, e.g. "midsize", "luxury".
RentalRate	Element	Optional	n12	The rental rate (in the minor denomination) charged for the vehicle.
RentalRateTimePeriod	Element	Optional	as1	Indicates the time period to which the <i>RentalRate</i> value applies. Valid values: D Daily

Fields

Field	Type (element or attribute)	Condition	Format	Description
				W Weekly M Monthly
MaximumFreeMilesOrKms	Element	Optional	n4	The number of free miles or kilometres allowed to a customer for the duration of the vehicle rental agreement.
VehicleInsuranceIndicator	Element	Optional	as1	Indicates whether the customer purchased vehicle insurance as part of the vehicle rental agreement. Valid values: Y Yes N No
AmountVehicleInsurance	Element	Optional	n12	The amount (in the minor denomination) of vehicle insurance purchased as part of the vehicle rental agreement.
VehicleRegistrationNr	Element	Optional	an17	The registration number of the rented or fleet vehicle.
OdometerReading	Element	Optional	n8	The reading of the total distance travelled by the vehicle.
ReturnLocationID	Element	Optional	ans10	The agency code, phone number or other abbreviation used to identify the location to which the vehicle was/will be returned.
ReturnAddress	Element	Optional	ans..26	The address to which the vehicle was/will be returned.
ReturnCity	Element	Optional	ans..18	The city to which the vehicle was/will be returned.
ReturnStateOrRegion	Element	Optional	ans3	The state or province within the country to which the vehicle was/will be returned.
ReturnCountry	Element	Optional	ans3	The country to which the vehicle was/will be returned.
ReturnDate	Element	Optional	YYYYMMDD	The date on which the vehicle was/will be returned.
ReturnTime	Element	Optional	HHMM	The time by which the vehicle was/will be returned.
RentalDistance	Element	Optional	n5	The distance travelled during the rental period.

Fields

Field	Type (element or attribute)	Condition	Format	Description
DistanceUnitOfMeasure	Element	Optional	a1	The unit of measure of distance travelled. Valid values: K Kilometres M Miles
AmountAdjusted	Element	Optional	n12	The amount (in the minor denomination) of miscellaneous charges incurred after the vehicle was rented, e.g. extra hours.
AmountAdjustedIndicatorCode	Element	Optional	as1	Indicates the type of charges provided in <i>AmountAdjusted</i> . Valid values: A Drop-off charges B Delivery charges C Parking expenses D Extra hours E Violations F-W Reserved for future Postilion use X Multiple charges of the above types Y-Z Reserved for client-specific use
ProgramCode	Element	Optional	ans2	A code allocated by the acquirer that identifies special circumstances, e.g. "frequent customer" or "no show".
CustomerServicePhoneNr	Element	Optional	ans16	The customer service number that the cardholder may call to resolve questions or disputes.

Fields

VechicleRentalData DTD

```
<!ELEMENT VehicleRentalData (  
    RentalAgreementRef?,  
    RenterName?,  
    RentalLocationID?,  
    RentalAddress?,  
    RentalCity?,  
    RentalStateOrRegion?,  
    RentalCountry?,  
    RentalDate?,  
    RentalTime?,  
    RentalClassIdentifier?,  
    RentalRate?,  
    RentalRateTimePeriod?,  
    MaximumFreeMilesOrKms?,  
    VehicleInsuranceIndicator?,  
    AmountVehicleInsurance?,  
    VehicleRegistrationNr?,  
    OdometerReading?,  
    ReturnLocationID?,  
    ReturnAddress?,  
    ReturnCity?,  
    ReturnStateOrRegion?,  
    ReturnCountry?,  
    ReturnDate?,  
    ReturnTime?,  
    RentalDistance?,  
    DistanceUnitOfMeasure?,  
    AmountAdjusted?,  
    AmountAdjustedIndicatorCode?,  
    ProgramCode?,  
    CustomerServicePhoneNr?  
)>  
<!ELEMENT RentalAgreementRef (#PCDATA) >  
<!ELEMENT RenterName (#PCDATA) >  
<!ELEMENT RentalLocationID (#PCDATA) >  
<!ELEMENT RentalAddress (#PCDATA) >  
<!ELEMENT RentalCity (#PCDATA) >  
<!ELEMENT RentalStateOrRegion (#PCDATA) >  
<!ELEMENT RentalCountry (#PCDATA) >  
<!ELEMENT RentalDate (#PCDATA) >  
<!ELEMENT RentalTime (#PCDATA) >  
<!ELEMENT RentalClassIdentifier (#PCDATA) >  
<!ELEMENT RentalRate (#PCDATA) >  
<!ELEMENT RentalRateTimePeriod (#PCDATA) >  
<!ELEMENT MaximumFreeMilesOrKms (#PCDATA) >  
<!ELEMENT VehicleInsuranceIndicator (#PCDATA) >  
<!ELEMENT AmountVehicleInsurance (#PCDATA) >  
<!ELEMENT VehicleRegistrationNr (#PCDATA) >  
<!ELEMENT OdometerReading (#PCDATA) >  
<!ELEMENT ReturnLocationID (#PCDATA) >  
<!ELEMENT ReturnAddress (#PCDATA) >  
<!ELEMENT ReturnCity (#PCDATA) >  
<!ELEMENT ReturnStateOrRegion (#PCDATA) >  
<!ELEMENT ReturnCountry (#PCDATA) >
```

Fields

```

<!ELEMENT ReturnDate      (#PCDATA) >
<!ELEMENT ReturnTime     (#PCDATA) >
<!ELEMENT RentalDistance (#PCDATA) >
<!ELEMENT DistanceUnitOfMeasure (#PCDATA) >
<!ELEMENT AmountAdjusted   (#PCDATA) >
<!ELEMENT AmountAdjustedIndicatorCode (#PCDATA) >
<!ELEMENT ProgramCode    (#PCDATA) >
<!ELEMENT CustomerServicePhoneNr (#PCDATA) >

```

LodgingData

The fields described below are used to send LodgingData information. The key value of this structure is "LodgingData", and the top level element is "LodgingData".

This DTD is based on the ISO 8583:2003 specification and can be used to report information regarding lodging (hotel, motel, etc.) transactions.

This DTD is to be used in 0100/0120/0200/0220/0400/0420 messages with transaction type 00 (*Goods and services*) or 09 (*Goods and services with cash back*).

Field	Type (element or attribute)	Condition	Format	Description
FolioNr	Element	Optional	ans10	The lodging facility's internal invoice or billing identification reference number.
FacilityPhoneNr	Element	Optional	ans16	The local phone number of the lodging facility at which the cardholder stayed.
DateArrival	Element	Optional	YYYYMM DD	The date on which the cardholder checked into the lodging facility.
DateDeparture	Element	Optional	YYYYMM DD	The date on which the cardholder checked out of the lodging facility.
AmountRoomRate	Element	Optional	n12	The daily room charges (in the minor denomination), exclusive of taxes and fees.
AmountRoomTax	Element	Optional	n12	The daily room tax amount (in the minor denomination).
AmountPhoneCharges	Element	Optional	n12	The total amount (in the minor denomination) of phone calls charged to the room.
AmountRestaurantAndRoo mService	Element	Optional	n12	The total amount (in the minor denomination) of restaurant and/or room service food charged to the room.

Fields

Field	Type (element or attribute)	Condition	Format	Description
AmountBarAndMinibar	Element	Optional	n12	The total amount (in the minor denomination) of bar and in-room "mini-bar" items charged to the room.
AmountLaundryAndDryCleaning	Element	Optional	n12	The total amount (in the minor denomination) of laundry and dry cleaning items charged to the room.
AmountGiftShop	Element	Optional	n12	The total amount (in the minor denomination) of gift shop and speciality shop items charged to the room.
AmountOtherServices	Element	Optional	n12	The total amount (in the minor denomination) of miscellaneous items/services charged to the room, not specified elsewhere.
AmountOtherServicesIndicator	Element	Optional	ans3	Indicates the type of charges provided in <i>AmountOtherServices</i> . Values are provided by the acquirer.
AmountBillingAdjustment	Element	Optional	n12	The amount (in the minor denomination) of any additional charges incurred after the cardholder's departure from the lodging facility.
ProgramCode	Element	Optional	ans2	A code allocated by the acquirer that identifies special circumstances, e.g. "frequent customer" or "no show".
CustomerServicePhoneNr	Element	Optional	ans16	The customer service number that the cardholder may call to resolve questions or disputes.

LodgingData DTD

```
<!ELEMENT LodgingData (  
    FolioNr?,  
    FacilityPhoneNr?,  
    DateArrival?,  
    DateDeparture?,  
    AmountRoomRate?,  
    AmountRoomTax?,  
    AmountPhoneCharges?,  
    AmountRestaurantAndRoomService?,  
    AmountBarAndMinibar?,  
    AmountLaundryAndDryCleaning?,  
    AmountGiftShop?,  
    AmountOtherServices?,  
    AmountOtherServicesIndicator?,  
    AmountBillingAdjustment?,  
    ProgramCode?,  
    CustomerServicePhoneNr?  
)>  
<!ELEMENT FolioNr (#PCDATA)>  
<!ELEMENT FacilityPhoneNr (#PCDATA)>  
<!ELEMENT DateArrival (#PCDATA)>  
<!ELEMENT DateDeparture (#PCDATA)>  
<!ELEMENT AmountRoomRate (#PCDATA)>  
<!ELEMENT AmountRoomTax (#PCDATA)>  
<!ELEMENT AmountPhoneCharges (#PCDATA)>  
<!ELEMENT AmountRestaurantAndRoomService (#PCDATA)>  
<!ELEMENT AmountBarAndMinibar (#PCDATA)>  
<!ELEMENT AmountLaundryAndDryCleaning (#PCDATA)>  
<!ELEMENT AmountGiftShop (#PCDATA)>  
<!ELEMENT AmountOtherServices (#PCDATA)>  
<!ELEMENT AmountOtherServicesIndicator (#PCDATA)>  
<!ELEMENT AmountBillingAdjustment (#PCDATA)>  
<!ELEMENT ProgramCode (#PCDATA)>  
<!ELEMENT CustomerServicePhoneNr (#PCDATA)>
```

Fields

KeyExchangeData

The fields described below are used to send encryption key information. The key value of this structure is "Postilion:KeyExchangeData", and the top level element is "KeyExchangeData". This field will be populated if the key to be exchanged is in TR31 format. The value will be in XML format with the data elements listed below:

Element	Type (Element, Attribute)	Condition (Mandatory, Optional, One or more, Zero or more)	Format	Description
KeyExchangeData	Element	Mandatory		
Key	Element	Mandatory		
EncryptedKey	Element	Mandatory	AN.. (Variable length)	Value encrypted under KEK in TR-31 Key Block format, Base64 encoded (Note this field does not have an explicit maximum length. It will be determined by the key block format.)
CheckDigits	Element	Optional	AN..6	Hex Check digits (up to 6)

KeyExchangeData XSD

```
<?xml version="1.0" encoding="UTF-8"?>
<xss:schema xmlns:xss="http://www.w3.org/2001/XMLSchema"
elementFormDefault="qualified">
    <xss:complexType name="KeyDataType">
        <xss:all>
            <xss:element type="xss:string" name="EncryptedKey" minOccurs="1"/>
            <xss:element type="xss:string" name="CheckDigits" minOccurs="0"/>
        </xss:all>
    </xss:complexType>
    <xss:element name="KeyExchangeData">
        <xss:complexType>
            <xss:all>
                <xss:element name="Key" type="KeyDataType" minOccurs="1"/>
            </xss:all>
        </xss:complexType>
    </xss:element>
</xss:schema>
```

XML Schemas Hosted by the IRP Interface

The following XML Schemas are hosted by the IRP (Interface Resource Pack). Please refer to the Interface Resource Pack User Guide for information on each XML Schema listed below:

- AccountOwnerDataSensitive
- AdditionalAmountData

Fields

- AdditionalEmvTags
- AirlineIteneraryData
- BrazilMaestroData
- BrazilMemberDefinedData
- BrazilPostDatedTransaction
- BrazilTimePayment
- DebtRepayment
- DebtRepaySensitive
- DeviceData
- EComSecurityDataEwic
- ExtendedTeleCheckData
- FundsReceiverDataSensitive
- GiftCardData
- InstallmentPaymentData
- MoneySendData
- MoneySendSensitive
- ProtectBuy
- RealtimeSubstantiation
- RecurringPaymentDetail
- Term
- TokenData
- TokenSensitive
- WalletProviderData