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THE STATE OF SOUTH CAROLINA
In The Court of Appeals

APPEAL FROM THE ADMINISTRATIVE LAW COURT

Milton G. Kimpson, Administrative Law Judge

Case No. 20-ALJ-17-0008-CC

Appellate Case No. 2024-001252

Mastercard International Incorporated, Appellant,

v.

South Carolina Department of Revenue, Respondent.

RECORD ON APPEAL - VOLUME VIII of XIV

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GCMS Reference Manual

12 October 2012

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Summary of Changes, 12 October 2012

This document reflects changes effective since the last publication of this manual.

Description of Change	Where to Look
Updated references to the <i>Authorization System Manual</i> with the document's new title, <i>Authorization Manual</i> .	Throughout document
Chapter 13 Reconciliation	
Revised the "Proc. Code (Processing Code)" row of the "Report IP727020-AA Field Descriptions" table by specifying the type of credit transaction that can affect a customer account.	Clearing Cycle Notification Report Samples

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Chapter 1 Overview of GCMS

This chapter provides the reader with a basic understanding of what GCMS is, what message types it uses, and what components compose it or interact with it.

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Definition of GCMS

GCMS is the Global Clearing Management System. This MasterCard system manages the clearing processing of credit transactions and debit transactions (in offline mode). GCMS is a centralized clearing facility owned and operated by MasterCard for the daily processing and routing of worldwide financial transactions between MasterCard and its customers.

DEFINITION

Clearing is the movement of data from the customer to MasterCard and from MasterCard to the customer.

GCMS processes clearing transactions using the Integrated Product Messages (IPM) format. GCMS functions include:

- Editing transactions to ensure adherence to MasterCard processing standards
- Performing currency conversion, assessing interchange fees, and calculating settlement values for each transaction
- Providing currency conversion rates for customer use
- Routing clearing transactions (messages) to the appropriate customer, vendor, or processor
- Providing acknowledgement messages to advise the originator of the transaction that GCMS received the transaction
- Providing notification messages to advise the receiver of the transaction that GCMS has processed clearing transactions for that receiver
- Providing error messages and reports to advise the originator of an invalid transaction that GCMS rejected the transaction
- Creating reconciliation reports
- Providing summarized settlement request information to the Settlement Account Management (S.A.M.) system
- Providing clearing information to other MasterCard systems such as the MasterCom® electronic imaging system, the MasterCard Consolidated Billing System (MCBS), and Data Warehouse
- Providing optional on-behalf services for customers such as Account Level Management, mapping services—for both MasterCard® *PayPass*™ and MasterCard inControl Commercialization, Clearing Chip Processing service, and several Clearing on-behalf reports

Who Participates in Clearing?

Customers participate in clearing. A customer can be an issuer, an acquirer, or both.

DEFINITION

The issuer is the customer that maintains the contractual relationship with the cardholder.

DEFINITION

The acquirer is the customer that has the contractual relationship with card acceptors to process payment account transactions and to reimburse the card acceptors for those transactions.

MasterCard offers the means for an acquirer and an issuer involved in a transaction to clear and settle the transaction.

Why Do Customers Perform Clearing?

Customers perform clearing to exchange transaction data. From the data provided in clearing, GCMS derives the amounts for settlement.

DEFINITION

Settlement provides acquirers with the funds to reimburse their card acceptors and collects funds from issuers.

Customers also use clearing data for some of their back-office processes, including posting to cardholder accounts.

Customers that issue MasterCard® cards and customers contracting with card acceptors to accept cards must perform clearing to exchange transaction data.

What is the Difference Between Clearing and Settlement?

Clearing is the process of exchanging clearing **data**. For example, clearing includes sending transactions from the acquirer to the issuer for posting to the cardholder account (also called “presentment”). GCMS accepts the data, edits it, assesses the appropriate fees, and routes it to the appropriate receiver. The clearing messages contain data but do not actually exchange or transfer funds.

Settlement is the process by which **funds** are exchanged. The funds represent the net equivalent of monetary value from clearing processing. These funds are exchanged each day between customers for the net monetary value of the cleared transactions. MasterCard calculates in reconciliation currency the net position of each customer involved in the clearing process and performs the following two settlement functions:

- Sending advisements
- Transferring funds (when applicable)

GCMS manages clearing. The S.A.M. system supports settlement. GCMS feeds clearing data to S.A.M.

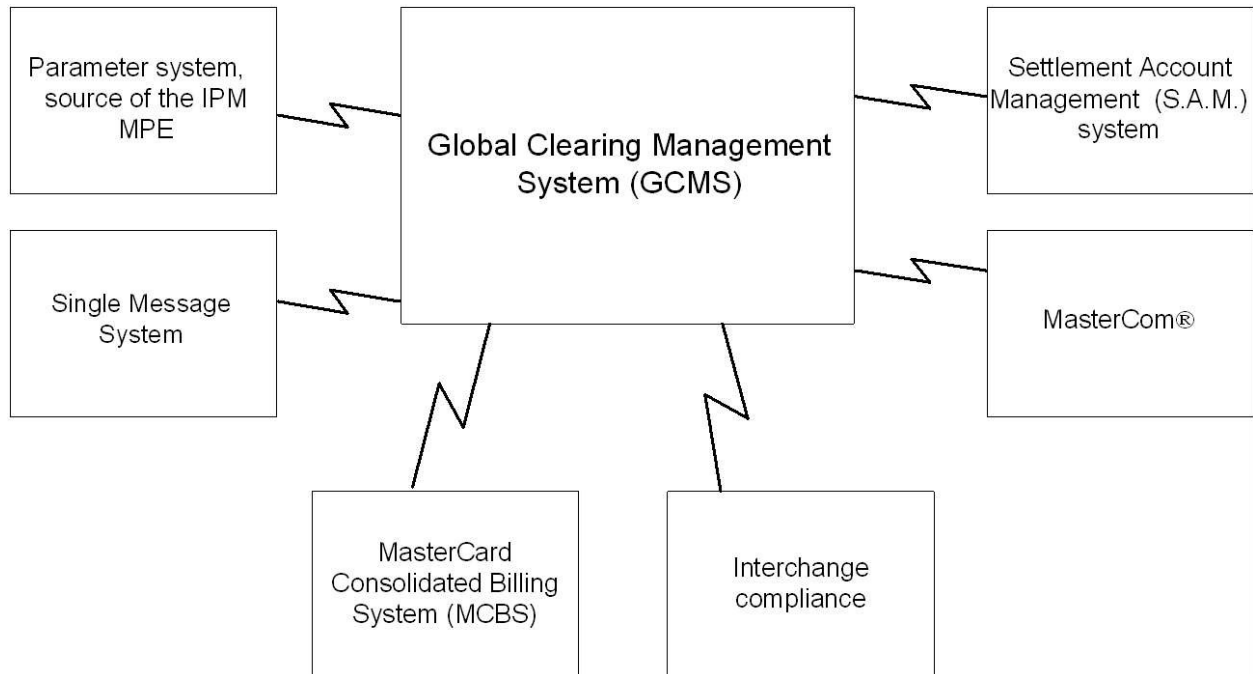
NOTE

For more information about settlement, refer to the *Settlement Manual*.

System Integration Diagram

The following diagram shows the systems with which GCMS interacts.

Figure 1.1—System Integration Diagram



Clearing Basics

To understand clearing through GCMS, the reader should understand the following:

- When clearing can occur
- When settlement occurs
- The IPM format (the clearing message format)
- Clearing message types
- Means of transferring clearing data
- Processing cycles

Clearing Times

The sending customer can submit transaction data for clearing to the St. Louis Operations Center (Central Site) seven days a week, 24 hours a day.

With the implementation of six clearing cycle cutoffs in GCMS, processing customers have the option to receive clearing files four, five, or six times per day. Each customer or processor must receive data from a minimum of four cycles per day. Options can vary for each clearing endpoint. MasterCard has established the initial default delivery cycles for all processing customers as cycles one, two, four, and six.

NOTE

In addition to the six primary clearing cycles, a seventh clearing cycle exists exclusively for Mexico domestic switching transactions.

These four cycles are also the default delivery cycles for all new endpoints, unless otherwise specified. Processing customers will automatically receive clearing files at these default times, unless they contact MasterCard to request different times. Processing customers may request any combination of daily cycles that include four, five, or six cycles per day, adhering to the requirements listed above. Processing customers that want to change their clearing cycle cutoff times should complete section 4 of the *GCMS Parameter Worksheet* (Form 600).

The following table shows the daily schedule for the six primary clearing cycles and the seventh clearing cycle designated for Mexico domestic switching transactions.

Business Day	Clearing 1	Clearing 2	Clearing 3	Clearing 4	Clearing 5	Clearing 6
Sunday	No processing	No processing	No processing	No processing	No processing	No processing
Monday	Sunday, 16:00	Sunday, 21:00	Monday, 00:00	Monday, 03:00	Monday, 06:00	Monday, 08:00
Tuesday	Monday, 18:00	Monday, 21:00	Tuesday, 00:00	Tuesday, 03:00	Tuesday, 06:00	Tuesday, 08:00
Wednesday	Tuesday, 18:00	Tuesday, 21:00	Wednesday, 00:00	Wednesday, 03:00	Wednesday, 06:00	Wednesday, 08:00
Thursday	Wednesday, 18:00	Wednesday, 21:00	Thursday, 00:00	Thursday, 03:00	Thursday, 06:00	Thursday, 08:00
Friday	Thursday, 18:00	Thursday, 21:00	Friday, 00:00	Friday, 03:00	Friday, 06:00	Friday, 08:00
Saturday	Friday, 18:00	Friday, 21:00	Saturday, 00:00	Saturday, 03:00	Saturday, 06:00	Saturday, 08:00

The following table shows the daily schedule for the seventh clearing cycle designated for Mexico domestic switching transactions.

Business Day	Clearing 7 (Mexico domestic switching transactions)
Sunday	No processing
Monday	Monday, 11:00
Tuesday	Tuesday, 11:00
Wednesday	Wednesday, 11:00
Thursday	Thursday, 11:00
Friday	Friday, 11:00
Saturday	Saturday, 11:00

Refer to Chapter 2 ([Clearing Processing Details](#)) for clearing file delivery options.

Settlement Times

MasterCard settles with most customers Monday through Friday following the sixth clearing cycle cutoff. However, for intracurrency settlement participants, the option to settle after any clearing cycle is available.

The customers receive settlement advisements from the S.A.M. system.

The deadline for U.S. dollar funds transfer is 14:00 St. Louis, Missouri, U.S.A. time.

Transactions processed in the Saturday clearing cycles are included in the Monday net settlement totals. Advisements that customers receive on Monday report both Saturday and Monday settlement totals. Settlement can occur only after clearing has already occurred.

NOTE

For more information about settlement, refer to the *Settlement Manual*.

The IPM Format

Customers send clearing data to GCMS using the Integrated Product Messages (IPM) format, which is based on the ISO 8583-1993 format and has the following characteristics:

- It is variable-length: A particular element in the message or the entire message can have a different length based on the data it contains.
- It is variable-format: The location of a particular element within a message can vary between messages, depending on the other elements that are present in each message.
- It has a bit map orientation: The bit map indicates whether data elements are present or absent from the message.

Elements of IPM Messages

IPM messages contain four types of message elements:

- Message Type Identifier (MTI): Identifies the purpose of the message, such as Financial, Administrative, or Fee Billing.
- Two bit-maps: A series of binary digits (bits) that indicate the presence or absence of data elements.
- Data elements: Message elements, defined within the ISO 8583-1993 specification, that may contain data.
- Private data subelements: Message elements that MasterCard defined to support data not defined within the ISO 8583-1993 specification.

IPM Message Types

The IPM message uses a combination of two elements to define the message type:

Message Type Identifier (MTI) + Data Element (DE) 24 (Function Code)

The MTI identifies the general ISO message type. Valid MTIs include the following.

MTI	Description
1240	Presentment
1442	Chargeback
1644	Administrative
1740	Fee Collection

The Function Code more specifically defines the message's purpose.

For example, the combination of an MTI value of 1644 plus a DE 24 value of 697 indicates a file header.

MasterCard documentation refers to IPM message types by stating the MTI value and then the function code value, separated by a hyphen, as follows: File Header/1644-697.

NOTE

For more information about the construction of the IPM message, refer to the *IPM Clearing Formats* manual and Chapter 2 ([Clearing Processing Details](#)) of this manual.

Transferring Clearing Data

Customers can use the following methods for transmitting data:

- MasterCard interface processor (MIP): A mid-range CPU that accesses the customer gateway to the MasterCard network. The sending customer captures data and transmits it to GCMS at Central Site.
- MasterCard File Express: Transfer via dial-up access between remote personal computers and a Central Site-based mainframe using modems and communications software developed and licensed by MasterCard. The *MasterCard File Express Client Users' Guide* contains more information about this transmission method.
- CONNECT:Direct or XCOM: MasterCard mainframe to customer mainframe using dedicated network communication facilities. This facility supports all bulk data types.

Processing Cycles of Clearing Transactions

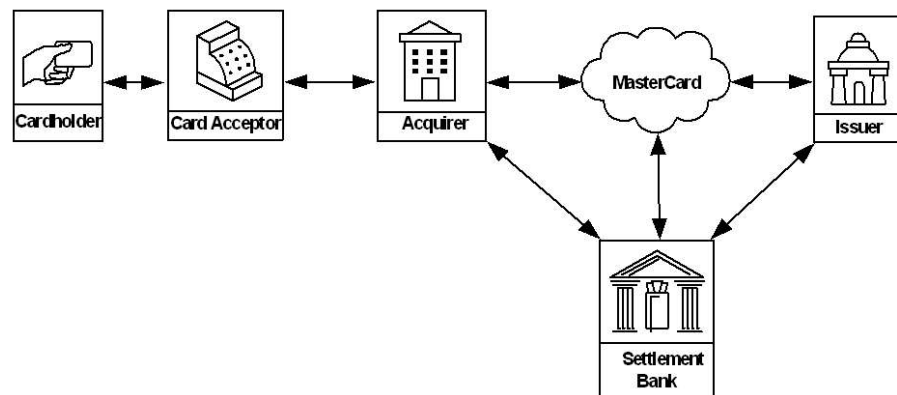
There are five processing cycles through which a clearing transaction may travel. Customers can submit clearing transactions from any of these processing cycles in one file.

1. First Presentment

The acquirer presents transaction data to the issuer.

The following diagram illustrates the movement of data in processing a **first presentment**.

Figure 1.2—Presentment Processing



2. Retrieval Requests and Fulfillments

An issuer can request the transaction slip from the acquirer if there is any question about the transaction that the original document or facsimile may resolve. Not all **retrievals** must precede a chargeback (defined below).

To complete this cycle, the acquirer either **fulfills** the issuer's request or sends a message documenting the inability to honor the request. MasterCard encourages the use of the MasterCom® electronic imaging system to deliver transaction slips and other information concerning the request.

Chargeback messages (see following) with message reason code 4802 (Requested/Required Information Illegible or Missing) are the only messages that require a preceding retrieval request.

3. Chargeback

After the initial presentment of the cardholder transaction from the acquirer to the issuer, the issuer may determine that, for a given reason, the transaction may not be valid. The issuer may return the transaction to the acquirer as a **chargeback**.

The issuer can submit a chargeback if the issuer or the cardholder disputes the first presentment. The chargeback must be processed within the designated time frames after receiving the first presentment. (These time frames vary according to the chargeback reason.) This returns the transaction to the acquirer for possible remedy.

4. Second Presentment

The acquirer may return the transaction with additional information as a **second presentment**. The acquirer may return the second presentment to correct the original defect or to indicate a disagreement with the issuer's chargeback.

5. Arbitration Chargeback

If the issuer continues to dispute the item, it returns the transaction to the acquirer for the second time as an **arbitration chargeback**. This cycle is not supported for Maestro and Cirrus transactions.

Arbitration

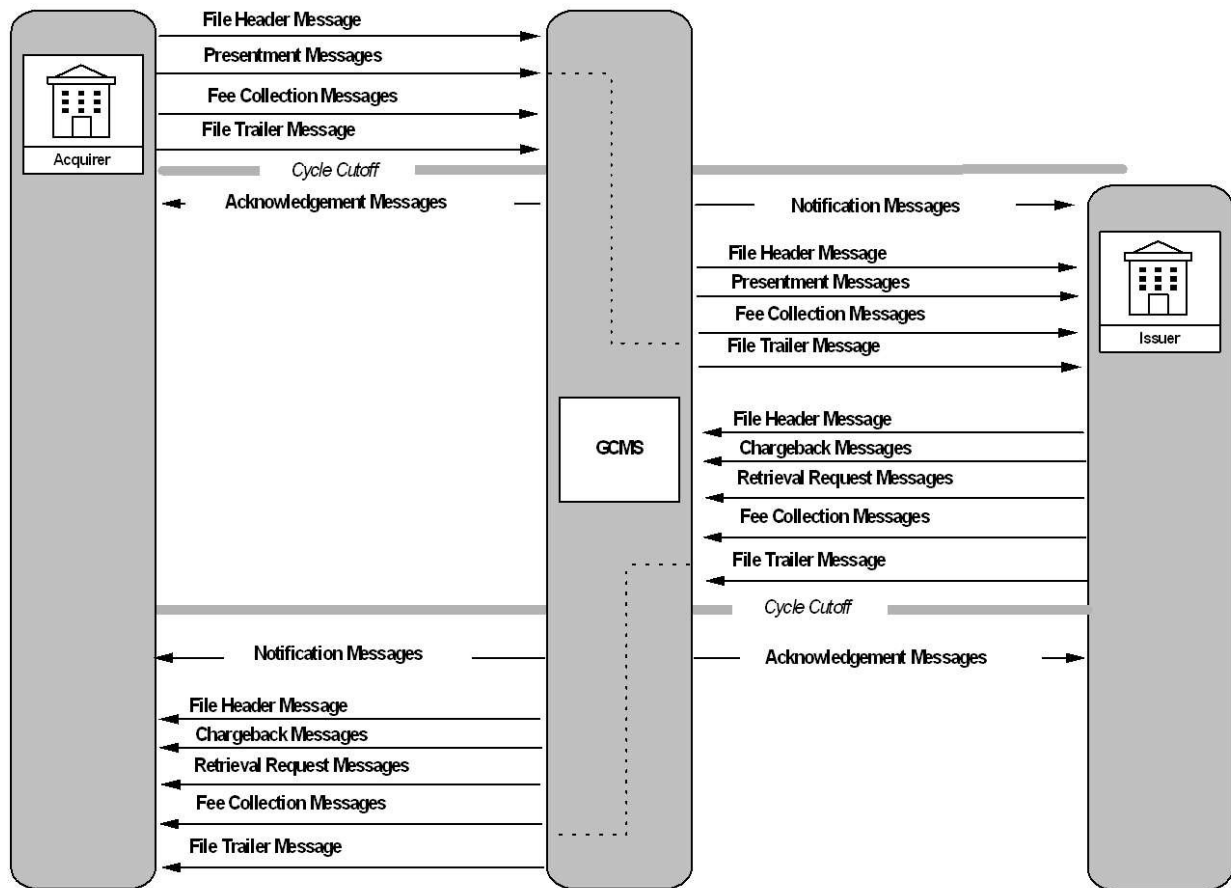
The final phase in the chargeback process (processing cycles 3–5) is arbitration. A customer may petition MasterCard to determine responsibility for a transaction after unsuccessful dispute resolution through the chargeback process outlined above.

Compliance

The customers request that MasterCard resolve a rules violation or a dispute between the customers when no remedy exists via the chargeback life cycle.

Diagram of the Transaction Processing Cycles

The following diagram shows the relationships of customers during the first three cycles of transaction processing.



Protection of Cardholder Confidential Information

Customers are required to protect all data files of and storage methods for cardholder confidential information that is in electronic form and while the information is in storage per the PCI Data Security Standard (PCI DSS).

This protection should be performed by encryption or other appropriate compensating controls. In addition, this information must be placed in secure areas with adequate controls (which may include encryption or other appropriate compensating controls) to prevent unauthorized access. Customers shall dispose of confidential information in accordance with customer policies, to avoid exposing or compromising cardholder confidential information.

Acquirers and issuers that use either the IPM Pre-edit and Utilities—Mainframe or IPM Pre-edit and Utilities—Workstation Plus applications are required to take steps to ensure that data files of and the storage methods used for cardholder confidential information are protected from unauthorized access using PCI DSS.

Distributed IPM Software

MasterCard has developed the IPM Pre-edit and Utilities software package to help customers to interact with IPM formatted messages.

The software performs the following functions:

- Emulates many of the editing functions performed by GCMS at Central Site.
- Helps the customer to manipulate IPM messages.
- Parses or rebuilds IPM messages for use by other software tools.
- Provides a file of customer parameters for use in populating IPM messages.

Customers and processors that choose to use this software install it at their sites on their own hardware.

NOTE

For more information about the distributed software, refer to either the *IPM Pre-edit and Utilities—Mainframe* manual or the *IPM Pre-edit and Utilities—Workstation Plus* manual.

In addition to the distributed software described above, MasterCard will deliver DDDD Host Preparation Facility (MHPF) communication software upon request. The purpose of the software is to assist in the management of data transfers via a MIP. The MHPF communication software performs the following functions:

- Transmits files via the TCP/IP transmission protocol.
- Provides modules to perform some very basic file structure edits on non-clearing files.
- Provides MIP Bulk File Advisement software to perform queries and reporting of bulk files received and available for unloading from their MasterCard interface processor (MIP).

Table 1.1—Bulk File Advisement Module (module not specific to clearing format files)

Module	Description
MH410010	MIP Bulk File Advisement

NOTE

For more information about the MHPF software, refer to the *File Transfer Manual* and the *Data Communications Manual*.

NOTE

MasterCard will deliver modules MH590010 and MH700010 solely to support the existing compile and link edit processes for the driver routines that contain them. Customers no longer will run the modules themselves.

Customer Requirements and Responsibilities in Clearing Transactions

All customers have certain rights and obligations in the processing and settlement of clearing transactions and must accept such items received in clearing as specified in this manual.

All customers are required to present (submit) and accept specific messages electronically through GCMS. Chapter 2 ([Clearing Processing Details](#)) of this manual and the *IPM Clearing Formats* manual define the specific messages that customers are required to use for the clearing of data.

An issuer receiving a presented transaction that is incomplete, invalid, or otherwise not in conformance with the provisions of this manual or the *IPM Clearing Formats* manual has specific rights to return the transaction to the acquirer (chargeback). The acquirer has specific rights to present the transaction again to the issuer so that the acquirer can remedy the transaction (second presentment). In turn, the issuer may originate another chargeback (an arbitration chargeback) if the acquirer incorrectly presented it a second time.

All customers are responsible for sending, receiving, and balancing GCMS messages.

All customers should balance the daily net settlement advisement to their IPM reconciliation messages, GCMS reconciliation reports, or both.

NOTE

The daily net settlement advisement is the definitive authority about funds movement. Differences between the GCMS reconciliation messages and reports and the settlement advisement may occur from time to time because of risk management edits present in the settlement system.

NOTE

For more information about net settlement procedures, refer to the *Settlement Manual*.

Acquirer Responsibilities in Clearing Transactions

There are a number of tasks for which acquirers are responsible during the processing and settlement of clearing transactions.

Acquirers must perform the following:

Overview of GCMS

Customer Requirements and Responsibilities in Clearing Transactions

- Ensure that presented data is accurate, complete, and in compliance with the MasterCard rules. Further, acquirers are responsible for editing and monitoring all messages sent and received.
- Edit and balance the prepared data before submission to Central Site via MIP, MasterCard File Express, or CONNECT:Direct. Make any necessary corrections to the input of data based on the edits, using the IPM Pre-edit software (if supported). Customers using the IPM Pre-edit software must always work with the most current version.
- Transmit the prepared data to GCMS to await processing by Central Site.
- Keep a transmission log or listing of each file sent to GCMS.
- Verify the incoming acknowledgement messages from GCMS against outgoing file data, and resubmit any rejected items or files based on the rejected messages that GCMS returns.
- Receive all first chargeback and arbitration chargeback messages submitted by issuers. In accordance with the MasterCard rules and procedures outlined in Chapters 1, 3, and 4 of the *Chargeback Guide*, the acquirer may either accept responsibility for the transactions or:
 - Second present the transactions on receipt of a first chargeback, or
 - File for arbitration on receipt of an arbitration chargeback
- Capture and process incoming retrieval requests.
- Initiate fee collection messages in accordance with the format and details defined in *IPM Clearing Formats*.
- Edit and reconcile messages sent and received by balancing the IPM acknowledgement and notification reconciliation messages or reports to their internal system reports of outgoing and incoming data. Acquirers must ensure that they have reconciled all rejected and accepted messages.

Issuer Responsibilities in Clearing Transactions

There are a number of tasks for which issuers are responsible during the processing and settlement of clearing transactions.

Issuers must perform the following:

- Receive all financial records as presented by the acquirer and ensure that all data necessary to identify the transaction is provided to the cardholder or is readily accessible for transaction research and monitoring purposes.
- Reconcile net settlement figures.
- Initiate retrieval, chargeback, and fee collection messages in accordance with:
 - The formats and details defined in *IPM Clearing Formats*
 - MasterCard chargeback rules and procedures outlined in Chapter 1 and Chapter 3 of the *Chargeback Guide*
- Edit and reconcile retrieval, chargeback, and fee collection messages to ensure that the issuer sends complete and accurate detail in compliance with MasterCard operating standards. To reconcile messages **sent**, issuers must balance the IPM acknowledgement reconciliation messages to their internal system reports of outgoing data sent to MasterCard.
- Edit and reconcile messages **received** by balancing the IPM notification reconciliation messages or reports to the issuer's internal system reports of incoming data sent from MasterCard.
- Capture and process retrieval request fulfillments when received.

GCMS Responsibilities in Clearing Transactions

The Global Clearing Management System (GCMS) serves a variety of functions.

GCMS performs the following:

- Edits, balances, and distributes clearing data received from each customer.
- Determines the net amount for each customer's daily incoming and outgoing work. GCMS produces a net settlement figure in reconciliation currency that it sends to the S.A.M. system.
- Verifies and adjusts fee calculations when necessary.
- Rejects individual messages or entire files and then notifies the sending customer of the rejection.
- Updates accepted file information for each customer sending files.
- Produces and sends clearing files to participating customers.
- Provides currency conversion rates to customers at their option.

Establishing GCMS Services

Customers and processors must provide MasterCard with information related to the following:

Overview of GCMS

Documents Related to GCMS

- Current processing procedures
- Testing preferences
- Contacts
- Requested GCMS clearing options

Customers provide this data to MasterCard via the *GCMS Parameter Worksheet* (Form 600).

NOTE

For a sample of the worksheet, refer to the *GCMS Parameter Worksheet* (Form 600).

Documents Related to GCMS

The following documents and resources provide information related to the subjects discussed in the *GCMS Reference Manual*:

- Authorization and Clearing Release Documents
- *Authorization Manual*
- *Chargeback Guide*
- *Customer Interface Specification*
- *Data Communications Manual*
- *File Transfer Manual*
- *GCMS Parameter Table Layouts*
- *Interchange Manual*
- *IPM Clearing Format Error Numbers and Messages*
- *IPM Clearing Formats*
- *IPM Pre-edit and Utilities—Mainframe*
- *IPM Pre-edit and Utilities—Workstation Plus*
- *MasterCard Clearing Presentment Simulator Guide*
- *MasterCard Rules*
- *Quick Reference Booklet*
- *Security Rules and Procedures*

Chapter 2 Clearing Processing Details

This chapter presents details about the functionality and support that GCMS provides. It addresses how to send and receive messages and how the system edits certain transactions.

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Creating IPM Messages

The Global Clearing Management System (GCMS) processes the Integrated Product Messages (IPM) format. IPM messages contain the following data elements (DEs).

Element	Element Number	Description
Message Type Identifier (MTI)	----	Describes the message class.
Primary Bit Map	----	A series of binary digits (bits) that indicate the presence or absence of DE 1–DE 64.
Secondary Bit Map	DE 1	A series of binary digits (bits) that indicate the presence or absence of DE 65–DE 128.
Function Code	DE 24	A three-position data element indicating the specific purpose of a message within the message class. The function code provides additional information about the MTI or message class (such as first presentment, second presentment partial, or first chargeback full).
Message Reason Code	DE 25	A four-position data element indicating the reason for sending the message. Most, but not all, IPM messages require the message reason code.
Message Number	DE 71	An eight-position data element that monitors the integrity and continuity of the files being exchanged.

The *IPM Clearing Formats* manual documents the specifications for each data element and private data subelement (PDS).

IPM Message Construction Requirements

The following requirements apply to the construction of IPM messages:

- The file header and file trailer for each logical file must contain the same value in PDS 0105 (File ID).
- Every message must contain the MTI in positions 1–4, followed by both bit maps in positions 5–20, followed by the International Organization for Standardization (ISO)-defined data elements (DE 1–DE 128) in ascending sequence.
- DE 24 (Function Code) and DE 71 (Message Number) must be present in every IPM message.
- DE 71 must always contain 00000001 in the file header. For each subsequent message in the logical file, the value in DE 71 must be greater than the value in the previous message. (The only exception to this occurs when GCMS rejects a message, in which case GCMS returns the message to the customer with the **original** DE 71 value.)

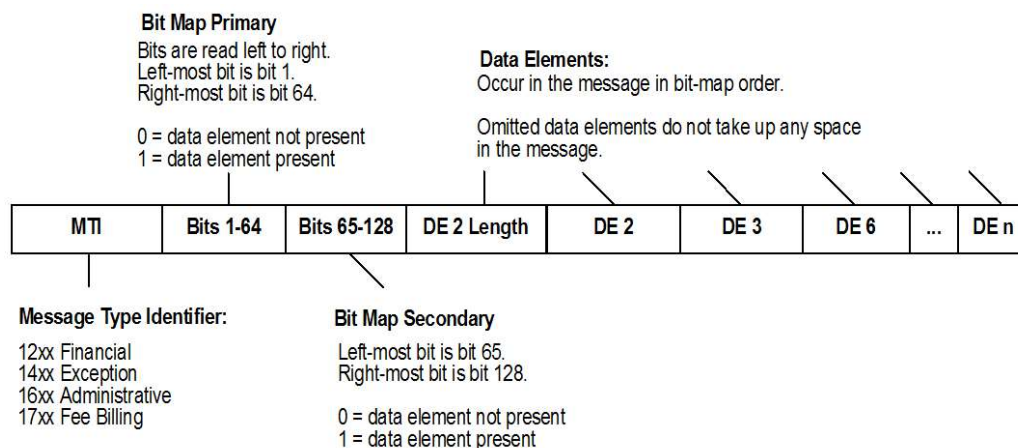
NOTE

Customers must not populate an element with all high values, such as hexadecimal FF, or all low values, such as hexadecimal 00, within clearing messages. GCMS edits for all low and high values and will reject messages that contain them.

IPM Structure

The following diagram shows the structure of the IPM format.

Figure 2.1—IPM Structure



Supported and Unsupported Data Elements of IPM Format Messages

Within the IPM ISO 8583-1993 format, there are data elements supported by MasterCard and data elements not supported by MasterCard. There are also data elements that MasterCard may support for future use.

Customers should refer to the *IPM Clearing Formats* manual for a description of the supported data elements and PDSs that customers may submit in IPM format messages.

MasterCard does not reject customer-generated messages for including extraneous data or unsupported elements. GCMS simply drops the undefined elements before sending such messages to the receiving customer. This protects the data integrity and validity of files generated by MasterCard.

Customers managing their inbound clearing files should know that MasterCard limits the data sent to customers to the data elements and PDSs defined for use in the *IPM Clearing Formats* manual.

Handling of Unsupported Elements

A message containing unsupported data elements or PDSs results may not be accepted by GCMS.

GCMS does not edit and does not include, in any accepted message to the transaction destination, unsupported data elements or PDSs, nor any data elements not supported for specific MTI and DE 24 (Function Code) combinations. This includes elements and subelements that MasterCard will support in the future.

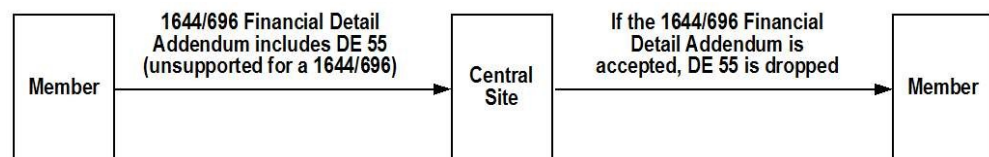
For example, the *IPM Clearing Formats* manual defines DE 17 (Capture Date) as an element that MasterCard does not currently support and does not plan to support in the future. GCMS does not edit DE 17 or include it in any accepted message to the transaction destination.

In addition to the above examples, some data elements are not valid for specific MTI and DE 24 combinations. For example, DE 55 (Integrated Circuit Card System Related Data) is a valid data element for first presentment, second presentment, first chargeback, and arbitration chargeback messages. However, it is not a valid data element for financial detail addendum messages. Therefore, GCMS would not forward it to the transaction destination if it were included in a financial detail addendum message by the sender of the message.

MasterCard follows the *IPM Clearing Formats* manual data element and PDS specifications.

As shown in the following figure, GCMS drops an unsupported data element or PDS if GCMS accepts the message. An accepted message is one that GCMS processes because it does not fail format, syntax, content, or context edits.

Figure 2.2—GCMS Handling of an Unsupported Element

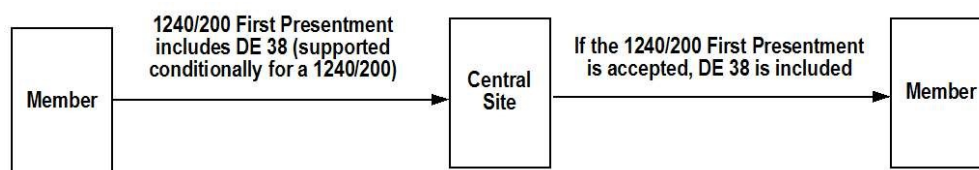


Handling of Supported Elements

GCMS accepts a message if it contains supported elements. This process and its conditions are described as follows.

GCMS includes a supported data element or PDS if GCMS accepts the message. For example, MasterCard considers PDSs 1000–1099, which contain customer-to-customer proprietary data, to be supported elements. GCMS always forwards proprietary elements to the destination for accepted messages, and always returns them to the sender for rejected messages. As shown in the following figure, GCMS forwards DE 38 (Approval Code) if the First Presentment/1240-200 is accepted.

Figure 2.3—GCMS Handling of a Supported Element



GCMS accepts a particular data element or PDS if the element is all of the following:

- Parseable
- Identified as a recognized element for the transaction function (MTI and DE 24 [Function Code]), regardless of whether the field is mandatory, optional, or conditional
- Valid

“Valid” means that the data element or PDS passes any format, syntax, content, or context edits applied during the edit process. For example, a PDS that the *IPM Clearing Formats* manual defines as containing only numeric digits must contain only numeric digits to be considered “valid.” Chapters 7, 8, 9, and 10 of the *IPM Clearing Formats* manual document the specifications for each data element and PDS.

For example, within a first presentment, the *IPM Clearing Formats* manual defines:

- PDS 0165 (Settlement Indicator) as a mandatory field for a first presentment.
- PDS 0171 (Alternate Card Acceptor Description Data) as optional (that is, the transaction originator may or may not include it) in a first presentment.

IF the transaction originator includes...	AND...	THEN GCMS will...
Both fields described above	Both are valid	Forward the fields to the transaction destination.
Both fields described above	Any field is invalid	Reject the message and return both fields.

Customer-to-Customer Proprietary Data in the IPM Format

MasterCard has allocated 100 private data subelements within the range of 1000 through 1099 for customer proprietary use. This enables customers to exchange customer-defined proprietary data with other customers who process in the IPM format.

Customers can use these PDSs to exchange information that the IPM format does not define and capture in other elements. Customers can present up to 999 bytes of non-binary data (including tags, lengths, and data for all PDSs in the 1000–1099 range) within a single IPM message.

To accommodate varying global business requirements, customers have two options for presenting their data:

- Customers who want to use their own parsing routines to parse the proprietary data may provide one string of up to 992 characters of data within a single PDS in the 1000–1099 range. With this option, customers would provide a single PDS tag (ID) and one length definition, followed by the desired data string. GCMS will leave this customer data intact.
- Customers who would like MasterCard to parse the proprietary data may use up to 100 individual PDSs in the 1000–1099 range to define their data. With this option, customers must use the normal “tag-length-data” PDS encoding structure to define as many PDSs as they choose to use. Customers may provide up to 999 positions total (including tags, lengths, and data for all PDSs within the range) per message.

Customers may present proprietary data in PDSs 1000–1099 in any of the IPM message types for which the customer is the originator. They may include the customer-to-customer proprietary PDSs in any of the “Additional Data” data elements (DE 48, DE 62, DE 123, DE 124, and DE 125), which are the carrier data elements for private data subelements. Customers also should be prepared to receive PDSs 1000–1099 in any of the carrier data elements.

The contents of PDSs 1000–1099 must be in display format. The clearing system does not accommodate binary data in the private data subelements dedicated for customer-to-customer proprietary data.

Customers must treat the data in the Customer-to-Customer Proprietary PDSs as confidential. Customers may disregard unsolicited Customer-to-Customer Proprietary PDS data, and may discard it, provided this is done in a manner which preserves the confidentiality of the data.

Customer-Generated Files in the IPM Format

The IPM format provides a flexible structure for customer-generated logical and physical files. Both of these file types, and the ways in which GCMS uses them, are described as follows.

DEFINITION

A logical file is an offline file that contains a single file header, followed by various IPM clearing messages, followed by a single file trailer.

DEFINITION

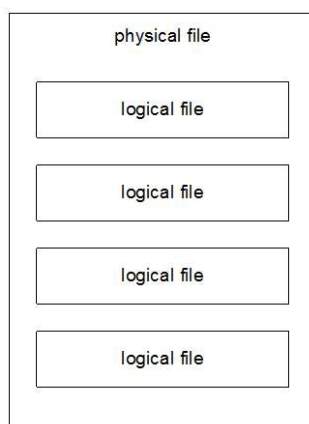
A physical file is an offline transmission that is a single dataset or bulk file and that contains one or more logical files. There is no transmission header or transmission trailer to enclose an offline transmission.

DEFINITION

As used above, offline refers to an operating mode in which current active files are not being viewed during the time the transaction is conducted.

GCMS processes each logical file within a physical file independently. The transmission originator determines whether to submit a single logical file or multiple logical files within a physical file.

Figure 2.4—Logical Files within a Physical File



There are no requirements related to the grouping of IPM messages into logical files. For example, one transmission originator may choose to create a separate logical file for each ending customer ID. Another transmission originator may choose to create one logical file for chargebacks and retrievals and another for presentments.

Sequence of the Customer-Generated IPM File

Customers must adhere to certain rules when constructing IPM files.

There are relatively few sequencing rules for customer-generated logical files. The customer may construct its IPM outbound logical file using any message sequence, with the following exceptions:

- A file must begin with a file header message and end with a file trailer message.
- The file ID in the header must match the file ID in the trailer.
- DE 71 in the file header message always must contain 00000001. Subsequent DE 71 values must be incremented, so that each succeeding DE 71 value is greater than the previous.
- Financial detail addendum messages must immediately follow the associated first presentment messages.

IPM files may contain data from multiple customer IDs and may mix Collection Only data with other clearing data.

For example, customer (or processor) 004444 processes clearing data for customer IDs 002222 and 003333.

The following table specifies the contents of a possible clearing file that customer (or processor) 004444 could send.

MTI-Function Code	Description	Endpoint, from:
1644-697	File Header	004444
1644-603	Retrieval Request	002222
1240-205	Second Presentment (Full)	003333
1240-200	First Presentment—Non-Collection Only	002222
1644-696	Financial Detail Addendum	002222
1740-700	Fee Collection	003333
1240-200	First Presentment—Collection Only	002222
1240-282	Second Presentment (Partial)	002222
1240-200	First Presentment—Collection Only	003333
1442-450	First Chargeback (Full)	003333
1442-451	Arbitration Chargeback (Full)	003333
1240-200	First Presentment	003333
1644-695	File Trailer	004444

Files Generated by MasterCard

This section describes options, requirements, and structure relating to files generated by MasterCard (incoming to customers).

Customer Clearing File Delivery Options

Customers and processors have multiple options from which they may choose to receive clearing files. Details about the requirements and cutoff time of each cycle are as follows.

Customers and processors have the option to receive clearing files four, five, or six times per day. Each customer (or processor) must receive data from a minimum of four cycles per day. In addition to the six primary clearing cycles, a seventh clearing cycle exists exclusively for Mexico domestic switching transactions. If a customer in Mexico domestic participates in this seventh cycle, they must receive clearing files in the seventh clearing. All customers will continue to receive the outbound from the sixth clearing including customers under the Mexico domestic processing.

Clearing cycle options can vary for each clearing endpoint. The following table includes additional requirements for the six clearing cycle cutoff option.

Table 2.1—Additional Requirements for Seven Clearing Cycle Cutoff

Location	Requirements
U.S. region and Canada region customers and processors	• Must receive a clearing file after cycle 1. • Must receive a clearing file after cycle 6. • Must choose to receive clearing files after two or more of the following cycles: cycle 2, cycle 3, cycle 4, or cycle 5.
Customers and processors outside the U.S. and Canada regions	• Must receive a clearing file after cycle 6. • Must choose to receive clearing files after three or more of the following cycles: cycle 1, cycle 2, cycle 3, cycle 4, or cycle 5.
Customers and processors processing Mexico Domestic transactions and participating in the seventh clearing	• Must receive a clearing file after cycle 6. • Must choose to receive clearing files after three or more of the following cycles: cycle 1, cycle 2, cycle 3, cycle 4, or cycle 5. • Must receive a clearing file after cycle 7.

MasterCard has established the initial default delivery cycles for all processor customers as cycles one, two, four, and six. These four cycles are also the default delivery cycles for all new endpoints unless otherwise specified.

Table 2.2—Default Delivery Cycles

Cycle Number	Cutoff Time (St. Louis Time)	File Delivery Default Cycle
1	18:00 ¹	Yes
2	21:00	Yes
3	00:00	No
4	03:00	Yes
5	06:00	No
6 (Final)	08:00	Yes
7 (Mexico domestic switching transactions)	11:00	Yes

Processors and customers automatically receive clearing files at these default times, unless they contact MasterCard to request different times. Customers and processors may request any combination of daily cycles that include four, five, or six cycles per day, adhering to the requirements listed above.

The following table provides examples of the relationship between clearing cycle cutoff and the receipt of clearing data.

IF the customer location is...	AND the delivery cycles selected are...	THEN the customer will receive clearing data after...
U.S. or Canada regions	Default cycles	Cycles 1, 2, 4, and 6
U.S. or Canada regions	From the available optional cycles	Any combination of four or more clearing cycles that include cycle 1 and cycle 6
Outside the U.S. and Canada regions	Default cycles	Cycles 1, 2, 4, and 6
Outside the U.S. and Canada region	From the available optional cycles	Any combination of four or more clearing cycles that include cycle 6

Customers and processors that want to change their clearing cycle cutoff times should complete section 2 of the GCMS Parameter Worksheet (Form 600).

Clearing File Delivery Options

Customers have multiple options to choose from when receiving clearing data from GCMS.

1. Cutoff time for Sunday is 16:00.

Clearing Processing Details

Creating IPM Messages

GCMS provides several options for organizing into separate files incoming clearing data generated by MasterCard. GCMS will assign different endpoints to different categories of data. An endpoint is a numeric, seven-digit identifier that is linked to a physical file delivery location defined to MasterCard.

GCMS delivers one file to each endpoint after each clearing cycle in which a customer chooses to receive data.

Following are the file delivery options:

Option 1: Customer ID

With this option, customers can specify different endpoints according to customer ID. The following table is an example.

Customer ID	Endpoint
001234	0000001
005678	0000002
002222	0000001

In this example, GCMS will create one file for endpoint 0000001 and one file for endpoint 0000002 after each specified clearing cycle cutoff.

The file created for endpoint 0000001 will contain transactions destined for customer IDs 001234 and 002222. The file created for endpoint 0000002 will contain transactions destined for customer ID 005678.

A processor might choose to use this arrangement to group its customers into different files.

Option 2: Acquirer BIN

With this option, a customer can specify different endpoints according to acquirer bank identification number (BIN). The following table is an example.

Acquirer BIN	Endpoint
541234	0000001
543333	0000002

In this example, GCMS will create one file for endpoint 0000001 and one file for endpoint 0000002 after each specified clearing cycle cutoff.

The file created for endpoint 0000001 will contain transactions destined for acquirer BIN 541234. The file created for endpoint 0000002 will contain transactions destined for acquirer BIN 543333.

Option 3: Acquirer BIN plus Card Program Identifier

With this option, a customer can specify different endpoints according to the combination of acquirer BIN plus card program identifier. The following table is an example.

Acquirer BIN	Card Program Identifier	Endpoint
544444	Maestro (MSI)	0000001
544444	MasterCard (MCC)	0000002

In this example, GCMS will create one file for endpoint 0000001 and one file for endpoint 0000002 after each specified clearing cycle cutoff.

The file created for endpoint 0000001 will contain Maestro transactions destined for acquirer BIN 544444. The file created for endpoint 0000002 will contain MasterCard transactions destined for acquirer BIN 544444.

An acquirer might choose to use this arrangement to separate debit and credit activity.

Option 4: Issuer Account Range

With this option, a customer can specify different endpoints according to issuer account range. The following table is an example.

Issuer Account Range	Endpoint
541111	0000001
542222	0000002

In this example, GCMS will create one file for endpoint 0000001 and one file for endpoint 0000002 after each specified clearing cycle cutoff.

The file created for endpoint 0000001 will contain transactions destined for issuer account range 541111. The file created for endpoint 0000002 will contain MasterCard transactions destined for issuer account range 542222.

An issuer might choose to use this arrangement to separate consumer and corporate activity, by assigning consumer account ranges to one endpoint and corporate account ranges to another endpoint.

An issuer might also choose to use this arrangement to separate debit and credit activity, by assigning one endpoint to Maestro or Cirrus account ranges and another endpoint to MasterCard account ranges.

Option 5: Issuer Account Range plus Card Program Identifier

With this option, a customer can specify different endpoints based on the combination of issuer account range plus card program identifier. The following table is an example.

Clearing Processing Details

Creating IPM Messages

Issuer Account Range	Card Program Identifier	Endpoint
545555	Cirrus (CIR)	0000001
545555	MasterCard (MCC)	0000002

In this example, GCMS will create one file for endpoint 0000001 and one file for endpoint 0000002 after each specified clearing cycle cutoff.

The file created for endpoint 0000001 will contain Cirrus transactions destined for issuer account range 545555. The file created for endpoint 0000002 will contain MasterCard transactions destined for issuer account range 545555.

An issuer might choose to use this arrangement to separate Cirrus and MasterCard activity for each account range.

Option 6: Issuer Account Range plus Card Program Identifier plus ATM versus POS

With this option, a customer can specify different endpoints according to the combination of issuer account range, card program identifier, and whether the transaction is an ATM transaction. The following table is an example.

Issuer Account Range	Card Program Identifier	ATM/POS	Endpoint
545555	Cirrus (CIR)	ATM	0000001
545555	MasterCard (MCC)	Not specified	0000002
547777	Maestro (MSI)	ATM	0000001
547777	Maestro (MSI)	POS	0000003

In this example, GCMS will create one file for endpoint 0000001, one file for endpoint 0000002, and one file for endpoint 0000003 after each specified clearing cycle cutoff.

The file created for endpoint 0000001 will contain Maestro and Cirrus ATM transactions destined for issuer account ranges 545555 and 547777. The file created for endpoint 0000002 will contain all MasterCard transactions destined for issuer account range 545555. The file created for endpoint 0000003 will contain Maestro POS transactions destined for issuer account range 547777.

An issuer could use this option to simulate the processing class concept by assigning one endpoint to Maestro and Cirrus ATM transactions, one endpoint to Maestro POS transactions, and one endpoint to MasterCard transactions, for each issuing account range.

GCMS Sequence of the File Generated by MasterCard

Within a given MasterCard destination (a combination of endpoint and DE 93 [Destination ID]), GCMS sequences files generated by MasterCard as shown in the following table.

Table 2.3—Sequence of Files Generated by MasterCard

IPM Inbound Message Type		IPM MTI-Function Code Combination
1.	File Header	1644-697
2.	Text Messages	1644-693
3.	Currency Updates	1644-640
4.	First Presentments	1240-200
5.	Financial Detail Addendum (if required)	1644-696
6.	Retrieval Requests	1644-603
7.	Fee Collections (Retrieval Fee Billing)	1740-700
8.	First Chargebacks, Full and Partial	1442-450 1442-453
9.	Second Presentments, Full and Partial	1240-205 1240-282
10.	Arbitration Chargebacks, Full and Partial	1442-451 1442-454
11.	Fee Collections (non-Retrieval Fee Billing)—DDDD-generated, Returns, Resubmissions, Arbitration Returns, and Clearing System-Generated	1740-700 1740-780 1740-781 1740-782 1740-783
12.	Message Exception and File Reject	1644-691 1644-699
13.	File Currency Summary, Financial Position Details, and Settlement Position Details	1644-680 1644-685 1644-688 1644-698
14.	File Trailer	1644-695

When there are multiple message types (for example, multiple first presentments) for multiple receiving customer IDs, the clearing system sequences them as follows:

Clearing Processing Details

Creating IPM Messages

- All message types except 1644-693 (Text Message) and 1644-640 (Currency Update): first by receiving customer ID and then by message type
- 1644-693 (Text Message) and 1644-640 (Currency Update) messages: once per processor by the first occurring (lowest) customer ID and then by message type

If a customer or processor processes for multiple customer IDs, GCMS constructs files generated by MasterCard as shown in the following table. For example, suppose that customer (processor) ID 004444, endpoint 1, processes for customer ID 002222 and customer ID 003333. When processing for multiple customer IDs, GCMS would construct the receiver's inbound file as shown in the following table.

Table 2.4—Example of Sequencing of Files Generated by MasterCard

MTI-Function Code	Description	Endpoint 1, to Customer ID (ICA):
1644-697	File Header	004444
1644-693	Text Message	002222
1644-640	Currency Update	002222
1240-200	First Presentment	002222
1644-696	Financial Detail Addendum	002222
1240-282	Second Presentment (Partial)	002222
1644-685	Financial Position Detail	002222
1644-698	Settlement Position Detail	002222
1240-200	First Presentment	003333
1644-603	Retrieval Request	003333
1740-700	Fee Collection (Retrieval Fee Billing)	003333
1442-450	First Chargeback—Full Amount	003333
1240-205	Second Presentment	003333
1442-451	Arbitration Chargeback—Full Amount	003333
1740-700	Fee Collection (non-Retrieval Fee Billing)	003333
1644-685	Financial Position Detail	003333
1644-695	File Trailer	004444

Merging of Clearing Information Between Cycles

Customers and processors may choose to receive clearing data less than six times per day. This results in the merging of their clearing activity across cycle boundaries.

When the customer's or processor's next delivery cycle is completed, the clearing file delivered will actually represent activity from two cycles, or even three cycles, if two consecutive cycles have been skipped. In the following example, if a customer receives clearing data after cycles 1, 2, 5, and 6, the file delivered after cycle 5 will contain data from clearing cycles 3, 4, and 5.

NOTE

In addition to the six primary clearing cycles, a seventh clearing cycle exists exclusively for Mexico domestic switching transactions.

NOTE

Within the MTI-Function Code category, data will not necessarily be in ascending clearing cycle sequence. For example, cycle 5 First Presentments might precede cycle 4 First Presentments.

Example Illustrating Delivery Cycle 5 with Clearing Cycles 3, 4, and 5

MTI-Function Code	Description	Clearing Cycle	Delivery Cycle
1644-697	File Header	5	5
1644-693	Text Message	5	5
1644-640	Currency Update	5	5
1240-200	First Presentment	3, 4, 5	5
1644-696	Financial Detail Addendum (when present)	3, 4, 5	5
1644-603	Retrieval Request	3, 4, 5	5
1740-700	Fee Collection/Retrieval Fee Billing (DE 25 = 7614)	3, 4, 5	5
1442-450/453	First Chargeback, Full or Partial	3, 4, 5	5
1240-205/282	Second Presentment, Full or Partial	3, 4, 5	5
1442-451/454	Arbitration Chargeback, Full or Partial	3, 4, 5	5
1740-700/780/781/782/783	Fee Collections/Other (other than DE 25 = 7614)	3, 4, 5	5
1644-691	Message Exception	3, 4, 5	5
1644-699	File Reject	3, 4, 5	5
1644-680	File Currency Summary	3, 4, 5	5

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Creating IPM Messages

MTI-Function Code	Description	Clearing Cycle	Delivery Cycle
1644-685	Financial Position Detail	3, 4, 5	5
1644-688	Settlement Position Detail	3, 4, 5	5
1644-695	File Trailer	5	5

The individual messages in a specific MTI-Function Code will continue to be sequenced as they are today.

Delivery of Administrative Messages Following Clearing Cycles

Customers and processors that receive early reconciliation files will receive their early reconciliation files as soon as GCMS has processed their outgoing files. They will receive their administrative messages, such as those from MasterCard to customers, after the next available delivery cycle they have chosen.

NOTE

In addition to the six primary clearing cycles, a seventh clearing cycle exists exclusively for Mexico domestic switching transactions.

Customers and processors that elect to receive early reconciliation files may receive information after all six cycles. For example, if a customer chooses to receive clearing files after cycles 1, 2, 4, and 6, and to send files to MasterCard during cycles 3 and 5, the customer will receive clearing files in all six cycles.

Customers and processors that choose to not receive early reconciliation will receive all of their reconciliation messages, error messages, and messages from MasterCard to customers after the next available delivery cycle they have chosen.

GCMS will not recalculate or merge totals of reconciliation messages that are held until the next available delivery cycle.

For example, if a customer or processor has selected cycles 1, 3, 4, and 6 as its delivery cycles and has elected to not receive early reconciliation files, the following will apply:

- Reconciliation and error messages, if any, from cycle 1 will be delivered after cycle 1 processing.
- Reconciliation and error messages generated in clearing cycle 2 will be held, combined with any reconciliation and error messages reconciliation and error messages generated during cycle 3, and delivered after cycle 3 processing.
- Reconciliation and error messages generated in clearing cycle 4 will be delivered after cycle 4 processing.
- Reconciliation and error messages generated in clearing cycle 5 will be held, combined with any generated during cycle 6, and delivered after cycle 6 processing.

The following table illustrates the differences of selecting receipt of early reconciliation messages when both processors have chosen cycles 1, 3, 4, and 6 as their delivery cycles.

Table 2.5—Early Reconciliation Customer and Non-Early Reconciliation Processor Example

IF the current cycle is...	AND both processors send in...	Processors that choose early reconciliation files will receive...	Processors that do not choose early reconciliation files will receive...
Cycle 1	First Presentment messages totaling USD 1,000	Acknowledgement messages for the USD 1,000 in First Presentments when GCMS processes the file	Acknowledgement messages for the USD 1,000 in First Presentments from cycle 1
Cycle 2	First Presentment messages totaling USD 2,000	Acknowledgement messages for the USD 2,000 in First Presentments when GCMS processes the file	Acknowledgement held for the next delivery cycle
Cycle 3	First Presentment messages totaling USD 3,000	Acknowledgement messages for the USD 3,000 in First Presentments when GCMS processes the file	Acknowledgement messages for the USD 2,000 in First Presentments from cycle 2 Acknowledgement messages for the USD 3,000 in First Presentments from cycle 3
Cycle 4	First Presentment messages totaling USD 4,000	Acknowledgement messages for the USD 4,000 in First Presentments when GCMS processes the file	Acknowledgement messages for the USD 4,000 in First Presentments from cycle 4

Clearing Processing Details

Creating IPM Messages

IF the current cycle is...	AND both processors send in...	Processors that choose early reconciliation files will receive...	Processors that do not choose early reconciliation files will receive...
Cycle 5	First Presentment messages totaling USD 5,000	Acknowledgement messages for the USD 5,000 in First Presentments when GCMS processes the file	Acknowledgement held for the next delivery cycle
Cycle 6	First Presentment messages totaling USD 6,000	Acknowledgement messages for the USD 6,000 in First Presentments when GCMS processes the file	Acknowledgement messages for the USD 5,000 in First Presentments from cycle 5 Acknowledgement messages for the USD 6,000 in First Presentments from cycle 6

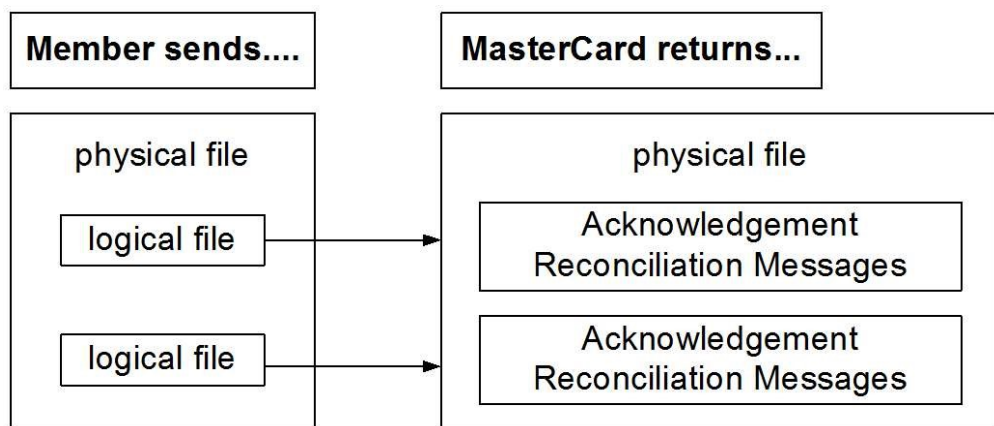
Sequence of the Early Reconciliation File

Guidelines and processes exist for the generation and exchange of early reconciliation files between MasterCard, GCMS, and customers.

Customers electing to receive early reconciliation files generated by MasterCard will receive one physical file for each physical file sent to MasterCard for processing. If the customer sends a physical file containing two logical files, GCMS will return one early reconciliation Message file. The acknowledgement reconciliation messages for the two logical files contained in the file sent to MasterCard will be contained in the single early reconciliation message physical file.

For example, if the customer sends two logical files within a physical file, GCMS will send the acknowledgement reconciliation messages for the two logical files within one physical file. Refer to the following figure for an illustration of this example.

Figure 2.5—Number of Early Reconciliation Files Returned



The sequence number returned by GCMS in the T113 early reconciliation bulk file generated by MasterCard will match the sequence number sent by the customer in the corresponding customer-generated R111 GCMS Data bulk file for those customers electing receipt of the early reconciliation files. Mexico Domestic transactions for the seventh clearing is sent by customers under bulk type RSP1 and GCMS will use the sequence number from the RSP1 bulk file for early reconciliation and sent under the Bulk File T113 bulk to customers.

The sequence of an IPM early reconciliation message physical file generated by MasterCard is similar to the sequence in the following table. Suppose that customer (processor) ID 004444, endpoint 1, processes for customer IDs 002222, 003333, 005555, and 006666. When processing for multiple customer IDs, GCMS would construct the receiver's inbound file as shown in the following table.

Sequencing of Files Generated by MasterCard Early Reconciliation

MTI-Function Code	Description	Endpoint 1, to Customer ID (ICA):
1644-697	File Header	004444
1644-680	File Currency Summary	002222
1644-685	Financial Position Detail	003333
1644-691	Message Exception	005555
1644-685	Financial Position Detail	005555
1644-691	Message Exception	006666
1644-685	Financial Position Detail	006666
1644-695	File Trailer	004444

NOTE

This example assumes that data for all customers was received in two logical files. Each logical file contains a file header, followed by various IPM clearing messages, followed by a file trailer.

Customers can match the physical file sent to MasterCard with the early reconciliation file shown below by the T113 GCMS early reconciliation file. The following table identifies the pairing of the early reconciliation files with the file sent by the customer.

The customer should match the...	With the...
T113 GCMS Early Reconciliation File received from MasterCard	R111 (or RSP1 for Mexico Domestic transactions under the seventh clearing cycle) GCMS Data sent by the customer.
T121 Test—GCMS Early Reconciliation File received from MasterCard	R119 (or RSP3 for Mexico Domestic transactions under the seventh clearing cycle) Test—GCMS Data sent by the customer.

Administrative, IPM Text Messages Used by the Clearing System

The clearing system uses IPM text messages for the following functions:

- To transmit “broadcast” messages from the clearing system to all customers
- To transmit text messages (such as “No Data” messages) from the clearing system to a customer

This message type contains 1644 in the MTI and 693 in DE 24 (Function Code) to identify it as a text message.

Broadcast Text Messages Used by the Clearing System

The clearing system distributes broadcast text messages in every clearing cycle for the applicable period by the combination of customer or processor, endpoint, and card program identifier.

Because broadcast text messages may contain time-critical information, these text messages are not optional. The clearing system distributes them whether or not customers have financial activity or other clearing data in the next available delivery cycle based on options for the destination endpoint. If GCMS has acknowledgement, notification, or error messages ready to send at the time of the broadcast message, GCMS may include them in the same file as the broadcast message. However, even if no such messages are ready to be sent, GCMS will send the broadcast message after the clearing cycle cutoff is complete.

“No Data” Text Messages Used by the Clearing System

If selected by the customer or processor, the clearing system generates a “No Data” message when there is no clearing data activity for the specified customer ID for the entire delivery cycle.

For example, if the customer has chosen to receive clearing data from both cycles 5 and 6 in one delivery, a “No Data” message would be delivered for the customer ID only if the customer has no data to receive for either cycle. The message text in DE 72 (Data Record) will appear as follows: NO DATA FOR THIS MEMBER AND/OR ENDPOINT FOR THIS CLEARING.

The clearing system distributes “No Data” text messages by the combination of customer or processor endpoint and delivery cycle. The clearing system generates these messages only if the customer or processor chooses to receive them.

If the customer or processor does **not** choose to receive this “No Data” message and there is no data for that customer or endpoint, the customer or processor will not receive an empty dataset for specified delivery cycles. This “No Data” message also applies to the seventh clearing cycle for Mexico domestic switching transactions.

NOTE

MasterCard recommends that customers using CONNECT: Direct choose to receive the “No Data” file.

Processing and Delivery of Clearing Files

Clearing Times

The sending customer can submit transaction data for clearing to the St. Louis Operations Center (Central Site) seven days a week, 24 hours a day.

MasterCard processes the data during one of six clearing periods Monday through Saturday. The six cutoff times per processing day are 18:00 (16:00 on Sunday) and 21:00 the day before the processing day, and 00:00, 03:00, 06:00, and 08:00 of the processing day. (All times shown are expressed as St.Louis time.)

Customers may create and send clearing files as frequently as they want. Sending clearing files earlier allows customers to have more transactions processed in earlier clearing cycle cutoffs, thus ensuring the next available settlement of their accepted transactions.

DEFINITION

Julian date refers to the day of the year expressed as a three-position number, with a range of 001 through 366 (for example, 001 on 1 January).

The file sequence subfield within PDS 0105 (File ID), a five-position file sequence number, supports the frequent submission of files. It allows customers to have up to 99,999 files per unique combination of PDS 0105, subfields one through three. PDS 0105 in the IPM format consists of the subfields shown in the following table.

File ID Format for PDS 0105

Subfield	Description	Format
1	File Type	n-3 File type 001 = Clearing system to customer File type 002 = Customer Generated File type 003 = Early Reconciliation
2	File Reference Date	n-6

Clearing Processing Details

Processing and Delivery of Clearing Files

Subfield	Description	Format
3	Processor ID	n-11
4	File Sequence Number	n-5 For customer-generated files: Number assigned by customer or processor. Must be unique for each Processor ID and File Reference Date combination. For files generated by MasterCard: Positions 1–2 = Clearing Cycle NOTE: This will be 99 if the customer receives clearing files containing data from two or more clearings. Position 3 = Delivery Cycle (Values = 1–6) Positions 4–5 = Sequence Number

NOTE

For additional information about customer delivery cycle options, refer to the [Files Generated by MasterCard](#) section in this chapter.

Methods of Transmitting Data to GCMS

Customers transmit clearing data to GCMS through certain media and under certain conditions.

Following are the methods of transmitting clearing data to GCMS:

- MasterCard interface processor (MIP)
- CONNECT:Direct or XCOM
- MasterCard File Express

For each transmission method, GCMS performs edits to ensure that the system does not process test files in the production environment. Therefore, if a customer inadvertently sends a test file to the production environment, GCMS does not process it as production data.

Customers use the PDS 0122 (Processing Mode) to designate their outbound clearing files as production (a value of P) or test (a value of T). All files generated by MasterCard will specify whether MasterCard created them in production or in test mode, so that the customer can perform edits to ensure that it does not process test files in the production environment.

Transmitting Data to GCMS through the MIP

Customers using the MasterCard Worldwide Network may use a MasterCard interface processor (MIP) to interact directly with GCMS.

The MIP is a front-end communications processor that MasterCard places on-site at a MasterCard customer's facility to provide access to the MasterCard Worldwide Network. Through the MIP interface and MasterCard gateways, MasterCard customers have access to all MasterCard electronic funds transfer (EFT) products and to a wide variety of other financial EFT services.

Each customer's MIP is configured on the basis of how it will connect with the customer's host and the applications that the customer supports.

MIP Bulk File Naming Standard

All customers sending R111 (or RSP1) GCMS Data and R119 (or RSP3) Test-GCMS Data must use the following format when naming the bulk file.

Example: R1110025636504

Name Component	Positions	Value
File Type	1–1	R
Bulk Type	2–4	111 GCMS Data 119 Test—GCMS Data
Member Endpoint	5–9	Endpoint for the sending customer. Right-justified, zero-filled.
Julian Day	10–12	Julian Day portion of the Julian date.
Sequence Number	13–14	Numeric sequence number of the file. This number should be unique within a MasterCard clearing processing day. Right-justified, zero-filled. Valid values include 01–99.

NOTE

For more information about MIP hardware and Host/MIP connections, and a planning checklist for the physical installation, refer to the *Data Communications Manual* or contact the Customer Operations Services team.

Bulk IDs for Clearing Data

Customers transmitting IPM clearing data via the MIP should use the following PDS 0122 (Processing Mode) and IPM bulk ID values.

Bulk Type	Description	Value in PDS 0122 (Processing Mode)
R111	Member-generated production outbound IPM data to Central Site	P
RSP1	Member-generated production outbound IPM data to Central Site	P

Clearing Processing Details

Processing and Delivery of Clearing Files

Bulk Type	Description	Value in PDS 0122 (Processing Mode)
T112	Production IPM data generated by MasterCard from Central Site	P
T113	Early Reconciliation Message file generated by MasterCard: If the member chooses to receive this file, it provides early reconciliation and error message details after each logical file from a member is processed	P
T121	Test bulk ID for the Early Reconciliation Message file generated by MasterCard	T
R119	Member-generated test IPM data to Central Site	T
RSP3	Member-generated test IPM data to Central Site	T
T120	Test IPM data generated by MasterCard from Central Site	T

Bulk IDs for the MPE

Customers receiving the IPM MPE via the MIP will receive the following IPM bulk ID values.

Bulk Type	Description	Value in PDS 0122 (Processing Mode)
T067	Production IPM MPE generated by MasterCard from Central Site (daily updates)	P
T068	Production IPM MPE generated by MasterCard from Central Site (full file replacement)	P
T167	Test IPM MPE generated by MasterCard from Central Site (daily updates)	T
T168	Test IPM MPE generated by MasterCard from Central Site (full file replacement)	T

Acknowledgement Bulk Files

After having applied the bank identification number (BIN) updates from the IPM MPE bulk files listed above, acquirers must submit corresponding acknowledgement bulk files with the following IPM bulk ID values to MasterCard.

- RMF5—Acknowledgement GCMS Parameter Extract Data—Daily Updates
- RMF7—Acknowledgement GCMS Parameter Extract Data Full File Replace
- RMG5—Test—Acknowledgement GCMS—Parameter Extract File Daily Update
- RMG7—Test—Acknowledgement GCMS—Parameter Extract Full File Replace

The acknowledgement bulk files will contain header information from the MPE file being acknowledged so that the two may be matched.

Layout of Acknowledgement Files—Daily Update MPE Files

Field Name	Positions	Attribute	Comments and Values
IPM MPE File Identifier	1–15	an-15	Constant value: “UPDATE FILE” followed by four spaces.
Date created	16–23	n-8	Date the IPM MPE Daily Update file was generated. Format: YYYYMMDD.
Time created	24–27	n-4	Time the IPM MPE Daily Update file was generated. Format: HHMM.
Filler	28–125	an-98	Spaces.

Layout of Acknowledgement Files—Full File Replace MPE Files

Field Name	Positions	Attribute	Comments and Values
IPM MPE File Identifier	1–17	an-17	Constant value: “REPLACEMENT FILE” followed by one space.
Module Identifier	18–31	an-14	Module that generated the IPM MPE.
Filler	32–45	an-14	Constant value: “CURRENT-DATE=” followed by one space.
Date created	46–54	an-9	Date the IPM MPE Full File Replacement was generated. Format: MM DD YY followed by one space.
Filler	55–61	an-7	Constant value: “TIME =” followed by one space.
Time created	62–69	an-8	Time the IPM MPE Full File Replacement was generated. Format: HH:MM:SS
Filler	70–125	an-56	Spaces.

Transmitting Data to GCMS via CONNECT:Direct or XCOM

CONNECT:Direct and XCOM are commercially available software products for bulk file transmission via a dedicated network communication between MasterCard Central Site and a customer's host mainframe servers.

This facility supports all of the transmission types for bulk data. For further information, customers may contact the Customer Operations Services team.

For transmission of clearing files to GCMS, customers require Global File Transfer dataset naming conventions that are specific to IPM format files. Customers transmitting IPM clearing data via CONNECT:Direct or XCOM should use the usual procedures to request new file types.

CONNECT:Direct Bulk File Naming Standard

All customers sending R111 (or RSP1 for Mexico Domestic transactions under the seventh clearing cycle) GCMS Data and R119 (or RSP3 for Mexico Domestic transactions under the seventh clearing cycle) Test—GCMS Data must use the following format when naming the bulk file.

Example: MCI.AR.CR111.I01234.E0000256.D1231.G1845004

Name Component	Position	Value
Constant	1–13	MCI.AR.CR111. for R111 GCMS Data YTF.AR.CR119. for R119 MTF—GCMS Data
Constant	14	I
Member ID	15–19	Member ID. Right-justified, zero-filled.
Constant	20–21	E
Member Endpoint	22–28	Endpoint for the sending member. Right-justified, zero-filled.
Constant	29–30	D
Date	31–34	MMDD
Constant	35–36	G
Time	37–40	HHMM (24 hour clock)
Sequence Number	41–43	Numeric sequence number of the file. This number should be unique within a MasterCard clearing processing day. Right-justified, zero-filled. Valid values include 001–099.

NOTE

Customers should contact their Customer Implementation Services specialist if a new dataset name will be used.

Transmitting Data to GCMS via MasterCard File Express

MasterCard File Express provides customers and processors a secure mechanism for transferring production and test files between any desktop and MasterCard.

Users of this product communicate with MasterCard by using one of the MasterCard OnLine® connectivity options. The encryption and compression of all data exchanged between the desktop user and MasterCard is done in a manner that is transparent to the desktop user.

MasterCard File Express enables customers to do the following:

- Exchange (download and upload) production and business partner testing from MasterCard to the customer PC.
- Retrieve archived files. Archived files are those that have been successfully downloaded once before. Archived files are available for retrieval for a specific number of calendar days, depending on the file type.
- Generate a file transmission report. The file transmission report provides information about successful or unsuccessful file exchanges occurring during the current transfer session. The user can print the file transmission report on a default printer or preview it from the MasterCard File Express application.

For transmission of clearing files to GCMS, customers require MasterCard File Express identification that is specific to IPM format files. Customers transmitting IPM clearing data via MasterCard File Express should use the usual procedures to request new MasterCard File Express file types.

NOTE

For more information about MasterCard File Express, refer to the *File Express Client User Guide*.

Record Descriptor Word at the Beginning of IPM Messages

A Record Descriptor Word (RDW) field appears before each IPM message.

The format of the data in both IPM clearing messages and IPM MPE messages (both full file and updates) is Variable Blocked Spanned (VBS). Therefore, messages may be longer than the MasterCard Worldwide Network constraint of 1014 bytes. To accommodate customers delivering and receiving these messages over the Network and via MasterCard File Express, a four-byte Record Descriptor Word field immediately preceding each IPM message holds the length of the data in each message.

IPM Pre-edit Software, Workstation Plus Version

The IPM Pre-edit software, Workstation Plus version, handles the RDW in the IPM clearing messages and in the IPM MPE messages correctly.

Clearing Processing Details

Processing and Delivery of Clearing Files

An RDW is present in all VBS clearing files that MasterCard delivers to customers or receives from customers. The customer's method of file transfer determines whether the customer needs to handle these files differently.

MHPF MIP Load and Unload Modules

The Member Host Preparation Facility (MHPF) MIP load and unload modules handle the RDW in the IPM clearing messages and in the IPM MPE messages correctly.

Additional information may be found in the *File Transfer Manual*.

CONNECT:Direct or XCOM

The RDW does not affect customers that send or receive IPM clearing files, the IPM MPE file, or both via CONNECT:Direct or XCOM.

MasterCard Worldwide Network through a MIP

Refer to the following table to determine what to do with the Record Descriptor Word (RDW) based on the communications software they use.

IF a customer...	AND the customer...	THEN the customer...
Sends IPM clearing files via the MasterCard Worldwide Network through a MIP	Uses MasterCard MHPF communications software	Can handle the RDW by installing the optional JCL. Job SMH1003R is the Customer Host Bulk Load for Variable Length Data Files.
	Does not use MasterCard MHPF communications software	Must delete then insert the RDW at the beginning of each IPM clearing message before loading the IPM clearing file to the MIP for delivery to MasterCard.
Receives IPM clearing files, the IPM MPE, or both via the MasterCard Worldwide Network through a MIP	Uses MasterCard MHPF communications software	Can handle the RDW by installing the optional JCL. Job SMH2003R is the Customer Host Bulk Unload for Variable Length Data Files.
	Does not use MasterCard MHPF communications software	Must remove the RDW from the beginning of each IPM clearing message, as the file is unloaded from the MIP.

Processing Cards That have Converted from Cirrus to PLUS

Once cards are converted from Cirrus to PLUS, customers must be aware of the processing changes that occur.

In instances where an issuing account range has been converted from Cirrus to PLUS, new transactions occurring after the conversion must be authorized and processed by the Visa/PLUS ATM network, not by the MasterCard Single Message System. However, transactions that were authorized by the Single Message System before the conversion to PLUS must be cleared and settled by both GCMS and the Single Message System.

To accommodate customers that use the IPM MPE file for both authorization routing decisions and clearing processing, when an issuer account range converts to PLUS, MasterCard removes the account range from table IP0040T1 (Issuer Account Range) in the IPM MPE file sent to customers, but still retains it in table IP0040T1 in the IPM MPE file used by GCMS. This procedure allows acquirers to stop sending new authorization requests for the issuer account range to the Single Message System, but still process clearing messages for previously authorized transactions by sending them to GCMS.

Acquirers that use the IPM Pre-edit and Utilities software to process production clearing messages before sending their files to GCMS may receive error messages from the IPM Pre-edit software for these transactions, even though they are accepted when processed by GCMS. To account for this condition, in GCMS Release 06.2, MasterCard enhanced the IPM Pre-edit and Utilities software to prevent customers from receiving error messages when processing clearing messages for transactions authorized before an issuer account range is converted from Cirrus to PLUS. This enhancement consisted of adding the issuer account ranges that had been converted from Cirrus to PLUS, to a MasterCard private-use IPM MPE table IP9000T1. The IPM Pre-edit software will use this table in its “optimized” table processing, to allow IPM Pre-edit to accept clearing transactions involving these converted account ranges.

The following table describes distinctions between the two versions of the IPM MPE file in this context.

Clearing Processing Details

Confirmation of Successful Receipt and Processing of GCMS Transmission Files

File	Change
IPM MPE file sent to customers	• MasterCard private-use table IP9000T1—contains issuer account ranges that have converted from Cirrus to PLUS • Table IP0090T1 (Issuer Account Range Card Program Identifier and Business Service Arrangement Participation)—contains issuer account ranges that have converted from Cirrus to PLUS. • Table IP0040T1 (Issuer Account Range)—omits issuer account ranges that have converted from Cirrus to PLUS, so that acquirers can continue to understand that new authorizations for these account ranges must be authorized and processed via the Visa/PLUS ATM network, and not by MDS.
“Optimized” version of the IPM MPE (created by the IPM Pre-edit and Utilities software)	• Table IP0090T1 (optimized version)—contains issuer account ranges that have converted from Cirrus to PLUS. • Table IP0040T1 (optimized version)—contains issuer account ranges that have converted from Cirrus to PLUS so that the IPM Pre-edit and Utilities software will no longer reject clearing transactions for these issuer account ranges.

These changes were previously implemented and announced as part of GCMS Release 06.2. They are provided here to customers as a courtesy reminder of this feature; therefore, no action is required.

Confirmation of Successful Receipt and Processing of GCMS Transmission Files

Customers that send an inbound GCMS transmission data file to MasterCard will receive an automated corresponding outbound confirmation file from MasterCard.

Customers that do not receive a confirmation file need to contact the Customer Operations Services team to verify that their inbound file was received and processed successfully by MasterCard.

Penalty for Late GCMS Retransmission Request

Customers that submit late GCMS retransmissions requests will be subject to an administrative fee. The explanation of such a fee is as follows.

If a customer is unable to process a GCMS transmission and is connected to the MasterCard Worldwide Network, the customer must restage the data and unload it again. If the customer is not connected to the MasterCard Worldwide Network, the customer must immediately request a recreate of the transmission.

Because satisfying late requests requires reprocessing in GCMS, MasterCard will charge each customer that requests the transmission of data no longer available on the MIP. An administrative fee is charged per file of data requested. See 2GC0001—Clearing Data Recreation fee in *MasterCard Consolidated Billing System* manual menu.

GCMS Rejection of Messages

GCMS will reject transactions containing inadequate message elements. Information about exception conditions, IPM error messages created by GCMS, and the message types that GCMS can reject is as follows.

In general, all transactions submitted to GCMS for clearing must pass specific GCMS edits. The sending customer must present all message elements with correct contents (for example, a numeric element must contain only digits) and ensure that all required elements are present. If the sending customer does not have an accurate description of required information, the customer should **not** provide the element in the IPM message.

GCMS will reject the message if edits reveal that required information is missing. In most cases, GCMS will also reject a message if an element contains all low values, all high values, all spaces, or all zeros.

Refer to the *IPM Clearing Formats* manual for specific exceptions to this policy. One such exception is for Mexico Domestic transactions where, under certain conditions, the transaction is not rejected but flagged for error and the transaction settles. This is referred to as syntax error condition.

NOTE

For information about the edits that apply to individual IPM messages, refer to the *IPM Clearing Formats* manual.

When GCMS encounters exception conditions at the single message or file level, it generates appropriate error messages. GCMS creates the following types of IPM error messages:

- Full file rejection messages
- Single message rejection messages

NOTE

IPM reject messages contain no warning or adjustment conditions, only reject conditions.

GCMS can reject both a first presentment message and its associated financial detail addendum messages, or it can reject just the associated financial detail addendum messages, as follows:

- If GCMS rejects an IPM first presentment message, it also rejects and returns to the transaction originator all associated financial detail addendum messages.
- If GCMS rejects financial detail addendum messages, it does not necessarily reject the associated first presentment message.

Full IPM File Rejection by GCMS

Details of IPM file rejections by GCMS—including what information is provided in the rejection message sent by GCMS, and examples of scenarios in which IPM files may be rejected—are as follows.

If GCMS rejects an entire IPM file, it does not forward the file or any of its messages for further processing. GCMS generates the file reject messages to indicate that it has rejected the entire file.

The full file reject message provides the following:

- Up to 10 error codes describing the errors that caused the file to reject.
- The file ID of the rejected file, if it is present and the clearing system is able to parse it.
- Up to 200 positions of the rejected file's first message.

NOTE

GCMS does not return the IPM file reject message if the header message of the rejected file is unparseable, nor if PDS 0105 (File ID), subfield 3 (Processor ID) is invalid. In these cases, GCMS cannot determine the receiver of the file reject message and therefore cannot notify the appropriate customer of the file reject.

Example 1

Suppose that the transaction originator omits IPM messages between the file header and file trailer messages. Because GCMS requires data between the file header and file trailer messages in a customer-submitted logical file, the absence of data results in a file reject. The clearing system would return a file reject message to the transaction originator indicating the following:

- The file ID of the rejected file
- The appropriate error code
- Up to 200 positions of the first message (the header) in the rejected file

The clearing system would not forward any of the messages to the intended transaction destinations because it rejected the entire file.

Example 2

Suppose that the transaction originator includes a file ID in the file trailer message that does not match the file ID in the file header message. The clearing system would return a file reject message to the transaction originator indicating the following:

- The file ID of the rejected file
- The field in error, with the appropriate error code
- Up to 200 positions of the first message in the rejected file

The clearing system would not forward any of the messages to the intended transaction destinations because it rejected the entire file.

Example 3

Suppose that the transaction originator includes PDS 0105 on a file header message that has a duplicate file ID—that is, the file ID duplicates the ID of another clearing file submitted within the previous 180 days. The clearing system would return a file reject message to the transaction originator indicating the following:

- The file ID of the rejected file
- The field in error, with the appropriate error code
- Up to 200 positions of the rejected file's first message

The clearing system would not forward any of the messages to the intended transaction destinations because it rejected the entire file.

Full Clearing File Rejections Delivered with Early Reconciliation

If a customer receives the Early Reconciliation File, and GCMS rejects their entire clearing file, GCMS sends the file reject between a file header and a file trailer, as shown in the following table.

MTI-Function Code	Description	Endpoint 1, To:
1644-697	File Header	001111
1644-699	File Reject	001111
1644-695	File Trailer	001111

If a customer processes for multiple customer IDs, GCMS sends a single file reject for that customer processor surrounded by a file header and a file trailer. For example, if customer 004444, endpoint 1:

Clearing Processing Details

GCMS Rejection of Messages

- Processes for member IDs 001111, 002222, and 003333
- Sends a file with transactions for member IDs 001111, 002222, and 003333, which GCMS rejects with a full file reject, and
- Receives the Early Reconciliation File

GCMS would construct the file generated by MasterCard as follows.

MTI-Function Code	Description	Endpoint 1, To:
1644-697	File Header	004444
1644-699	File Reject	004444
1644-695	File Trailer	004444

Single Message Rejection

GCMS generates IPM message exception messages when the system encounters an exception condition as it is processing single messages. The message exception messages will contain the following.

- Up to 10 codes identifying the errors within the message being rejected and the associated data elements, PDSs, or both that caused the exception conditions.
- The file ID of the file containing the rejected message, if it is present and the clearing system can parse the data.
- The Acceptance Brand and Business Service ID being evaluated at the time of the reject.

The entire original message that the clearing system rejected follows the single message reject, if the message is parseable.

IF the message is rejected by...	THEN...
GCMS	GCMS provides the entire original message unaltered.
The IPM Pre-edit application	The IPM Pre-edit application provides the entire original message, unaltered except for DE 71 (Message Number). (See following information.)

The IPM Pre-edit application assigns a new DE 71 (Message Number) value to the rejected original message when returning it to the sending customer, although GCMS retains the DE 71 value from the original message. Customers also may use PDS 0138 (Source Message Number ID) of the message exception message to identify the input source message number. PDS 0138 will not be present if the original message is unparseable and GCMS cannot determine the DE 71 value from the original message.

If all detail messages in a logical file are rejected, the clearing system generates a Message Exception/1644-691 for each rejected detail message. Additionally, the clearing system generates a File Reject/1644-699 because none of the individual messages were accepted.

Single Message Rejections Delivered with Early Reconciliation

If a customer receives the Early Reconciliation File and GCMS rejects individual messages in the customer's clearing file, GCMS sends the message exception messages between a file header and a file trailer.

The rejected message follows its associated message exception message, as shown in the following table.

MTI-Function Code	Description	Endpoint 1, to:
1644-697	File Header	001111
1644-691	Message Exception	001111
1240-200	Rejected First Presentment	001111
1644-691	Message Exception	001111
1644-696	Rejected Financial Detail Addendum	001111
1644-691	Message Exception	001111
1442-450	Rejected First Chargeback	001111
1644-685	Financial Position Detail	001111
1644-695	File Trailer	001111

If a customer processes for multiple member IDs, GCMS sends all the message rejects for that customer surrounded by a file header and a file trailer. For example, if customer 4444, endpoint 1, processes for member IDs 1111 and 2222 and receives the Early Reconciliation File, GCMS would construct the file generated by MasterCard as follows.

MTI-Function Code	Description	Endpoint 1, to:
1644-697	File Header	004444
1644-691	Message Exception	001111
1240-200	Rejected First Presentment	001111
1644-691	Message Exception	001111
1240-205	Rejected Second Presentment	001111
1644-685	Financial Position Detail	001111

MTI-Function Code	Description	Endpoint 1, to:
1644-691	Message Exception	002222
1644-603	Rejected Retrieval Request	002222
1644-680	File Currency Summary	002222
1644-695	File Trailer	004444

Reconciling Single Message Rejections

Customers should be prepared to administer the appropriate accounting procedures to handle single message rejections and to reconcile incoming acknowledgement reconciliation data with the previous outgoing data.

The customer may resubmit the rejected (corrected) messages mixed within a new file that contains other messages or as a separate file. The customer may resubmit a rejected file with the old file ID number only if the entire transmission is rejected.

Messages Supported by MasterCard for Mexico Domestic Transactions

MasterCard supports syntax errors, syntax error returns, retrieval request acknowledgement messages, and late presentments for Mexico domestic transactions.

Syntax Errors for Mexico Domestic Transactions

Information about syntax errors for Mexico domestic transactions—including the messages in which the syntax errors will be identified—is as follows.

Mexico domestic rules allow for transactions that meet certain conditions to be cleared and settled. Under these conditions, transactions are not rejected, but are flagged as containing one or more syntax errors. When a transaction is flagged with a syntax error, the receiver of the transaction has the right to return the transaction to the sender.

MasterCard will identify syntax errors in the following PDS 0005 (Message Error Indicator) messages for all Mexico domestic POS and credit card payment transactions.

- First and Second Presentment/1240
- First and Arbitration Chargeback/1442
- Retrieval Request/1644
- Miscellaneous Fee Collection/1740

PDS 0005 will contain both the MasterCard-defined syntax error number and the local reason code. For details about the syntax error identification, see PDS 0005 in Appendix E, “IPM Data Element and Private Data Subelement Definitions” in the Dual Message System Release 11.Q4 Document.

Transactions that are flagged only with syntax errors are not rejected, but will be cleared and settled business as usual. However, transactions that are flagged with syntax errors and also have other errors resulting from Clearing Platform edits will be rejected.

Syntax Error Returns for Mexico Domestic Transactions

The Clearing Platform will support the ability for the receiver of a Mexico domestic transaction with a syntax error to return the syntax error to the sender within a given timeframe using the same message format as used for the original transaction.

For example, an issuer may return a syntax error for a First Presentment/1240 message to the acquirer using a First Presentment/1240 message. Likewise, an acquirer may return a syntax error for a First Chargeback/1442 message to the issuer using a First Chargeback/1442 message.

When sending a syntax error return, the receiver must ensure that the message contains the following values:

- DE 25 (Message Reason Code) containing one of the following new message reason codes that identifies a syntax error return:
 - 1500 (for presentment messages only)
 - 4890 (for chargeback messages only)
 - 6390 (for retrieval request messages only)
 - 7715 (for miscellaneous fee collection messages only)
- PDS 0005 (Message Error Indicator) containing the syntax error. While a transaction may have multiple syntax errors, for syntax error return PDS 0005 will only identify a single condition as the reason for the return.
- PDS 0225 (Syntax Return, Original Message Reason Code) containing the original message reason code value from DE 25.

NOTE

Interchange and fees will be reversed on syntax error return messages. The receiver of the returned syntax error can return the message and collect funds using a Miscellaneous Fee Collection/1740 message, if applicable.

Error Detail—Input Sequence Report and Collection Only Error Detail—Input Sequence Report

GCMS reports rejected transaction data via the Error Detail—Input Sequence report and the Collection Only Error Detail—Input Sequence report. These reports provide all data elements of a rejected message, including data that fails edits and data that passes edits, highlighting the data elements in error.

These reports include rejected transaction details at the following levels:

- Logical file to MasterCard
- Processing Mode (Test or Production)
- Source Message Number
- Source Currency
- Source Amount
- Transaction Function
- Collection Only separated from non–Collection Only rejected transactions

These reports are billable at USD 0.01 per line and are billed through the MasterCard Consolidated Billing System (MCBS). The billing event numbers are as follows.

Report Number	Description	Billing Event Number
IP857010-AA	Error Detail Report	2RP2219
IP857010-BB	Collection Only Error Detail Report	2RP2220

The Error Detail—Input Sequence reports are optional. The clearing system transmits this report using bulk type T140 for production and bulk type T150 for test reports.

NOTE

Customers that request these reports will receive them after each clearing cycle, regardless of the customer's file delivery options. For example, if data from clearing cycles 3 and 4 are merged for data delivery, GCMS will produce a report after clearing cycle 3 and a separate report after clearing cycle 4.

Error Detail—Input Sequence Report (IP857010-AA), Banner Page, page 1

```

1-----10-----+---20-----+---30-----+---40-----+---50-----+---60-----+---70-----+---80-----+---90-----+---100-----+---110-----+---120-----+---130-----
IP857010-AA                                MASTERCARD WORLDWIDE                                RUN DATE YYYY-MM-DD                                PAGE 01

                                ERROR DETAIL - INPUT SEQUENCE
                                MESSAGE LEVEL REJECT
                                YYYY-MM-DD

FILE ID: XXX/YY-MM-DD/XXXXXXXXXX/9999
PROCESSING MODE: X

*** FILE PROCESSED - MESSAGE LEVEL ERRORS ENCOUNTERED ***
*** FILE PROCESSED - MESSAGE LEVEL ERRORS ENCOUNTERED ***
*** FILE PROCESSED - MESSAGE LEVEL ERRORS ENCOUNTERED ***
*** FILE PROCESSED - MESSAGE LEVEL ERRORS ENCOUNTERED ***

```

Error Detail—Input Sequence Report (IP857010-AA), Banner Page Field Descriptions

Field	Description
Run Date	The date on which this report was produced
Page	The page number within the report
File ID	The logical file ID of the member-generated file to which the data in this report pertains
Processing Mode	Type of processing (Production or Test) to be performed on this file
Description	A detailed description of the error encountered, or if no errors are encountered, the literal "FILE PROCESSED—NO ERRORS ENCOUNTERED"

Clearing Processing Details

GCMS Rejection of Messages

Error Detail—Input Sequence Report (IP857010-AA), File Level Reject, page 2 Field Descriptions

Field	Description
Run Date	The date on which this report was produced
Page	The page number within the report
File ID	The logical file ID of the member-generated file to which the data in this report pertains
Processing Mode	Type of processing (Production or Test) to be performed on this file
Error Code	A unique code (established by MasterCard) that identifies the type of error encountered. Refer to the <i>IPM Clearing Format Error Numbers and Messages</i> manual for a list of the error codes established by MasterCard and their corresponding descriptions.
Description	A detailed description of the error encountered
Source Message Number	Number of the original message that contains the error, from DE 71 (Message Number)
Element ID	The number of the data element or PDS causing the error condition
Invalid Data	(Does not print for file level rejects)
File Information	If parseable, contains up to the first 200 positions of data in a reject of an entire file (This information prints only for file-level rejects.)

Error Detail—Input Sequence Report (IP857010-AA), continuation of page 3

```
-----10-----+-----30-----+-----40-----+-----50-----+-----60-----+-----70-----+-----80-----+-----90-----+-----100-----+-----110-----+-----120-----+-----130-----
D0093      009999
D0094      009999
D0095      9999999999
P0023      NA
P0148      840
P0148      2
P0149      320
P0149      000
P0158      75
P0158      M
P0165      1
P0191      1
P0262      661
P0800      001409
P0800      1
P0800      01
P0805      1
P0805      1
```

Error Detail—Input Sequence Report (IP857010-AA), Message Level Reject, page 3
Field Descriptions

Field	Description
Run Date	The date on which this report was produced
Page	The page number within the report
File ID	The logical file ID of the member-generated file to which the data in this report pertains
Processing Mode	Type of processing (Production or Test) to be performed on this file
Source Message Number	Number of the original message that contains the error, from DE 71 (Message Number)
Source Amount	Monetary amount of the rejected message. For messages without a DE 4 (Amount, Transaction) value (for example, retrieval fee billing or financial detail addendum messages), the field will be zero
MTI-Function Code	The Message Type Identifier and the DE 24 (Function Code) value associated with the rejected message
Source Currency	The alphabetic currency code associated with the monetary amount
Error Code	A unique code (established by MasterCard) that identifies the type of error encountered. Refer to the <i>IPM Clearing Format Error Numbers and Messages</i> manual for a list of the error codes established by MasterCard and their corresponding descriptions.
Description	A detailed description of the error encountered
Source Message Number	Number of the original message that contains the error, from DE 71 (Message Number)
Element ID	The number of the data element or PDS causing the error condition
Invalid Data	Listing of the contents of the data element or PDS in error, within the rejected message (This information prints only for message level rejects.)
Message Details	Details about the message

[illegible]

**Error Detail—Input Sequence Report (IP857010-AA), Message Level Reject, page 3
(alternate) Field Descriptions**

Field	Description
Run Date	The date on which this report was produced
Page	The page number within the report
File ID	The logical file ID of the member-generated file to which the data in this report pertains
Processing Mode	Type of processing (Production or Test) to be performed on this file
Error Code	A unique code (established by MasterCard) that identifies the type of error encountered. Refer to the <i>IPM Clearing Format Error Numbers and Messages</i> manual for a list of the error codes established by MasterCard and their corresponding descriptions.
Description	A detailed description of the error encountered
Source Message Number	Number of the original message that contains the error, from DE 71 (Message Number)
Element ID	The number of the data element or PDS causing the error condition
Invalid Data	Listing of the contents of the data element or PDS in error, within the rejected message (This information prints only for message level rejects.)
Message Unparseable	Contains up to the first 200 positions of the rejected message when GCMS cannot parse the message into elements

Clearing Processing Details

GCMS Rejection of Messages

Error Detail—Input Sequence Report (IP857010-AA), Message Level Reject, page 4

```
1-----10-----20-----30-----40-----50-----60-----70-----80-----90-----100-----110-----120-----130-----
IP857010-AA
MASTERCARD WORLDWIDE
ERROR DETAIL - INPUT SEQUENCE
MESSAGE LEVEL REJECT
      YYYY-MM-DD

FILE ID: XXX/YYYY-MM-DD/XXXXXXXXXXXX/99999
PROCESSING MODE: X

MESSAGE TYPE
REGULAR      FINANCIAL DETAIL
              NON-FINANCIAL DETAIL
              UNRECOGNIZABLE DETAIL

              CURRENCY      AMOUNT      COUNT
              XXX          XXXXXXXXXX XXXXXXXXXX
              XXX          XXXXXXXXXX XXXXXXXXXX
              XXX          XXXXXXXXXX XXXXXXXXXX
              XXX          XXXXXXXXXX XXXXXXXXXX

***END OF REPORT***
```

Error Detail—Input Sequence Report (IP857010-AA), Message Level Reject, page 4
Field Descriptions

Field	Description
Run Date	The date on which this report was produced
Page	The page number within the report
File ID	The logical file ID of the member-generated file to which the data in this report pertains
Processing Mode	Type of processing (Production or Test) to be performed on this file
Message Type	Identifies whether the message has a settlement indicator of settled by MasterCard, bilateral (not settled by MasterCard), or Collection Only
Financial Detail	Identifies messages that have monetary impact
Non-Financial Detail	Identifies messages that do not have monetary impact
Unrecognizable Detail	Identifies messages that cannot be parsed
Currency	The alphabetic currency code of the source currency
Amount	The net total of the source monetary amount of the messages. Messages that do not include a DE 4 (Amount, Transaction) value are not included in this field.
Count	The total number of messages

Collection Only Error Detail—Input Sequence Report (IP857010-BB), Banner Page (page 1)

```
1-----10-----+-----20-----+-----30-----+-----40-----+-----50-----+-----60-----+-----70-----+-----80-----+-----90-----+-----100-----+-----110-----+-----120-----+-----130-----
IP85 7010-BB                                     MASTERCARD WORLDWIDE                                     RUN DATE YYYY-MM-DD                                     PAGE 01
                                                COLLECTION ONLY-ERROR DETAIL - INPUT SEQUENCE
                                                MESSAGE LEVEL REJECT
                                                YYYY-MM-DD

FILE ID: XXX/YY-MM-DD/XXXXXXXXXX/99999
PROCESSING MODE: X

*** FILE PROCESSED - MESSAGE LEVEL ERRORS ENCOUNTERED ***
*** FILE PROCESSED - MESSAGE LEVEL ERRORS ENCOUNTERED ***
*** FILE PROCESSED - MESSAGE LEVEL ERRORS ENCOUNTERED ***
*** FILE PROCESSED - MESSAGE LEVEL ERRORS ENCOUNTERED ***
*** FILE PROCESSED - MESSAGE LEVEL ERRORS ENCOUNTERED ***
```

Collection Only Error Detail—Input Sequence Report (IP857010-BB), Banner Page Field Descriptions

Field	Description
Run Date	The date on which this report was produced
Page	The page number within the report
File ID	The logical file ID of the member-generated file to which the data in this report pertains
Processing Mode	Type of processing (Production or Test) to be performed on this file
Description	A detailed description of the error encountered, or if no errors are encountered, the literal "FILE PROCESSED—NO ERRORS ENCOUNTERED."

Clearing Processing Details

GCMS Rejection of Messages

Collection Only Error Detail—Input Sequence Report (IP857010-BB), Message Level Reject

1	10	20	30	40	50	60	70	80	90	100	110	120	130
IB857010-BB													
MASTERCARD WORLDWIDE													
COLLECTION-ONLY ERROR DETAIL - INPUT SEQUENCE													
MESSAGE LEVEL REJECT													
YYY-MM-DD													
FILE ID: XXX/YYY-MM-DD/XXXXXXXXXX/9999													
PROCESSING MODE: X													
SOURCE MESSAGE #: 999999999 SOURCE AMOUNT: 999,999,999,999													
MTI-FUNCTION CODE: 9999-999 SOURCE CURRENCY: XXX													
ERROR													
9999	XXXXXX	XXXXXX	XXXXXX	XXXXXX	XXXXXX	XXXXXX	XXXXXX	XXXXXX	XXXXXX	XXXXXX	XXXXXX	XXXXXX	XXXXXX
MESSAGE DETAILS													
MTI													
D0002	1442	599999999999999999											
D0003	00	00											
D0003	S01	00											
D0003	S02	00											
D0003	S03	00											
D0004	000000001326	000000001326											
D0012	011105	011105											
D0012	S01	000000											
D0012	S02	000000											
D0024	450	450											
*D0025	4801	4801											
D0026	5541	5541											
D0030	S01	000000001300											
D0030	S02	000000000000											
D0031	S01	99											
D0031	S02	99999											
D0031	S03	9999											
D0031	S04	999999999999											
D0031	S05	9											
D0033	009999	009999											
D0038	385549	385549											
D0041	09140069	09140069											
D0042	02807926	02807926											
D0043	YPF AVALOS	YPF AVALOS											
D0043	S01	VILLA URQUIZA											
D0043	S02	VILLA URQUIZA											
D0043	S03	VILLA URQUIZA											
D0043	S04	VILLA URQUIZA											
D0043	S05	VILLA URQUIZA											
D0043	S06	VILLA URQUIZA											
D0049	840	840											
D0063	S01	XXXXXXXXXX9999											
D0063	S02	XXXXXXXXXX9999											
D0071	00000411	00000411											
D0072	NO RECEIVE DOCTOS	NO RECEIVE DOCTOS											

Collection Only Error Detail—Input Sequence Report (IP857010-BB), continuation

1	10	20	30	40	50	60	70	80	90	100	110	120	130
	D0093		00999										
	D0094		00999										
	D0095		999999999										
	P0023		C72										
	P0148	S01	840										
	P0148	S02	2										
	P0149	S01	032										
	P0149	S02	000										
	P0158	S01											
	P0158	S02											
	P0158	S03											
	P0158	S04	75										
	P0165	S01	C										
	P0191		1										
	P0262		1										
	P0800	S01	661										
	P0800	S02	01417										
	P0800	S01	1										
	P0805	S02	01										
	P0805	S03	1										

Clearing Processing Details

GCMS Rejection of Messages

Collection Only Error Detail—Input Sequence Report (IP857010-BB), Message Level Reject Field Descriptions

Field	Description
Run Date	The date on which this report was produced
Page	The page number within the report
File ID	The logical file ID of the member-generated file to which the data in this report pertains
Processing Mode	Type of processing (Production or Test) to be performed on this file
Source Message Number	Number of the original message that contains the error, from DE 71 (Message Number)
Source Amount	Monetary amount of the rejected message. For messages without a DE 4 (Amount, Transaction) value (for example, retrieval fee billing or financial detail addendum messages), the field will be zero
MTI—Function Code	The Message Type Identifier and the Function Code associated with the rejected message
Source Currency	The alphabetic currency code associated with the monetary amount
Error Code	A unique code (established by MasterCard) that identifies the type of error encountered. Refer to the <i>IPM Clearing Format Error Numbers and Messages</i> manual for a list of the error codes established by MasterCard and their corresponding descriptions.
Description	A detailed description of the error encountered
Source Message Number	Number of the original message that contains the error, from DE 71 (Message Number)
Source Element ID	Identifies the element for which GCMS encountered the reject condition
Invalid Data	Listing of the contents of the element within the rejected message
Message Details	Details about the message

Clearing Processing Details

GCMS Rejection of Messages

Collection Only Error Detail—Input Sequence Report (IP857010-BB), Message Level Reject (alternate) Field Descriptions

Field	Description
Run Date	The date on which this report was produced
Page	The page number within the report
File ID	The logical file ID of the member-generated file to which the data in this report pertains
Processing Mode	Type of processing (Production or Test) to be performed on this file
Error Code	A unique code (established by MasterCard) that identifies the type of error encountered. Refer to the <i>IPM Clearing Format Error Numbers and Messages</i> manual for a list of the error codes established by MasterCard and their corresponding descriptions.
Description	A detailed description of the error encountered
Source Message Number	Number of the original message that contains the error, from DE 71 (Message Number)
Element ID	The number of the data element or PDS causing the error condition
Invalid Data	Listing of the contents of the data element or PDS in error, within the rejected message
Message Unparseable	Contains up to the first 200 positions of the rejected message when GCMS cannot parse the message into elements

Collection Only Error Detail—Input Sequence Report (IP857010-BB), Message Level Reject

```

1-----10-----+---20-----+---30-----+---40-----+---50-----+---60-----+---70-----+---80-----+---90-----+---100-----+---110-----+---120-----+---130-----
IP857010-BB
MASTERCARD WORLDWIDE
COLLECTION-ONLY ERROR DETAIL - INPUT SEQUENCE
MESSAGE LEVEL REJECT
      YYYY-MM-DD
FILE ID: XXX/YYYY-MM-DD/XXXXXXXXXXXX/99999
PROCESSING MODE: X
MESSAGE TYPE
COLLECTION ONLY
FINANCIAL DETAIL
COUNT
XXXXXXXXXX
XXXXXXXXXX
XXXXXXXXXX
XXXXXXXXXX
NON-FINANCIAL DETAIL
UNRECOGNIZABLE DETAIL
XXXXXXXXXX
XXXXXXXXXX
***** OF *****

```


Clearing Processing Details

GCMS Rejection of Messages

Collection Only Error Detail—Input Sequence Report (IP857010-BB), Message Level Reject, page 2 Field Descriptions

Field	Description
Run Date	The date on which this report was produced
Page	The page number within the report
File ID	The logical file ID of the member-generated file to which the data in this report pertains
Processing Mode	Type of processing (Production or Test) to be performed on this file
Message Type	Identifies whether the message has a settlement indicator of settled by MasterCard, bilateral (not settled by MasterCard), or Collection Only
Financial Detail	Identifies messages that have monetary impact
Non-Financial Detail	Identifies messages that do not have monetary impact
Unrecognizable Detail	Identifies messages that cannot be parsed
Currency	The alphabetic currency code of the source currency
Amount	The net total of the source monetary amount of the messages. Messages that do not include a DE 4 (Amount, Transaction) value are not included in this field.
Count	The total number of messages

Chapter 3 Processing Cycles and Regulations

This chapter describes the processing cycles for clearing transactions and introduces the time frame requirements associated with each processing cycle.

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Clearing Processing Cycles and Time Frames

The clearing process follows a particular process that occur over various cycles and time frames. A description of the clearing process is as follows.

The clearing process begins when the acquirer presents transaction data to the issuer for the first time, for posting to the cardholder's account. After the first presentment of the cardholder transaction, the issuer may determine that, for one of the reasons specified in the *Chargeback Guide*, the transaction may be invalid. The issuer may "charge back" the transaction when procedures in the *Chargeback Guide* specifically allow the issuer to return the transaction to the acquirer for possible remedy.

For each transaction between issuer and acquirer, the following cycles allow presentment, retrieval, and chargeback processing:

- First presentment consists of one step—from the acquirer to the issuer.
- The retrieval process consists of two steps—retrieval request and fulfillment.
- Except in the case of Maestro® and Cirrus® transactions, the chargeback cycle consists of three steps: chargeback, second presentment, and arbitration chargeback. Arbitration chargeback does not occur for Maestro and Cirrus transactions.

If necessary, arbitration follows the arbitration chargeback.

Global Clearing Management System (GCMS) maintains a chargeback history file, which stores selected information from all incoming chargeback transactions that GCMS accepts. The purpose of the chargeback history file is to track chargeback cycles and documentation that customers send. GCMS edits chargeback messages against the chargeback history file to validate cycle sequence, time frames, and documentation requirements.

MasterCard standards govern the clearing presentment, retrieval, and chargeback cycles for all interchange transactions involving the MasterCard brand. These standards define specific time frames, constraints, and thresholds.

MasterCard has designed GCMS to support customization of these standards related to customer agreements, such as business service arrangements. MasterCard considers requests for such customization on a case-by-case-basis.

Customer Requirements and Guidelines for Processing Transactions through GCMS

Customers must use the message formats detailed in the *IPM Clearing Formats* manual for all presented transactions and chargebacks for processing through GCMS.

MasterCard encourages customers to process all chargeback documentation through the Chargeback Support Documentation (CSD) application of the MasterCom® electronic imaging system. Using the CSD application will help ensure timely delivery of the items, maintain an audit trail for the life cycle of the chargeback, and retain subsequent chargeback and second presentment rights.

First Presentments

The first presentment occurs when the acquirer submits transaction data to the issuer for the first time, for posting to the cardholder's account.

To minimize subsequent retrievals, chargebacks, and second presentments, acquirers must ensure that all presented clearing transactions contain accurate and complete data in the applicable first presentment and addendum messages. To further minimize subsequent chargebacks and second presentments, issuers must ensure that all transaction detail provided by the acquirer is readily available to the cardholder and to internal operations.

The acquirer must send all presented transactions to GCMS using the messages and procedures that MasterCard specifies.

NOTE

For information about the message procedures for presentment of transactions, refer to the *IPM Clearing Formats* manual.

The acquirer must present all cash disbursements, purchases, credits, unique, and Payment Transactions for the full amount of the original transaction currency as agreed to by the cardholder. The amount may not be increased (or reduced in the case of a credit or a Payment Transaction) unless specifically authorized within this manual. Acquirers must promptly present these transactions to issuers.

Currency Conversion of GCMS Transactions

MasterCard will convert all transactions processed through GCMS into the equivalent reconciliation currency amount for settlement.

MasterCard (not the card acceptor or acquirer) will convert the transaction using the buy, mid, fixed, and sell rates of the representative group of currencies most frequently traded. Other arrangements are defined for those customers participating in bilateral agreements as described in Chapter 1 of the *Settlement Manual* and intracurrency settlement agreements as described in the *Settlement Manual*.

NOTE

For more information about currency conversions, refer to the [Currency Conversion](#) chapter and to the *Chargeback Guide*.

Time Frame for First Presentments

A variety of rules and guidelines exist for customers to follow when first presenting, or first receiving, a GCMS transaction.

An acquirer has a maximum of seven days to present the transaction to the issuer for electronically recorded card information (whether card-read or key-entered). MasterCard defines seven days as the time between the date of the transaction and the date the transaction is presented to the issuer. Thus, the seven-day time frame does not include the transaction date but does include the St. Louis Central Site business date of the First Presentment/1240 message. Acquirers will continue to have a maximum of 30 calendar days from the transaction date to present transactions completed with manually recorded (paper-based) card information (whether imprinted or handwritten).

An issuer must still accept transactions submitted beyond the 30-day time frame if the cardholder account is in good standing or the transaction can be otherwise honored and posted.

If the message has no transaction date when processed through GCMS, the date 15 days before the date in PDS 0105 (File ID), subfield 2 (File Reference Date) will be presumed (for rules administration) to be the transaction date, subject to subsequent establishment of the actual date by support documentation.

Risk Reduction Process Applied to GCMS Transactions

MasterCard has risk reduction parameters with specific dollar values for acquirers and issuers. The parameters are established to reduce the risk of clearing and settling transactions sent to MasterCard in error and for fraudulent purposes.

These dollar value edits are applied to all First Presentment/1240 messages in the GCMS clearing process. A First Presentment/1240 that exceeds the risk reduction parameters is rejected in GCMS with error message number 2202 or 2203, "DE04 AMOUNT, TRANSACTION EXCEEDS THE MASTERCARD DEFINED MEMxBER LIMIT." MasterCard and the customer then work together to determine whether the transaction is valid, and it should be resubmitted.

Acquirers will be contacted by a MasterCard Customer Operations Services team representative about rejected First Presentment/1240 messages. Acquirers will be asked to verify the transaction amount in the First Presentment/1240 message.

If the transaction amount is in error, the acquirer either does nothing or resubmits the First Presentment/1240 with the correct transaction amount. GCMS applies standard edits to the resubmitted First Presentment/1240.

If the acquirer confirms that the rejected transaction amount is correct, the Customer Operations Services team representative will instruct the acquirer to resubmit the transaction with a risk management approval code provided by MasterCard.

Processing Cycles and Regulations

Clearing Processing Cycles and Time Frames

The acquirer should resubmit the transaction to GCMS, with the risk management approval code in PDS 0261 (Risk Management Approval Code). The acquirer must resubmit the transaction within 30 calendar days of the initial rejection of the transaction. After 30 calendar days the risk management approval code assigned by MasterCard expires. Resubmission attempts with an expired risk management approval code will generate GCMS error message number 2206, “PDS0261 RISK MANAGEMENT APPROVAL CODE HAS EXPIRED.”

Timeliness edits in GCMS clearing will not be performed on First Presentment/1240 messages that are resubmitted with a valid risk management approval code.

NOTE

GCMS checks First Presentment/1240 transactions exceeding specified risk reduction parameters for a corresponding authorization. If there is a match between the authorization and clearing messages, GCMS will bypass the risk reduction threshold edits.

NOTE

GCMS does not perform risk reduction edits on transactions submitted for Bilateral Settlement.

Retrieval Requests and Fulfillments

Details of the request and retrieval of a transaction information document (TID)—such as required actions from customers and the types of transactions eligible—are as follows.

On occasion, the issuer may find it necessary to request a copy of the transaction information document (TID) to satisfy a cardholder’s inquiry, resolve an internal investigation, or to substantiate a chargeback. An acquirer is under obligation to fulfill this request by providing a copy or substitute draft of the TID, or by providing a response indicating the reason for its failure to honor the request.

Customers may not submit retrieval requests for ATM transactions.

NOTE

Refer to the *Chargeback Guide* for more information about retrieval requests and fulfillments, including information about processing time frames, required retention periods, and processing procedures.

Healthcare Retrieval Requests and Fulfillments

MasterCard has provided a means for issuers who must respond to an IRS request for healthcare IAS (Inventory Information Approval System) data. The process by which healthcare retrieval requests are carried out is as follows.

The issuer instigates the retrieval request process through MasterCom® electronic imaging system. The healthcare retrieval request must be fulfilled by the acquirer outside of MasterCom via a secure method (such as, sending a bulk file, a fax, or a hard copy to a mailing address).

When the acquirer fulfills the retrieval request outside of MasterCom, the request within MasterCom will cycle off their MasterCom request queue or the acquirer can use an appropriate fulfillment response code. Please refer to the *Chargeback Guide* to learn more about acquirer response codes.

Issuers can provide instructions to the acquirer for fulfilling this request via PDS 1046 (Member-to-Member Proprietary Data), to be sent in the Retrieval Request/1644 message. PDS 1046 is the preferred method. If the issuer sends more than one preferred method (for example, both a fax and a hard copy to a mailing address), the acquirer can choose which method to use to fulfill the request. For all Inventory Information Approval System (IIAS)—an accepted and widely adopted inventory system that assists merchants with substantiation of qualified health care purchases—requests, the acquirer is not allowed to send documentation via MasterCom to fulfill the request. The ability to attach documentation for all IIAS requests has been disabled in MasterCom.

Used in this context for retrieval requests, PDS 1046 would be variable in length, with a minimum of 16 positions and a maximum of 200. It would be preceded by the standard IPM tag field of 1046 and a three-digit length value.

The suggested format for issuers requesting this information follows.

PDS 1046 (Member-to-Member Proprietary Data)

Sequence of Information	Positions	Name	Attribute	Justification
1	1–16	Fulfillment Fax Number	ans-16	left
2	17–46	Contact Name	ans-30	left
3	47–62	Contact Phone Number	ans-16	left
4	63–122	Contact E-mail Address	ans-60	left
5	123–152	Contact Street Address	ans-30	left
6	153–177	Contact City	ans-25	left
7	178–187	Contact Postal (ZIP) Code	ans-10	left

Sequence of Information	Positions	Name	Attribute	Justification
8	188–190	Contact State, Province, or Region	ans-3	left
9	191–193	Contact Country (alpha)	ans-3	left

NOTE

Because this format is only a recommendation and uses existing customer-to-customer proprietary data fields within the IPM format, it is not documented in the *IPM Clearing Formats* manual.

Chargeback Processing

The chargeback process begins when an issuer determines that, for a valid chargeback reason specified in Chapter 3 of the *Chargeback Guide*, the transaction may be charged back to the acquirer for possible remedy. The chargeback life cycle includes the first chargeback and, if necessary, a second presentment, arbitration chargeback, and arbitration.

The required time frames applicable to each cycle are described below.

Time Frame for First Chargeback

First chargebacks are carried out within certain amount of time following the Central Site processing date depending on various details described as follows.

The message reason code determines the timeliness requirements for the first chargeback. The time frames for first chargebacks are 45, 60, 90, 120, and 540 calendar days after the Central Site processing date, depending on the reason for the chargeback. For certain message reason codes, GCMS does not edit the time frame. The chargeback time frame may begin with a day after the Central Site processing date.

When delayed delivery of goods or performance of services by a card acceptor results in a subsequent dispute about the condition of the goods or the quality of the services, MasterCard will calculate the period of 120 days using the delivery or performance date.

In cases that involve...	MasterCard calculates the period of 120 days from...
Delayed delivery of goods or performance of services that the cardholder asserts the card acceptor never provided	The latest anticipated date that the card acceptor was to provide the goods or services.
Interrupted services	The date that the services cease.

NOTE

In no case shall the first chargeback exceed 540 days (approximately 18 months) from the Central Site processing date of the first presentment. The issuer must prorate the chargeback amount to reflect the services received.

NOTE

For more information about chargeback life cycle support and the time frame associated with each chargeback reason, refer to the *Chargeback Guide*.

Time Frames for Second Presentments or Arbitration Chargebacks

Second presentments or arbitration chargebacks are carried out within a certain amount of time. Details about what this time frame is and how GCMS measures it is as follows.

The time frame for a second presentment involving the MasterCard brand or arbitration chargeback is 45 calendar days. GCMS measures this as the time between the Central Site processing date on which the customer received the chargeback or second presentment and the Central Site processing date on which GCMS processed the transaction as a second presentment or arbitration chargeback. GCMS will reject any second presentment or arbitration chargeback submitted more than 45 days after receipt of the previous cycle.

Time Frames for Disputes Involving Arbitration

Disputes involving arbitration are carried out within a certain amount of time. Details about what this time frame is and how the dispute is filed are as follows.

The acquirer may file an arbitration case to MasterCard, for a decision on the dispute, within 45 calendar days of the Central Site processing date of the arbitration chargeback.

This may be filed in either of the following ways:

- Through the electronic case filing system
- By fax to the Dispute Resolution Management (DRM) case filing hub site

Chargeback Timeliness Edits

The chargeback timeliness edits verify that second presentments and arbitration chargebacks do not exceed the applicable time frames for submission.

The chargeback timeliness edits use the Central Site processing date found in PDS 0158 (Business Activity), as shown in the following table.

Processing Cycles and Regulations

Clearing Processing Cycles and Time Frames

The life cycle timeliness edits will compare the...	To the...
Central Site processing date in PDS 0158 (Business Activity), subfield 5 (Business Date)	Retrieval history date in PDS 0243 (MasterCom Retrieval Response Data), subfield 1 (MasterCom Issuer Retrieval Request Date)
Central Site processing date in PDS 0158, subfield 5	Chargeback History File business date in PDS 0158, subfield 5
Central Site processing date in PDS 0158, subfield 5	Date in retrieval history in DE 31 (Acquirer Reference Data), subfield 3 (Julian Processing Date YDDD)
Retrieval history in PDS 0243, subfield 1	Date in retrieval history in DE 31, subfield 3

Examples

Compare the following examples to understand the effect of the submission date and time on chargeback processing. In both examples, the customer submits the second presentment with a message reason code of 2008, which has the requirement of submission within 45 days after the first chargeback.

Events	Example 1	Example 2
GCMS processes the first chargeback (Central Site processing date):	05 July	05 July
The customer submits the second presentment with a message reason code of 2008.	Saturday, 18 August after the sixth clearing. The file header date is Saturday, 18 August.	Saturday, 18 August before the sixth clearing. The file header date is Saturday, 18 August.
GCMS attempts to process the second presentment (Central Site processing date).	Monday, 20 August. Therefore, the date in PDS 0158, subfield 5 is 20 August.	Saturday, 18 August. Therefore, the date in PDS 0158 (Business Activity), subfield 5 (Business Date) is 18 August.
GCMS compares the second presentment processing date (date in PDS 0158, subfield 5), to the first chargeback processing date (date in the Chargeback History File).	PDS 0158, subfield 5 date = 20 August First chargeback processing date = 05 July	PDS 0158, subfield 5 date = 18 August First chargeback processing date = 05 July

Events	Example 1	Example 2
GCMS edits determine the time elapsed between the first chargeback processing date and the second presentment processing date.	47 days	45 days
RESULT	GCMS rejects the second presentment because it is past the 45-day time frame.	GCMS accepts the second presentment because it is within the 45-day time frame.

Exclusion from Chargeback Timeliness Edits

Under certain conditions, MasterCard may grant exclusions for individual account ranges or acquiring BINs. Details about these conditions, along with information pertaining to edit exclusion indicators, are as follows.

A customer experiencing severe operational difficulties because of a natural disaster may contact the Customer Operations Services team and apply for a hardship variance. Once approved by MasterCard, the hardship variance waives timeliness edits applicable to all chargeback reasons for the prescribed time frame. MasterCard publishes approved variances in the *Global Operations Bulletin* and in the Text Message/1644-693.

To allow for situations in which the hardship affects only a portion of a customer's activity or affects a processing center located in another country, MasterCard may grant exclusions for individual account ranges or acquiring BINs. Exclusions granted at the customer level will cause timeliness edits to be waived for all of a customer's activity. MasterCard may also grant a hardship variance at the processor level, which will result in timeliness edits being waived for all customers assigned to that processor.

To implement a chargeback exclusion systematically, the IPM format uses edit exclusion indicators.

DEFINITION

Edit exclusion indicators are codes that GCMS uses to designate a transaction.

GCMS edits PDS 0260 (Edit Exclusion Indicator), subfield 1 (Exclusion Request Code) for valid values. If GCMS receives a first chargeback, second presentment, or arbitration chargeback transaction with an invalid exclusion indicator in this PDS, GCMS will reject the message.

GCMS may reject a transaction for a reason other than an invalid exclusion indicator (such as an invalid processing code provided in DE 3 [Processing Code]) and also find that the exclusion indicator is invalid. In this case, GCMS will provide the IPM error code 2006 (INVALID EXCLUSION INDICATOR) in addition to the other applicable error codes in the IPM error message that the system returns to the sender of the transaction.

Processing Chargeback Messages

Customers must process all chargebacks, second presentments, and arbitration chargebacks through GCMS using the First Chargeback/1442, Second Presentment/1240, and Arbitration Chargeback/1442 messages.

The *IPM Clearing Formats* manual shows the formats and data requirements for these messages.

IPM messages are composed of data elements and private data subelements critical to the exchange of transactions between acquirers and issuers. Customers must ensure that all of the data contained within the messages specified above is accurate and complete.

The submitting customer must perform specific edits on the messages specified above. In general, the customer must edit all fields for correct content, and the message must contain all required fields.

If the customer processes the message and it does not pass the edit criteria when GCMS receives it, GCMS will reject the message as a single item reject.

Identifying the Chargeback Cycle

Customers must use a combination of message type identifier (MTI) and function code to identify the current cycle of the chargeback.

The specific reason for the First Chargeback/1442, Second Presentment/1240, or Arbitration Chargeback/1442 is in DE 25 (Message Reason Code).

MTI	DE 24 (Function Code)	Description
1442	450	First Chargeback (Full)/1442 for the full First Presentment/1240 amount. Initiated by the issuer.
	453	First Chargeback (Partial)/1442 for part of the First Presentment/1240 amount. Initiated by the issuer.
1240	205	Second Presentment (Full)/1240 for the full First Presentment/1240 amount. Initiated by the acquirer.
	282	Second Presentment (Partial)/1240 for part of the First Presentment/1240 amount. Initiated by the acquirer.
1442	451	Arbitration Chargeback (Full)/1442 for the full First Presentment/1240 amount. Initiated by the issuer.
	454	Arbitration Chargeback (Partial)/1442 for part of the First Presentment/1240 amount. Initiated by the issuer.

An issuer may exercise one first chargeback per presented transaction within the applicable time frame limit specified in Chapter 3 of the *Chargeback Guide*.

An acquirer may process a second presentment if it can provide additional information, as specified in the *Chargeback Guide*, to correct the original defect that led to the chargeback.

An issuer may process an arbitration chargeback if it is determined that a transaction was improperly presented for a second time or if the issuer does not receive supporting documentation required with the second presentment.

Submitting the Transaction Amount

Customers must submit three elements for first chargebacks, second presentments, and arbitration. Details about these elements and what each of them consist of are as follows.

For first chargebacks, second presentments, and arbitration chargebacks, the sender submits the following:

- DE 4 (Amount, Transaction), which provides the amount of the current chargeback in either U.S. dollars or the customer's intracurrency settlement currency.
- DE 30 (Amount, Original), which provides the original amount from the first presentment, in the original transaction currency.
- PDS 0149 (Currency Codes, Amounts, Original), which provides the currency code associated with the original transaction amount in DE 30 (Amounts, Original).

If the message is for a partial amount, the sender also may submit PDS 0268 (Amount, Partial Transaction), which provides the partial amount being submitted as a chargeback or second presentment, in the original transaction currency.

NOTE

Once an issuer or acquirer submits a transaction as a partial transaction, customers must submit the transaction as partial in all subsequent phases of the chargeback cycle.

DE 30 consists of the following subfields:

- Subfield 1—Original Amount, Transaction
- Subfield 2—Original Amount, Reconciliation

PDS 0149 consists of the following subfields:

- Subfield 1—Currency Code, Original Transaction Amount
- Subfield 2—Currency Code, Original Reconciliation Amount

PDS 0268 consists of the following subfields:

- Subfield 1—Amount, Partial Transaction
- Subfield 2—Currency Code, Partial Transaction

The combination of DE 4 (Amount, Transaction) and these three elements provides the receiver of the transaction with a complete history of the amounts involved in the chargeback cycle. The DE 4 amount supports partial first chargebacks, second presentments, and arbitration chargebacks while still providing the original amount of the transaction from the first presentment in the original transaction currency.

Customers must meet the following specific requirements related to the amount, depending on the phase of the chargeback life cycle.

- An issuer must not present a chargeback for an amount that exceeds the full amount of the transaction presented by the acquirer. An issuer may present a chargeback for an amount less than the full amount of the transaction. The only exceptions are the following:
 - If the message must be converted to U.S. dollars, the chargeback may be for an amount greater than the transaction amount originally presented by the acquirer.
 - If the transaction uses message reason code 4850 (Credit Posted as a Purchase), the chargeback is for twice the transaction amount originally presented by the acquirer.
- To charge back a transaction for an amount less than the full amount of the transaction, the issuer uses function code 453 with MTI 1442. The issuer includes the partial amount in PDS 0268 (Amount, Partial Transaction).
- An acquirer must not second present a chargeback for an amount that exceeds the full amount of the transaction charged back by the issuer. The acquirer may second present for an amount less than the full amount of the transaction.
- To submit a second presentment for an amount less than the full amount of the transaction, the acquirer uses function code 282 with MTI 1240. The acquirer includes the partial amount in PDS 0268.
- An issuer must not submit an arbitration chargeback for an amount that exceeds the full amount of the transaction presented by the acquirer. An issuer may present an arbitration chargeback for an amount less than the full amount of the transaction.
- To submit an arbitration chargeback for an amount less than the full amount of the transaction, the issuer uses function code 454 with MTI 1442. The issuer includes the partial amount in PDS 0268.

Chargeback Procedures for Purchase with Cash Back Transactions

Issuers choosing to process chargebacks on purchases with cash back transactions for Maestro and Debit MasterCard transactions should adhere to the following guidelines.

Chargebacks on Net Purchase Only

If only the net purchase or a portion of the net purchase of a purchase with cash back transaction is to be charged back, the issuer should submit it as a First Chargeback (Partial)/1442 or Arbitration Chargeback (Partial)/1442.

The following table identifies the message element criteria for processing chargebacks on purchases with cash back transactions.

Message Element	Requirement
DE 3 (Processing Code), subfield 1 (Cardholder Transaction Type)	Should be populated with 09, purchase with cash back
DE 4 (Amount, Transaction)	Should contain the amount to be charged back
DE 30 (Amounts, Original)	Should contain the original transaction amount of the First Presentment/1240
DE 54 (Amounts, Additional)	Should be present and be populated with zeros

Chargebacks on Total Amount

If the entire transaction amount of a purchase with cash back transaction is to be charged back, the issuer should submit it as a First Chargeback (Full)/1442 or Arbitration Chargeback (Full)/1442.

The following table identifies the message element criteria for processing chargebacks on purchase with cash back transactions.

Message Element	Requirement
DE 3 (Processing Code), subfield 1 (Cardholder Transaction Type)	Should be populated with 09, purchase with cash back
DE 4 (Amount, Transaction)	Should contain the amount to be charged back
DE 30 (Amounts, Original)	Should contain the original transaction amount of the First Presentment/1240
DE 54 (Amounts, Additional)	Should contain the cash back portion of the purchase with cash back transaction

Message Reason Codes

Issuers must not submit chargebacks on the cash back amount on Debit MasterCard purchases with cash back transactions for the following message reason codes.

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DE 25 (Message Reason Code)	Description
4853	Cardholder Dispute—Defective Merchandise/Not as Described
4854	Cardholder Dispute—Not Elsewhere Classified (U.S. region only)
4855	Nonreceipt of Merchandise
4859	Services Not Rendered
4860	Credit Not Processed

If initiating a chargeback for the purchase amount or a portion thereof, the issuer should submit a First Chargeback (Partial)/1442 or Arbitration Chargeback (Partial)/1442.

DE 95 (card issuer reference data)

DE 95 (card issuer reference data) is a control value of 10 positions that the issuer assigns with its original chargeback and is used to track the chargeback throughout its life cycle. Further details and guidelines about DE 95, such as when it should and should not be used, are as follows.

The issuer may, at its option, include its Member ID number when defining the value for this element. The card issuer reference data may be used to identify the originator, and in turn, the originator may determine and direct the chargeback to the department or affiliate customer that initiated the original chargeback.

The issuer provides DE 95 when processing retrieval or chargeback messages. The acquirer is required to include the same data in a subsequent fulfillment of the retrieval request or acquirer advisement. In the case of a chargeback, this applies to both Second Presentment/1240 and Arbitration Chargeback/1442 case filings.

The unique card issuer reference data provides an audit trail of a chargeback's processing life cycle. It allows customers to locate the source documentation needed to rebill a cardholder or recharge a card acceptor.

The issuer must not use the card issuer reference data number more than once in a 12-month period. GCMS edits validate all incoming chargebacks against the chargeback history file to ensure that the incoming chargebacks do not contain a card issuer reference data used previously with the same bank identification number (BIN). Acquirers must not modify the card issuer reference data when second presenting a chargeback. GCMS will reject the chargeback or second presentment if it contains an invalid card issuer reference data. Customers should always submit DE 95 in all chargeback life cycle transactions, even though GCMS does not perform the validation edits for ATM chargeback life cycle transactions (DE 3 [Processing Code], subfield 1 [Cardholder Transaction Type], value of 01).

PDS 0262 (Documentation Indicator)

The documentation indicator shows whether supporting documentation will be provided for the current chargeback or fee collection cycle. The field is mandatory for First Chargeback/1442, Second Presentment/1240, and Arbitration Chargeback/1442 messages.

IF supporting documentation...	THEN this PDS contains a value of...
Is neither required nor sent (for example, for a retrieval or fee collection message)	0
Will follow the message	1

GCMS will edit this PDS for all First Chargeback/1442, Second Presentment/1240, and Arbitration Chargeback/1442 messages and will reject the message if the indicator is not a 0 or a 1.

DE 72 (Data Record)

The DE 72 (Data Record) is used during the different chargeback processing cycles to provide the receiving customer with specific information about the item.

NOTE

For specific message text requirements for each type of message, refer to the *Chargeback Guide*.

Getting Additional Information about Chargebacks

The following elements, which carry information about the previous cycle of the transaction, provide customers with additional information when processing exception items.

- DE 30 (Amounts, Original), PDS 0149 (Currency Codes, Amounts, Original), and PDS 0268 (Original and Amount, Partial Transaction)

For first chargebacks, second presentments, and arbitration chargebacks, the sender submits DE 30 and PDS 0149, which provide the original amount and associated currency code from the first presentment, in the original transaction currency. PDS 0268 provides the partial amount being submitted as a chargeback or second presentment, in the original transaction currency.

- PDS 0243 (MasterCom Retrieval Response Data)

This PDS contains information related to the issuer's retrieval request, the acquirer's response, and any subsequent decisions made by the issuer, the MasterCom system, or both. The information provided in this PDS is obtained from MasterCom historical data supplied by GCMS. This PDS consists of the following eight subfields:

- PDS 0244 (MasterCom Chargeback Support Documentation Dates)

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- Subfield 1—MasterCom Chargeback Support Documentation Sender Processing Date (First Chargeback/1442).
- Subfield 2—MasterCom Chargeback Support Documentation Sender Processing Date (Second Presentment/1240).

This PDS contains each date that the customers sent Chargeback Support Documentation (CSD) for the first two chargeback cycles. This information indicates whether the customers provided CSD in the appropriate time frames. The system provides this information if it is available.

- PDS 0260 (Edit Exclusion Indicator)

This PDS contains information about processing of edit exclusions when MasterCard has granted deactivation of transaction life cycle editing to a particular customer. MasterCard will notify the customer when the system excludes chargeback cycle edits and will advise the customer of the reason for the exclusion. PDS 0260 consists of the following subfields:

- Subfield 1—Exclusion Request Code. This code identifies the originator request to bypass edit sets during processing of the transaction.
- Subfield 2—Exclusion Reason Code. This code, which the clearing system assigns, indicates approval of, and the reason for, the edit exclusion.
- Subfield 3—Exclusion Results Code. This code, which the clearing system assigns, indicates the edit set or sets that the clearing system actually bypassed when it processed the transaction.

- PDS 0262 (Documentation Indicator)

This PDS indicates whether supporting documentation will be provided for the current chargeback cycle.

- PDS 0266 (First Chargeback/Fee Collection Return Data)

This PDS contains dates, reasons, and other information from a first chargeback. When this PDS is present in a second presentment or an arbitration chargeback, it provides information from the first chargeback of that transaction, including the message text from the first chargeback.

- PDS 0267 (Second Presentment/Fee Collection Resubmission Data)

This PDS contains dates, amounts, reasons, and other information from a second presentment. When this PDS is present in an arbitration chargeback, it provides information from the second presentment of that transaction, including the message text from the second presentment.

Both PDS 0266 and PDS 0267 contain the following information from the appropriate chargeback cycle:

- Subfield 1—Message reason code (from DE 25 [Message Reason Code] of the first chargeback or second presentment)
- Subfield 2—First return business date (from PDS 0158 [Business Activity], subfield 5 [Business Date] of the first chargeback or second presentment)
- Subfield 3—Edit exclusion reason code (from PDS 260, subfield 2 of the first chargeback or second presentment)
- Subfield 4—Edit exclusion results code (from PDS 260, subfield 3 of the first chargeback or second presentment)
- Subfield 5—First return amount (from DE 4 [Amount, Transaction] of the first chargeback or second presentment)
- Subfield 6—First return currency code (from DE 49 [Currency Code, Transaction] of the first chargeback or second presentment)
- Subfield 7—First return data record (from DE 72 [Data Record] of the first chargeback or second presentment)

Arbitration Following Chargebacks

Details about arbitration following the three-step chargeback cycle, including when it is appropriate, are as follows.

When the acquirer and issuer have exhausted all of their rights under the previously mentioned three-step chargeback cycle, the acquirer may petition MasterCard to resolve the dispute in arbitration.

The customer may not use arbitration unless it has first exercised all of its rights under the previous processing cycles noted in this chapter.

Chargeback Infractions Worthy of Compliance Action

Compliance addresses situations where there is a rules violation but no applicable chargeback reason code.

A customer may proceed to compliance for any alleged violation that:

- Would result in a financial loss
- Is directly related to a rule or other Standard that is published in a MasterCard bulletin or manual and is currently effective, and
- Is not addressed by a chargeback remedy defined in Chapter 3 of the *Chargeback Guide*.

Any customer may proceed to compliance within 180 calendar days from the date when the infraction occurred.

NOTE

For more information about compliance procedures, refer to Chapter 5 of the *Chargeback Guide*.

Transaction Research Request

A transaction research request is a request by a customer for MasterCard to provide information about a transaction.

Ways to Perform a Transaction Research Request

Customers can use either of the following two methods to research information about previous transactions.

- MasterCard Transaction Research tool. This tool allows customers to conduct research about specific transactions or a range of transactions for an account number.
- Customer Operations Services. Contact the Customer Operations Services team to have the team perform the research for you. The team provides information about clearing transactions. To participate in this service, customers must complete the *Clearing Transaction Research Request* (Form 949).

Capabilities of the Transaction Research Tool

The MasterCard Transaction Research tool enables users to complete variety of unique tasks.

The MasterCard Transaction Research tool allows users to search the MasterCard data warehouse for first presentment transactions that a customer has processed either as an issuer or an acquirer.

This capability:

- Provides secure access to proprietary clearing information
- Retrieves 16 relevant transaction data elements online with the option to view all available data elements for a transaction message type
- Returns the data within seconds after the customer electronically submits the request for research

In addition, users can print the transaction data or export the information into a Microsoft® Excel file.

The transaction data is stored in the MasterCard data warehouse and is available to customers for 120 days. Most transactions are available within 24 hours of the transaction time.

To access the MasterCard Transaction Research tool, customers must be licensed users. To become a licensed user, follow these steps.

Step	Action
1.	Go to MasterCard OnLine®.
2.	Select the Order Products link.
3.	Select the Shop tab.
4.	View the catalog in two ways: • Products by Role—allows a user to search for products that match their job responsibilities • Products by Name—displays a listing of all products in alphabetical order
5.	Select Transaction Research . The product description will display on the right side of the screen.
6.	Click on the View Cart or Checkout buttons to check out.
7.	Complete all fields on the product request form(s) and click on the Place Order button.
8.	Make note of the confirmation number(s) provided for reference.

For help with requesting this tool, send an e-mail to online_requests@mastercard.com.

Registering for the Transaction Research Tool

To access the MasterCard Transaction Research tool, customers must be licensed users. To register and become a licensed user, follow these steps.

Step	Action
1.	Go to MasterCard OnLine®.
2.	Select the Order Products link.
3.	Select the Shop tab.
4.	View the catalog in two ways: • Products by Role—allows a user to search for products that match their job responsibilities • Products by Name—displays a listing of all products in alphabetical order
5.	Select Transaction Research . The product description will display on the right side of the screen.
6.	Click on the View Cart or Checkout buttons to check out.
7.	Complete all fields on the product request form(s) and click on the Place Order button.
8.	Make note of the confirmation number(s) provided for reference.

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Transaction Research Request

For help with requesting this tool, send an e-mail to online_requests@mastercard.com.

Accessing the Transaction Research Tool

After becoming licensed for the Transaction Research Tool, follow these steps to access it.

Step	Action
1.	Go to MasterCard OnLine.
2.	On the Products menu, point to My Products , and then click Transaction Research . The Transaction Research homepage appears.

Step	Action

3.	Click the Clearing tab. The Clearing Transaction Research page appears.

Using the Transaction Research Tool

The following procedure explains how to use the Transaction Research tool.

Step	Action

1.	In the Card Number box, enter the cardholder account number that you want to research. Note: MasterCard uses the optional ICA number for your tracking purposes only. If you enter an ICA number here, it will appear on your billing report to help you identify transactions.
2.	In the Date area select one of the following: • Authorization Date (DE012)—query date range between one and seven consecutive days • GCMS Processing Date (PDS0158 S05)—query date range between one and 28 consecutive days In the Local Date Range area, enter a starting transaction date and an ending transaction date using a MM/DD/YYYY format or click the Calendar link to select a date. The date range must be within seven consecutive days for Authorization Date (DE 12 [Date and Time, Local Transaction]) or 28 consecutive days for GCMS Processing Date (PDS 0158 [Business Activity], subfield 5 [Business Date]).

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Transaction Research Request

Step Action

3. Click **Search**.

The search results page that the MasterCard Transaction Research tool displays may look similar to the following illustration.



Clearing Transaction Research - Summary Results

Viewing 1-7 of 7 Results Matching the Search Criteria

[View Search Criteria](#)
[Printer Friendly](#)
[Export Data](#)

Card

Row	Card Acceptor Name	Point of Svc Data Codes						Transaction				Acquirer Reference Data	ICA		Business Activity				
		1	2	3	4	5	6	Type	Date	Amount	Cur		Orig	Dest	BSA	BS Id	Clr Cyc	IRD	
1.		2	2	0	9	0	1	00	061010	23957	840			2		010001	03	86	Detail
2.		0	9	9	1	0	1	00	061011	658	840			2		010001	04	76	Detail
3.		2	2	0	9	0	1	00	061011	2484	840			2		010001	03	86	Detail
4.		2	0	9	1	9	1	00	061011	37880	840			2		010001	01	86	Detail
5.		0	9	9	1	0	1	00	061013	557	840			2		010001	03	76	Detail
6.		B	1	0	1	0	1	00	061014	4150	840			2		010001	02	68	Detail
7.		0	9	9	1	0	1	00	061014	64071	840			2		010001	01	69	Detail

Step	Action

4. To display the detailed results for a specific transaction, select the transaction you want, and then click **Detail**.
- The detailed results page that the MasterCard Transaction Research tool displays may look similar to the following illustration.

Data Element	Description	Value	Interpretation
DE002	Primary Account Number (PAN)		
DE003	Processing Code	000000	
DE004	Amount, Transaction	1557	
DE005	Amount, Reconciliation	1557	
DE006	Amount, Cardholder Billing	1557	
DE012	Date and Time, Local Transaction	061204000000	YYMMDDhhmmss
DE022	Point of Service Data Code	099101299001	
DE026	Card Acceptor Business Code [MCC]		
DE031	Acquirer Reference Data		
DE033	Forwarding Institution ID Code		
DE038	Approval Code	004694	
DE041	Terminal ID	00000001	
DE042	Card Acceptor ID Code		

Understanding Fees for Transaction Research Requests

A general research fee applies to each customer inquiry requesting information that is readily available to the customer in a MasterCard publication, report, service, or other source.

See the appropriate regional *MasterCard Consolidated Billing System* manual for fees and billing information. (The billing events 2AB1710, 2AB1711, and 2RP1778 apply.)

GCMS Transaction and Chargeback Analysis Reports

Details about GCMS transaction and chargeback analysis reports—such as the bulk types through which they are transmitted, the versions in which they appear, and the descriptions of their fields—are as follows.

The transaction and chargeback analysis reports include:

- GCMS Transaction/Chargeback Analysis Report (IP776010-AA)
- Chargeback Activity Summary—Acquirer (IP776020-AA)
- Dollar/Volume Summary Report—Acquirer (IP776030-AA)

The clearing system uses the following bulk types to transmit these reports:

- T783 (production)
- T784 (test)

These three reports have three versions with the same layout.

Version...	Summarizes activity by...
-AA	Acquirer
-BB	Issuer
-CC	GCMS (clearing system) totals

Because the layouts are the same, the following shows only the -AA version.

These reports are available in the following media types:

- MasterCard Worldwide Network/Bulk
- MasterCard File Express
- CONNECT:Direct or XCOM

To request these reports, please contact the Customer Operations Services team or refer to and complete the *GCMS Parameter Worksheet* (Form 600).

Report IP776010-AA Field Descriptions

Field	Description
Report Name	Constant; Value is always MasterCard Worldwide GCMS Transaction/Chargeback Analysis.
Report Number	Constant; Value is always IP776010-AA.
Member ID	Received from GCMS member master file
Member Name	Name of the member associated with the above member ID
Report Subtitle	Constant; Value is always Life Cycle Volume Analysis—Acquirer.
Run Date	Current processing date
Page	Incremental number starting at 1 for each new ICA number/member ID
Period From	The specific beginning and end dates of the reporting month
Year-to-date	Calendar year to date beginning with January through the current reporting month
Financial Detail Sent	Total number of First Presentments/1240-200
Dollar Volume	Total U.S. dollar amount of First Presentments/1240-200
First Chargeback Received	Total number of First Chargebacks/1442-450 (full) and 1442-453 (partial).
Chargeback Dollars	Total U.S. dollar amount of 1442-450 (full) and 1442-453 (partial) messages
Retrieval Reqst Recd	Total number of Retrieval Request/1644-603 messages
PCNT FNCL	Value of the first Chargeback Received, Chargeback Dollars, and Retrieval Reqst Recd fields as a percentage of the total First Presentments/1240-200 messages sent/received by the member
PCNT GCMS	Value of fields 1 and 5 for the member as compared with the total volume of corresponding activity processed by GCMS for all members (IP776010-CC report)
Retrieval Volume	
Retrieval ReqstRecd (by acquirer) Sent (by issuer)	Total number of Retrieval Request/1644-603 messages processed for MasterCom and manual (non-MasterCom) retrieval activity
Retrieval Volume	

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GCMS Transaction and Chargeback Analysis Reports

Field	Description
Fulfillments Sent	Total number of fulfillments processed for MasterCom and manual (non-MasterCom) fulfillment activity
Retrieval Volume	
4802 CgbkRecd	Total number of First Chargeback/1442-450 and 1442-453 messages sent/received with message reason code 4802. Both MasterCom and manual (non-MasterCom) chargeback activity is reported.
vs Retvls Recd	Total number of First Chargeback/1442-450 and 1442-453 messages with reason code 4802 (4802 Cgbk Recd field) as a percentage of total retrieval requests received (Retrieval Reqst Recd field). Percentages are shown in the report for MasterCom, manual (non-MasterCom), and total activity.
Reason Code 4802	Total number of First Chargeback/1442-450 and 1442-453 messages with message reason code 4802. Both MasterCom and manual (non-MasterCom) activity is reported.
Retrieval Volume	
Retrvls Recd vs Fin Sent	Total number of Retr. Rqst. Rcd. (Retrieval Request/1644-603 messages) as a percentage of Financial Detail Sent (First Presentment/1240-200 messages) for MasterCom and manual (non-MasterCom) activity.
1st Cgbk*	Number of 45-day, 120-day, and total First Chargeback/1442-450 (Full) and 1442-453 (Partial) messages for all message reason codes received (by acquirer) or sent (by issuer). *Included in the 45-day count are transactions submitted with message reason code 4802, which are 60-day chargebacks, and included in the 120-day count are ATM transactions submitted with reason code 4859, which are 180-day chargebacks.
2nd Pres	Number of 45-day, 120-day, and Second Presentment/1240-205 (Full) for all message reason codes received (by issuer) or sent and 1240-282 (Partial) messages (by acquirer)
Arbitration Chargeback	Number of 45-day, 120-day, and total Arbitration Chargeback/1442-451(Full) and 1442-454 (Partial) messages for all reason codes received (by acquirer) or sent (by issuer)
Total Volume	Number of all first chargeback, second presentment, and arbitration chargeback messages
Total	Total number of First Chargeback (1442-450 and 1442-453), Second Presentment (1240-205 and 1240-282), and Arbitration Chargeback (1442-451 and 1442-454) messages
Average Ticket	Total chargeback dollars divided by total chargeback volume. Total U.S. dollars can be derived by adding the net U.S. dollar amount for chargebacks and second presentments shown on the corresponding IP776030 Dollar Volume Summary report.

Chargeback Activity Summary—Acquirer (IP776020-AA)

1-----10-----20-----30-----40-----50-----60-----70-----80-----90-----100-----110-----120-----130-----
IP776020-AA
MEMBER ID: 00000001002
COMMERCE BANK & TRUST
MASTERCARD WORLDWIDE
GCMS TRANSACTION/CHARGEBACK ANALYSIS
PAGE: 1
RUN DATE: 01/31/01
CHARGEBACK ACTIVITY SUMMARY - ACQUIRER
PERIOD FROM 01/01/01 THRU 01/31/01

REASON CODE	PERCENT OF CGBK	TOTAL CGBK VOLUME	TOTAL CGBK DOLLAR AMOUNT	1ST CGBK	2ND PRES	ARB CGBK
4801	.286	2	\$379	2		
4834	.571	4	\$210	4		
4837	.143	1	\$48	1		
GRAND TOTAL	1.000	7	\$637	7		

Report IP776020-AA Field Descriptions

Field	Description
Report Name	Constant; Value is always MasterCard Worldwide GCMS Transaction/Chargeback Analysis.
Report Number	Constant; Value is always IP776020-AA.
Member ID	Received from GCMS member master file
Member Name	Name of the member associated with the above member ID
Report Subtitle	Constant; Value is always Chargeback Activity Summary–Acquirer.
Run Date	Current processing date
Page	Incremental number starting at 1 for each new ICA number/member ID
Period From	The specific beginning and end dates of the reporting month
Reason Code	All activity on this report is sorted by message reason code. Message reason codes 4834 and 4859 include both ATM and non-ATM activity. For chargeback reason code 4802, both MasterCom and manual (non-MasterCom) activity is reported.
Percent of Cgbk	Percentage of Total Chargeback Volume (for message reason code specified) to the grand total of total chargeback volume processed
Total Cgbk Volume	Total number of first chargebacks, second presentments, and arbitration chargebacks by message reason code
Total Cgbk DollarAmount	Total dollar amount of first chargebacks, second presentments, and arbitration chargebacks by message reason code
1st Cgbk	Volume of First Chargeback/1442-450 (Full) and 1442–453 (Partial) messages
2nd Pres	Volume of Second Presentment/1240-205 (Full) and 1240-282 (Partial) messages
Arb Cgbk	Volume of Arbitration Chargeback/1442-451 (Full) and 1442-454 (Partial) messages
Grand Total	Grand totals for all chargeback, second presentment, and arbitration chargeback activity

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GCMS Transaction and Chargeback Analysis Reports

Dollar/Volume Summary Report—Acquirer (IP776030-AA)

1-----10-----+-----20-----+-----30-----+-----40-----+-----50-----+-----60-----+-----70-----+-----80-----+-----90-----+-----100-----+-----110-----+-----120-----+-----130-----	IP776030-AA	MASTERCARD WORLDWIDE	RUN DATE: 01/31/01	PAGE: 1
MEMBER ID: 00000001002	GCMS TRANSACTION/CHARGEBACK ANALYSIS			
COMMERCE BANK & TRUST	DOLLAR/VOLUME SUMMARY - ACQUIRER			
	PERIOD FROM 01/01/01 THRU 01/31/01	YEAR-TO-DATE FROM 01/01/01 THRU 01/31/01		
	TRANSACTIONS	DOLLAR AMOUNT	TRANSACTIONS	DOLLAR AMOUNT
FINANCIAL DETAIL DEBITS	8,975	\$720,477	8,975	\$720,477
FINANCIAL DETAIL DEBIT REVERSALS	0	\$0	0	\$0
FINANCIAL DETAIL CREDITS	114	\$12,867	114	\$12,867
FINANCIAL DETAIL CREDIT REVERSALS	0	\$0	0	\$0
* NET TOTAL	9,089	\$707,610	9,089	\$707,610
CHARGEBACK DEBITS	7	\$637	7	\$637
CHARGEBACK DEBIT REVERSALS	0	\$0	0	\$0
CHARGEBACK CREDITS	0	\$0	0	\$0
CHARGEBACK CREDIT REVERSALS	0	\$0	0	\$0
* NET TOTAL	7	\$637	7	\$637
REPRESENTMENT DEBITS	0	\$0	0	\$0
REPRESENTMENT DEBIT REVERSALS	0	\$0	0	\$0
REPRESENTMENT CREDITS	0	\$0	0	\$0
REPRESENTMENT CREDIT REVERSALS	0	\$0	0	\$0
* NET TOTAL	0	\$0	0	\$0
RETRIEVAL REQUESTS	2	\$78	2	\$78
RETRIEVAL REQUEST REVERSALS	0	\$0	0	\$0
* NET TOTAL	2	\$78	2	\$78
RETRIEVAL REQUEST FULFILLMENTS	0	\$0	0	\$0
RETRIEVAL REQUEST FULFILLMENT REVERSALS	0	\$0	0	\$0
* NET TOTAL	0	\$0	0	\$0
* NET TOTAL TRANSACTIONS = DEBITS + CREDITS - DEBIT REVERSALS - CREDIT REVERSALS				
* NET TOTAL DOLLAR VOLUME = DEBITS - CREDITS - DEBIT REVERSALS + CREDIT REVERSALS				

Report IP776030-AA Field Descriptions

Field	Description
Report Name	Constant; Value is always MasterCard Worldwide GCMS Transaction/Chargeback Analysis.
Report Number	Constant; Value is always IP776030-AA.
Member ID	Received from GCMS member master file
Report Subtitle	Constant; Value is always Dollar/Volume Summary—Acquirer.
Run Date	Current processing date
Page	Incremental number starting at 1 for each new ICA number/member ID
Period From	The specific beginning and end dates of the reporting month
Year-to-date	Calendar year-to-date beginning with January through the current reporting month
Transactions	The count of transactions
Dollar Amount	The dollar amount corresponding to the specified transactions
Financial Detail Debits	Total number and associated dollar volume of First Presentment/1240-200 non-reversal debit messages
Financial Detail Debit Reversals	Total number and associated dollar volume of First Presentment/1240-200 reversal debit messages
Financial Detail Credits	Total number and associated dollar volume of First Presentment/1240-200 non-reversal credit messages
Financial Detail Credit Reversals	Total number and associated dollar volume of First Presentment/1240-200 credit reversal messages
* Net Total (Transactions)	Debits + credits - debit reversals - credit reversals
* Net Total (Dollar Volume)	Debits - credits - debit reversals + credit reversals
Chargeback Debits	Total number and associated dollar volume of non-reversal debit First Chargeback/1442-450 (Full) and 1442-453 (Partial) and Arbitration Chargeback/1442-451 (Full) and 1442-454 (Partial) messages
Chargeback Debit Reversals	Total number and associated dollar volume of reversal debit First Chargeback/1442-450 (Full) and 1442-453 (Partial), and Arbitration Chargeback/1442-451 (Full) and 1442-454 (Partial) messages

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GCMS Transaction and Chargeback Analysis Reports

Field	Description
Chargeback Credits	Total number and associated dollar volume of non-reversal credit First Chargeback/1442-450 (Full) and 1442-453 (Partial) and Arbitration Chargeback/1442-451 (Full) and 1442-454 (Partial) messages
Chargeback Credit Reversals	Total number and associated dollar volume of credit reversal First Chargeback/1442-450 (Full) and 1442-453 (Partial) and Arbitration Chargeback/1442-451 (Full) and 1442-454 (Partial) messages
Representment Debits	Total number and associated dollar volume of non-reversal debit Second Presentment/1240-205 (Full) and 1240-282 (Partial) messages
Representment Debit Reversals	Total number and associated dollar volume of reversal debit Second Presentment/1240-205 (Full) and 1240-282 (Partial) messages
Representment Credits	Total number and associated dollar volume of non-reversal credit Second Presentment/1240-205 (Full) and 1240-282 (Partial) messages
Representment Credit Reversals	Total number and associated dollar volume of reversal credit Second Presentment/1240-205 (Full) and 1240-282 (Partial) messages.
Retrieval Requests	Total number and associated dollar volume of non-reversal Retrieval Request/1644-603 messages
Retrieval Request Reversals	Total number and associated dollar volume of reversal Second presentment/1240-205 (Full) and 1240-282 (Partial) messages
Retrieval Request Fulfillments	Total number and associated dollar volume of non-reversal MasterCom and manual (non-MasterCom) fulfillment activity
Retrieval Request Fulfillment Reversals	Total number and associated dollar volume of reversal MasterCom and manual (non-MasterCom) fulfillment activity

Chapter 4 Account Level Management

This chapter describes how GCMS performs transaction processing for applicable Account Level Management services.

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Overview of Account Level Management

Account Level Management occurs when MasterCard recognizes and processes transactions at the primary account level. This differs from account range processing, in which all cardholder accounts within a designated account range are subject to identical processing rules and standards.

The MasterCard Authorization Platform and Global Clearing Management System (GCMS) applications support specialized processing at the primary account level.

MasterCard currently supports the following types of account level processes within the Account Level Management platform; each type uniquely defines how the system processes transactions at the primary account level:

- MasterCard Enhanced Value supports the following Account Level Management capabilities:
 - Consumer High Value
 - Consumer High Spend in Canada
 - Premium High Spend in Canada
- MasterCard Product Graduation
- MasterCard High Value supports the following Account Level Management capabilities:
 - Consumer High Value
 - Enhanced Value for Small Business
- Valid types of Account Level Management combinations are as follows:
 - Enhanced Value and Product Graduation
 - High Value and Product Graduation
- World Elite Spend Shortfall

Account Level Management Capability	Account Level Management Program	Account Category Code	Country/Region
Enhanced Value	High Spend	B	Canada
Enhanced Value	Premium High Spend	S	Canada
Enhanced Value	Enhanced Value	B	Ukraine
Enhanced Value	Enhanced Value	B	U.S.
Enhanced Value	Enhanced Value	B	Poland, Europe
Product Graduation	Product Graduation	P	Australia

Account Level Management

Overview of Account Level Management

Account Level Management Capability	Account Level Management Program	Account Category Code	Country/Region
Product Graduation	Product Graduation	P	U.S.
Enhanced Value and Product Graduation	Enhanced Value and Product Graduation	M	U.S.
High Value	High Value	S	U.S.
High Value	Enhanced Value—Small Business	S	U.S.
High Value and Product Graduation	High Value and Product Graduation	T	U.S.
High Value and Product Graduation	Enhanced Value—Small Business and Product Graduation	T	U.S.
World Elite Spend Shortfall	World Elite Spend Shortfall	W	U.S.
High Value and Product Graduation	World Elite Spend Shortfall	Y	U.S.

NOTE

The rest of this chapter references the Account Level Management platform, which includes all of the Account Level Management capabilities as defined above.

NOTE

MasterCard World Elite Spend Shortfall is not an Account Level Management service offering, but the clearing processing follows the same logic.

Account Level Management Transaction Qualification

To qualify for one or more Account Level Management capabilities, the following conditions must be met.

- Transaction must be authorized through the MasterCard Worldwide Network
- DE 38 (Approval Code), position 6 contains a valid Account Level Management account category code value
- DE 3 (Processing Code), subfield 1 (Cardholder Transaction Type) must have one of the following values:
 - 00 (Purchase [Goods and Services])
 - 09 (Purchase [Goods and Services] with Cash Back)
 - 18 (Unique Transaction)
- Account Level Management participation switch indicator on IPM MPE table IP0040T1 (Account Range) = **Y**
- Transaction date must be after the Account Level Management activation date indicator
- Business service arrangements participate in Account Level Management. This is identified by an Account Level Management account category code present on IPM MPE table IP0019T1 (Account Level Management Participation Parameters) for the derived business service arrangement and null interchange rate designator (IRD) combination

Enhanced Value for Consumer

The benefits of Enhanced Value for Consumer are as follows.

Enhanced Value for Consumer:

- Gives issuers the flexibility of qualifying primary accounts for appropriate interchange, allowing issuers to respond appropriately to cardholder needs and spending habits.
- Enables issuers to more closely align the profitability of their rewards programs with cardholder value, offering higher interchange rates for primary accounts meeting the designated reward requirements and registered for Enhanced Value.

Enhanced Value Account Category

The account category code and description for Enhanced Value are as follows.

Account Category Code	Account Category Description
B	Account category of B represents primary accounts that participate in Enhanced Value type processing. When the sixth position of DE 38 (Approval Code) contains the value of B and the transaction meets all qualifying criteria associated with Account Level Management processing, then the transaction should be processed based on the licensed brand product on the account range.

Product Graduation

MasterCard Product Graduation gives issuers the flexibility to migrate primary accounts to different card programs while maintaining the account number. This allows for a true “account for life” management throughout the changing needs of the cardholder.

Specifically, Product Graduation supports the migration of cardholders to different card programs without changing the account number. (For example, an issuer migrates a Gold MasterCard® card cardholder to a World MasterCard® card, retaining the account number and thus having a Gold BIN associated with a World card program. This process will allow issuers to manage their card portfolios at the primary account level rather than at the BIN or account range level.)

NOTE

As a reminder, only U.S.-to-U.S. transactions processed through the Dual Message System are recognized at the Product Graduated account level.

Product Graduation Account Category

The code and description for the account category Product Graduation are as follows.

Account Category Code	Account Category Description
P	Account category of P represents cardholder accounts that participate in Product Graduation. If the sixth position of DE 38 (Approval Code) contains the value P and the transaction meets all qualifying criteria associated with Account Level Management processing, then the transaction should be processed based on the licensed graduated product. The graduated product is present in customer interface specification (CIS) DE 63 (Network Data), subfield 1 (Financial Network Code) of the Authorization Request/0100 message and in IPM DE 63 (Transaction Life Cycle ID), subfield 2 (Trace ID) in the clearing message.

High Value

High Value provides enhanced functionality within the Account Level Management platform that monitors the quarterly spending on accounts so that future domestic transactions, processed on the MasterCard Worldwide Network, are eligible for differentiated interchange.

High Value Account Categories

The code and description for the account category High Value are as follows.

Account Category Code	Account Category Description
S	Account category of S represents cardholder accounts that participate in High Value type processing. When the sixth position of DE 38 (Approval Code) contains the value S and the transaction meets all qualifying criteria associated with Account Level Management processing, then the transaction should be processed based on the licensed product associated with the issuing account range.

Combined Account Level Management Capabilities

Combined Account Level Management supports the ability for a single account to participate in multiple Account Level Management capabilities simultaneously.

Account Category Value	Account Category Description
M	Account category of M represents cardholder accounts that participate in any Enhanced Value type processing and Product Graduation. When the sixth position of DE 38 (Approval Code) contains the value of M and the transaction meets all the qualifying criteria associated to Account Level Management processing, then the transaction should be processed based on the licensed graduated product populated in CIS DE 63 (Transaction Life Cycle ID) and in IPM DE 63 (Transaction Life Cycle ID), subfield 2 (Trace ID) in the clearing message.
T	Account category of T represents cardholder accounts that participate in MasterCard High Value for either consumer High Value or Enhanced Value for Small Business and Product Graduation. When the sixth position of DE 38 (Approval Code) contains the value of T and the transaction meets all the qualifying criteria associated to Account Level Management processing, then the transaction should be processed based on the licensed graduated product populated in CIS DE 63 (Transaction Life Cycle ID) and in IPM DE 63 (Transaction Life Cycle ID), subfield 2 (Trace ID) in the clearing message.

Account Level Management Participation Guidelines

Details about what guidelines must be met and what tasks must be completed to participate in Account Level Management are as follows.

Issuers that want to participate in any of the Account Level Management capabilities must:

Account Level Management

Account Level Management Participation Guidelines

- Enroll and Accept Terms and Conditions. Refer to the Account Level Management section of MasterCard OnLine® for additional details.
- Register Reward programs, as applicable, for Enhanced Value and High Value type processing
- Enroll/register cards to participate in the capabilities; each capability has unique enrollment/registration files.

For details about how to enroll or register accounts for participation in an Account Level Management capability, contact your MasterCard representative or refer to the *Account Management System User Manual*.

Account Level Management qualifications require transactions to be authorized through the MasterCard Worldwide Network.

NOTE

Authorization CIS Data Element (DE) 63, subfield 1 will contain the licensed graduated product code for those transactions identified as qualifying for Product Graduation or combined Enhanced Value and Product Graduation or High Value and Product Graduation or World Elite Spend Shortfall and Product Graduation. For those transactions qualifying for Enhanced Value or High Value capabilities, Authorization CIS DE 63, subfield 1 will contain the licensed product associated to the issuing account range.

NOTE

Issuers cannot register for World Elite Spend Shortfall, because the spend analysis and redirected accounts are determined by MasterCard.

The value in the last position of the approval code (Data Element [DE] 38, position 6) indicates that the cardholder account participates in the following Account Level Management types:

- Enhanced Value
- Product Graduation
- High Value
- Enhanced Value and Product Graduation
- High Value and Product Graduation
- World Elite Spend Shortfall

Qualified transactions must be submitted for the correct Account Level Management interchange program. Transactions not submitted correctly may be rejected by GCMS. In addition, all acquirers must be prepared to use the appropriate method when deriving the correct interchange programs for transactions that do not qualify for Account Level Management.

NOTE

U.S. region-acquired transactions may be downgraded by Interchange Compliance, when the appropriate interchange is not submitted.

Account Level Management Interchange Qualification

The process that GCMS follows to determine whether the submitted interchange rate designator (IRD) is valid for the sixth position of the approval code in the clearing message is as follows.

The below section outlines the steps that .

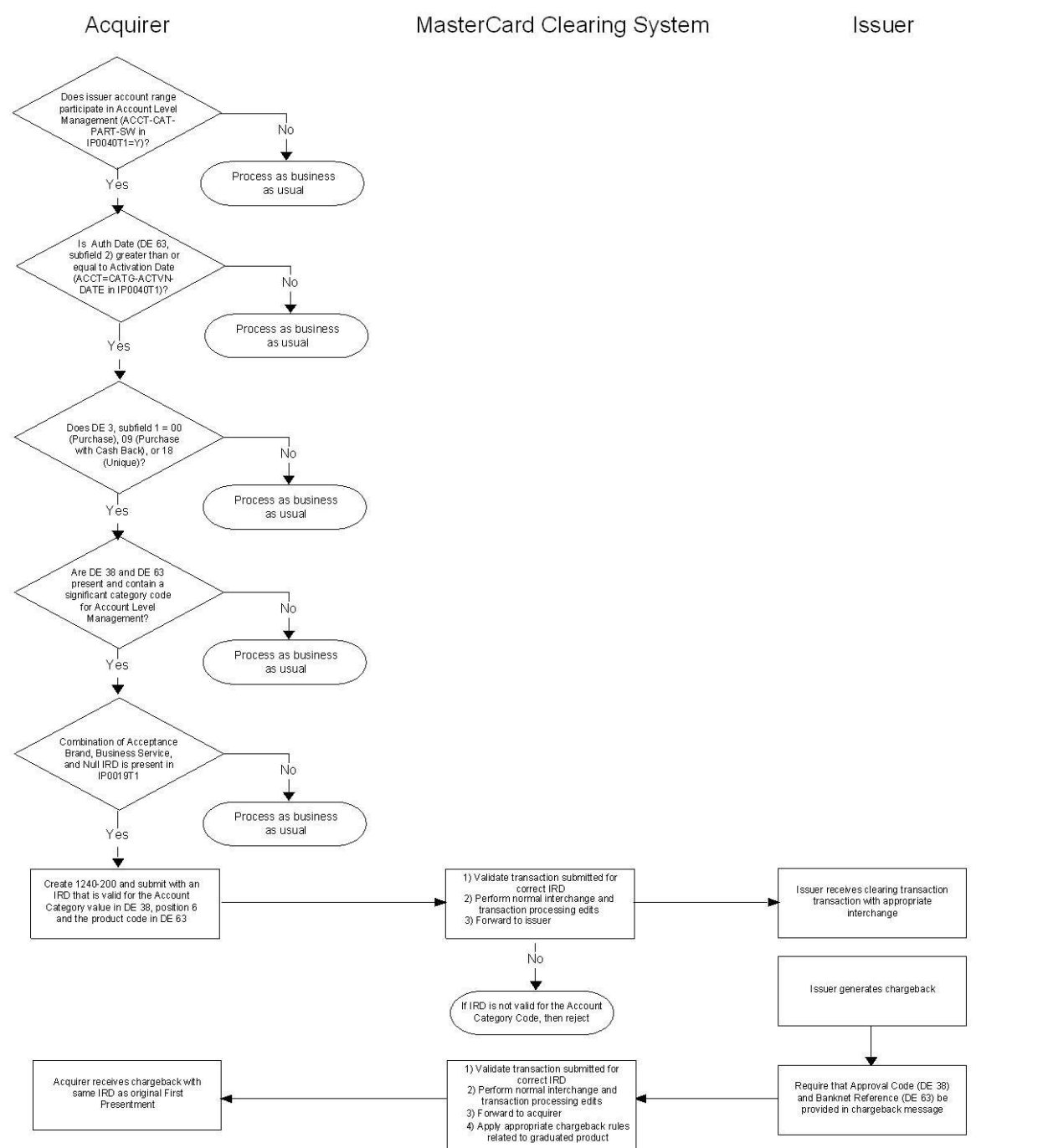
- In the event that unique IRDs are not assigned for Account Level Management for applicable business service arrangements, an incentive interchange will be used as indicated by Rate Type 20 for a given IRD on the IPM MPE table IP0053T1. The issuer will be notified in the clearing message in PDS 0158 (Business Activity), subfield 12 (Account Level Management Account Category Code) the appropriate Account Level Management capability for which the transaction is qualified.
- The unique IRDs for Account Level Management for participating business service arrangements can be found on IPM MPE table IP0019T1.

The following diagram depicts how an account level management transaction should be submitted for clearing processing.

Account Level Management

Account Level Management Interchange Qualification

Figure 4.1—Clearing Process Flow



Recognition of Cardholder Participation in Account Level Management

GCMS determines whether the cardholder account participates in Enhanced Value, Product Graduation, High Value, World Elite Spend Shortfall, or a combination of Account Level Management capabilities using the following criteria.

- DE 63, subfield 2 (Trace ID) confirms the transaction was authorized through the MasterCard Worldwide Network.
- GCMS looks at IPM MPE table IP0040T1 (Issuer Account Range) to locate the account range associated with the cardholder account. Specifically, GCMS evaluates the status of the Account Level Participation Indicator and the validity of the Activation Date to determine whether the account range participates in the Account Level Management process. Validation is as follows:
 - If the Account Range Participation Indicator is N, GCMS processes the transaction as usual.
 - If the Account Range Participation Indicator is Y (meaning that one or more cardholder accounts participate in Account Level Management processing) and as follows:
- Determine the business service arrangement for which the transaction qualifies. If account range participates in Account Level Management, find the business service arrangement for which the transaction participates for the null IRD setup on IPM MPE table IP0019T1 (Account Level Management Participation and Enhanced Value Parameter). If a valid Account Category Code is present for the given business service arrangement/acceptance brand/null IRD, and the requirements above are met, transaction is processed through Account Level Management processing. For additional details, see the [Determination of Account Level Management Program at Business Service Level](#) section.
- Account Level Management transactions participating in Product Graduation, the brand product found in DE 63, subfield 2 must be a valid brand product on the IPM MPE table IP0018T1 (MasterCard Product Graduation Parameters).

The valid values for the Account Level Participation Indicator are listed in the following table.

Account Level Management

Account Level Management Interchange Qualification

Value	Description
N	Default value. No cardholder accounts within account range participate in Account Level Management processing. The value N means that no special consideration is required on the part of the acquirer in determining the appropriate interchange program for which to submit the transaction.
Y	One or more cardholder accounts within account range participate in Account Level Management processing. All cardholder accounts may be participants, but not all cardholder accounts are required to be associated with the same Account Category levels. The sixth position of DE 38 is populated with a valid Account Category Code, the transaction continues through GCMS processing for Account Level Management.

Refer to the *GCMS Parameter Table Layouts* for the Account Level Management technical specifics for IPM MPE table IP0040T1 (Issuer Account Range).

NOTE

The validity of the activation date is conducted as follows: A comparison is performed between the Authorization Date (as found on DE 63, subfield 2 [Trace ID]) with the Activation Date on IPM MPE table IP0040T1 and the year obtained from the Business Processing Date (used by GCMS in PDS 0158 [Business Activity], subfield 6 [Business Cycle]). This date also can be identified in the IPM Pre-Edit process as the Run Control Date, plus an additional day.

— If the month portion of the Authorization Date is less than or equal to the month portion of the Business Processing Date, GCMS appends the year portion of the Business Processing Date to the Authorization date.

— If the month portion of the Authorization Date is not less than or equal to the month portion of the Business Processing Date, GCMS subtracts one from the year portion of the Business Processing Date and appends that year value to the Authorization Date.

Account Level Management Technical Specifications

DE 38—Approval Code and DE 63—Transaction Life Cycle ID are used to determine how Account Level Management transactions should be processed.

Technical Specifications of DE 38—Approval Code

The technical specifications of IPM DE 38 (Approval Code) are as follows.

A value of Y in the Account Level Participation Indicator indicates that the sixth position of DE 38 has significant meaning in how the transaction should be processed.

GCMS evaluates the account category code value in the sixth position of DE 38 and determines its meaning by using either IPM MPE table IP0018T1 (MasterCard Product Graduation Parameters) or IPM MPE table IP0019T1 (Account Level Management Participation and Enhanced Value Parameters).

IPM MPE table IP0018T1 identifies Product Graduation Account Category Codes along with their corresponding Licensed Product IDs, and GCMS Product IDs.

IPM MPE table IP0019T1 identifies the Account Category Codes along with their corresponding interchange programs for Enhanced Value, World Elite Spend Shortfall, or and High Value processing, if unique interchange programs are defined. This table also identifies the Account Level Management capabilities that a given business service arrangement participates in as indicated by Account Category Codes at the Null IRD.

The account category codes valid for these tables are as follows.

IPM MPE Table	Account Category Codes Mapped to DE 38, Position 6	
	Description	
IP0018T1	P	Product Graduation or Co-brand Proprietary Transaction Management. ¹
	M	Enhanced Value and Product Graduation
	T	Product Graduation and High Value
	Y	Product Graduation and World Elite Spend Shortfall

1. See [Private Label Program](#) for more details about Co-brand Proprietary processing.

Account Level Management

Account Level Management Interchange Qualification

IPM MPE Table	Account Category Codes Mapped to DE 38, Position 6		Description
IP0019T1	B		Enhanced Value
	M ²		Enhanced Value and Product Graduation
	S		High Value
	P		Product Graduation
	T ²		Product Graduation and High Value
	W		World Elite Spend Shortfall
	Y		Product Graduation and World Elite Spend Shortfall
	Z		Business as Usual processing

NOTE

Account Category Code value Z indicates that the account does not participate in Account Level Management and the transaction should be processed as usual.

Technical Specifications of DE 63—Transaction Life Cycle ID

The technical specifications of IPM DE 63 (Transaction Life Cycle ID) are as follows.

To qualify for Enhanced Value, Product Graduation, High Value, or a combination of Account Level Management capabilities, a clearing transaction must contain a valid Banknet Reference number in DE 63 (Transaction Life Cycle ID) and a valid Account Category Code in DE 38 (Approval Code), position 6. The combination of the two elements helps determine the appropriate interchange program and product code for the transaction.

Acquirers must ensure the information submitted in DE 63 and DE 38 in the clearing message for Account Level Management transactions, reflect the data from the corresponding authorization message.

When DE 63 or DE 38 are not present in a transaction, the transaction will not qualify for Account Level Management processing. The transaction must be submitted for the interchange rate program associated with the product code of the account number account range as identified in IPM MPE table IP0040T1.

-
- The combination account category codes of M and T will not be at the null IRD setup. These values are derived when more than one of the above account category codes are present for a business service arrangement.

When DE 63 is present in the clearing message, GCMS will perform the following edit checks on subfield 2 (Trace ID):

- Positions 1–3: Must contain a valid MasterCard product code. (GCMS will edit against IPM MPE table IP0016T1 for the valid product codes.)
- Positions 4–9: Must contain six alphanumeric characters, no embedded spaces, low values or high values.

NOTE

If DE 38 and DE 63 are provided in the First Presentment message, they should always be retained and returned throughout all subsequent life cycle messages. Transactions qualifying for Account Level Management or Co-Brand Proprietary Transaction Management require these data elements for correct processing.

Determination of Account Level Management Program at Business Service Level

Instructions on how to identify the Account Level Management capability for which the business service arrangement qualifies are as follows.

To support Account Level Management for cross-border transactions, GCMS identifies transactions qualifying for Account Level Management at the business service agreement. For example, a cardholder account may be registered for both Enhanced Value and Product Graduation. However, a business service arrangement can support one or more of the Account Level Management capabilities.

Therefore, in addition to recognition of Account Level Management at the account range level (IPM MPE table IP0040T1 [Issuer Account Range]), members must determine the Account Level Management capability for which the business service arrangement qualifies. This is identified by the Account Category Code at the business service arrangement/card program identifier/null IRD level. The transaction qualification must be performed as follows:

1. Determine the account range Account Level Participation Indicator to verify that the account range participates in Account Level Management and that the transaction was authorized via the MasterCard Worldwide Network after the Account Level Management activation date.
2. Determine whether the business service arrangement qualifies for Account Level Management.
 - Value **B** indicates Enhanced Value.
 - Value **S** indicates High Value.
 - Value **P** indicates Product Graduation.
 - Value **W** indicates World Elite Spend Shortfall.

This is identified at the business service arrangement/card program identifier level for the null IRD setup in IPM MPE table IP0019T1 (Account Level Management Participation and Enhanced Value Parameters) as follows:

NOTE

The business service arrangement will NOT be set up for combined Account Level Management programs. For example, account category value of M in IPM MPE table IP0019T1 for the business service arrangement/acceptance brand/null IRD combination. Customers must always derive the value M from the setup of Account Category values B and P at the business service arrangement level.

3. The value in DE 38, position 6 may not always match the account category code setup at the business service arrangement/card program identifier level on IPM MPE table IP0019T1. This may occur when the cardholder account participates, for example, in both Enhanced Value and Product Graduation at the domestic business service arrangement level, but only Product Graduation is valid for the cross border business service arrangement (that is, intra-EEA region, intercountry). If this occurs, the authorization message always will contain DE 38, position 6, value M, but if transaction is qualified for intra-EEA business service arrangement then the Account Level Management program qualified should be a **P** (Product Graduation). The value **M** in DE 38, position 6, may identify one of the following scenarios:
 - If only the value **B** is present at the business service arrangement/card program identifier level, it indicates the transaction will qualify for Enhanced Value
 - If only the value **P** is present at the business service arrangement/card program identifier level, it indicates the transaction will qualify for Product Graduation
 - If both values **B** and **P** are present at the business service arrangement/card program identifier level, it indicates the transaction qualifies for both Enhanced Value and Product Graduation
4. If the business service arrangement/card program identifier/null IRD level is set up with an Account Category value of P, validate that the product code in DE 63, subfield 2 is valid for Product Graduation as identified in IPM MPE table IP0018T1.

PDS 0003—Licensed Product Identifier

PDS 0003 (Licensed Product Identifier) identifies the actual product code assigned by MasterCard. The clearing system provides PDS 0003 to indicate the licensed product code assigned to the transaction.

For issuers that participate in the Product Graduation program, PDS 0003 is populated as follows:

- For qualified transactions authorized via the MasterCard Worldwide Network, this field reflects the registered licensed graduated product. For a transaction to qualify, all the following conditions must be met:

Transaction type (DE 3 [Processing Code], subfield 1 [Cardholder Transaction Type]) is 00 (Purchase [Goods and Services]) 09 (Purchase [Goods and Services] with Cash Back), or 18 (Unique Transaction).
- For non-qualified transactions, this field identifies the Licensed Product Identifier according to the licensed product associated with the issuer account range. Non-qualified transactions are listed as follows:
 - Transactions not authorized through the MasterCard Worldwide Network
 - Transactions that do not meet all of the conditions defined for Account Level Management qualified transactions

First Chargeback/1442 Messages

The existing rules for chargeback processing do not change. Chargeback product-specific edits (such as chargeback amount limits) are defined by the product code determined at the time of the authorization and the specific interchange program used in the First Presentment/1240.

If the authorization occurs on or after the account is registered on Enhanced Value, High Value, or Product Graduation, the Enhanced Value and Product Graduation status governs any subsequent chargeback transactions. If an issuer submits a First Chargeback/1442 on a graduated account, the chargeback must adhere to chargeback policies associated with said graduated account. For example, a cardholder account has graduated from MasterCard Gold (MCG) to MasterCard World (MCW). The MasterCard Worldwide Network authorization took place after the cardholder account graduated. The First Presentment/1240 was submitted with an IRD that is valid for MCW. When submitting the chargeback message, the issuer must submit it in accordance with the chargeback rules associated with the MCW product. MCW has different chargeback processing limits than MCG.

The IRD identifies the interchange program for which the acquirer submitted the First Presentment/1240. The IRD is presented in PDS 0158 (Business Activity), subfield 4 (Interchange Rate Designator). The IRD must remain the same throughout the life cycle of all transactions, including Retrieval Request/1644, First Chargeback/1442, and Second Presentment/1240 messages. Transactions submitted and processed as Enhanced Value, High Value, or Product Graduation transactions must also adhere to this business rule.

To ensure that all life cycle transactions for Enhanced Value, Product Graduation, High Value, or a combination of Account Level Management capabilities are processed in the same manner as their associated First Presentment/1240 message, MasterCard recommends that the following message elements be managed as “retain and return” fields:

Account Level Management

Account Level Management Interchange Qualification

- DE 38 (Approval Code)
- DE 63 (Transaction Lifecycle ID)

Chapter 5 MasterCard PayPass and PayPass Mapping Service

This chapter describes both how GCMS performs transaction processing for MasterCard PayPass and the PayPass Mapping Service.

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Overview of the MasterCard PayPass and PayPass Mapping Service

MasterCard supports account level processes for MasterCard® *PayPass*™ and *PayPass* Mapping Service.

MasterCard *PayPass* cards and non-card form factors that contain a proximity chip offer consumers a fast and convenient way to pay. Using proximity chip payment technology, consumers can pay for their purchases at the point of sale by tapping their *PayPass* card or non-card form factor on a *PayPass* terminal. The *PayPass* card or non-card form factor transmits the card information to the terminal. The *PayPass* terminal interacts with existing authorization mechanisms to initiate and complete the authorization. The increased speed and convenience make *PayPass* a very attractive way to pay, especially in high-traffic venues such as mass transit stations, movie theaters, and fast food restaurants.

MasterCard PayPass and PayPass Mapping Service Participation Guidelines

Guidelines for participation in the MasterCard PayPass and PayPass Mapping Service—including definitions of *Paypass* account number and primary account number—are as follows.

DEFINITION

***PayPass* account number is a unique number encoded on the proximity chip of a *PayPass* card or non-card form factor that the *PayPass* Mapping Service associates with the primary account number.**

DEFINITION

Primary account number (PAN) is the number that is embossed, encoded, or both, on a MasterCard card that identifies the issuer and the particular cardholder account.

MasterCard recommends that a unique account number be used for *PayPass* transactions. This unique account number is the optimal way to avoid the risk of cross-contamination. Use of a unique account number in the *PayPass* chip is accepted by the issuer only if the value in Data Element (DE) 22 (Point of Service Data Code), subfield 7 (Card Data Input Mode) indicates “proximity” (for example, from a *PayPass* contactless chip). This comparison allows blocking of the authorization for transactions presented via non-proximity channels such as magnetic stripe, mail order/telephone order (MO/TO), and the Internet.

Implementation of a separate *PayPass* account number requires the issuer to:

- Allocate an extra account number to provide *PayPass* functionality for an existing primary account number.
- Establish a cross-reference between the primary account number and the *PayPass* account number so that they are managed together, if required.

MasterCard recognizes that the use of a separate *PayPass* account number for some issuers may not be viable; therefore, MasterCard created the *PayPass* Mapping Service. This optional service helps issuers process *PayPass* transactions by translating *PayPass* account numbers into primary account numbers that issuers can process with minimal impact. *PayPass* account numbers eligible for the service may belong to a MasterCard issuer.

Through the *PayPass* Mapping Service, MasterCard can provide *PayPass* issuance and processing services as described in this chapter.

PayPass Mapping Service

Processing Only Participation in PayPass Mapping Service

Issuers may choose to offer the *PayPass* Mapping Service by creating the mapping file themselves. This choice is referred to as Processing Only participation.

In this scenario, the issuers provide MasterCard with a file mapping their cardholders' primary account numbers to *PayPass* account numbers. The issuer or MasterCard then provides each cardholder with a *PayPass* card or non-card form factor containing a *PayPass* account number.

When the *PayPass* card or non-card form factor is used at a *PayPass* terminal, the transaction first comes to MasterCard, where the *PayPass* account number is replaced with the cardholder's primary account number.

Processing and Issuance of Non-card Form Factor Participation

Individual consumers may request a *PayPass* card or non-card form factor from a secure Web site. This process is referred to as Processing and Issuance of Non-card Form Factor participation.

Cardholders use a secure Web site to request or register a *PayPass* card or non-card form factor and enter the primary account number they would like to associate with it. The Web site performs some security checks on the information entered and then approves the request. MasterCard then provides the cardholder with the *PayPass* card or non-card form factor requested. Upon receipt, the cardholder returns to the Web site and registers the *PayPass* card or non-card form factor to activate the *PayPass* account number. MasterCard collects the information provided through the Web site and creates the file mapping of the *PayPass* account number to the primary account number.

Process Flow of the PayPass Mapping Service

MasterCard maintains a *PayPass* Mapping Service database that maps *PayPass* account numbers to primary account numbers.

The *PayPass* Mapping Service database is used by the MasterCard Worldwide Network and GCMS, so that the acquirer can always process transactions using the *PayPass* account number and the issuer can always process using the primary account number.

1. When a consumer taps an eligible *PayPass* card or non-card form factor on a *PayPass* terminal, the card or non-card form factor transmits the *PayPass* account number to the terminal.
2. The *PayPass* terminal passes the *PayPass* account number and other authorization information to the acquirer.
3. The acquirer initiates an authorization message containing the *PayPass* account number and sends it to the MasterCard Worldwide Network.
4. The MasterCard Worldwide Network maps the *PayPass* account number to the cardholder's primary account number before sending the transaction to the issuer.
5. The issuer responds with an authorization response message containing the primary account number.
6. The MasterCard Worldwide Network maps the cardholder's primary account number back to the *PayPass* account number and sends the response message on to the acquirer.
7. The acquirer forwards the *PayPass* account number and other authorization response information to the *PayPass* terminal.
8. The MasterCard Worldwide Network logs all authorizations for which it performed the *PayPass* Mapping Service and makes this information available to GCMS.
9. The acquirer sends to GCMS the corresponding clearing message, containing the *PayPass* account number.
10. GCMS maps the *PayPass* account number to the primary account number using either the authorization logs or the *PayPass* Mapping Service database before sending the clearing message to the issuer for posting.
11. Issuers can send to GCMS subsequent retrieval and chargeback messages containing the cardholder's primary account number, and GCMS maps the cardholder's primary account number to the *PayPass* account number before sending the message to the acquirer.

Refer to the *Authorization Manual* for detailed information about using this service for authorization processing.

Using the MPE to Identify Issuer Account Ranges Participating in the PayPass Mapping Service

The IPM MPE table IP0040T1—Issuer Account Range contains the Mapping Service Indicator field. This field identifies issuer account ranges that require the *PayPass* Mapping Service. This field contains one of the following values for each issuer account range.

Value	Description
space	The issuer account range does not participate in the <i>PayPass</i> Mapping Service.
1	The issuer account range consists of <i>PayPass</i> account numbers owned by an issuer, in which the issuer actively participates in the <i>PayPass</i> Mapping Service. Every transaction containing this account range is to be mapped.
2	The issuer account range consists of <i>PayPass</i> account numbers owned by an issuer, in which the issuer actively participates in the <i>PayPass</i> Mapping Service. Not all transactions containing this account range are to be mapped because the issuer is phasing in the <i>PayPass</i> Mapping Service.
3	The issuer account range consists of <i>PayPass</i> account numbers provided by MasterCard, assigned to an issuer that participates in the Processing Only option of the <i>PayPass</i> Mapping Service.
4	The issuer account range consists of <i>PayPass</i> account numbers provided by MasterCard, assigned to an issuer that participates in the Processing and Issuance of Non-card Form Factor option of the <i>PayPass</i> Mapping Service by permitting its cardholders to request a <i>PayPass</i> card or non-card form factor via the Web site.
5	The issuer account range consists of <i>PayPass</i> account numbers provided by MasterCard, assigned to a merchant that sponsors the <i>PayPass</i> card or non-card form factor. The issuer passively participates in the <i>PayPass</i> Mapping Service.
6	The issuer account range consists of <i>PayPass</i> account numbers provided by MasterCard, and MasterCard sponsors the <i>PayPass</i> card or non-card form factor. The issuer passively participates in the <i>PayPass</i> Mapping Service.

Before distributing *PayPass* non-card form factors to consumers, MasterCard adds to the IPM MPE file issuer account ranges that consist of *PayPass* account numbers. The IPM MPE file contains valid GCMS Product IDs, country codes, and other fields necessary for processing for these issuer account ranges. They are assigned to participate in all the default interregional, intraregional, and intracountry business services that are relevant to their assigned country codes.

NOTE

If an issuer account range contains a value of 1 to 6 in this new field in the IPM MPE, acquirers must send ALL transactions involving this issuer account range to MasterCard for authorization and clearing because only the MasterCard systems contain the data needed to map a *PayPass* account number to a primary account number. Transactions processed in an On-Us or intraprocessor mode will not have access to this mapping data.

Identifying PayPass Mapping within IPM Messages

Contents of PDS 0001 (MasterCard Mapping Service Account Number)

GCMS provides PDS 0001 in any First Presentment/1240, Retrieval Request/1644, Fee Collection (Retrieval Fee Billing)/1740, First Chargeback/1442, Second Presentment/1240, or Arbitration Chargeback/1442 message in which it maps between a *PayPass* account number and a primary account number.

This element indicates to the receiver of the message that GCMS performed the *PayPass* Mapping Service for the transaction, and therefore, the sender of the message has processed the transaction using a different value in DE 2. PDS 0001 is for information only. The receiver of the message is not required to recognize PDS 0001 and must not retain and return PDS 0001 in future life cycle messages, although customers may choose to store and use it within their internal systems to help resolve processing questions that may occur.

PDS 0001 contains the following two subfields.

Number	Name	Description
1	Account Number Type	This subfield indicates whether subfield 2 contains a <i>PayPass</i> account number or a primary account number. It also indicates the participation option and whether GCMS performed the <i>PayPass</i> Mapping Service using authorization logs or another source.
2	Account Number	In messages received by issuers, this subfield contains the <i>PayPass</i> account number and DE 2 (Primary Account Number [PAN]) contains the primary account number. In messages received by acquirers, this subfield contains the primary account number and DE 2 contains the <i>PayPass</i> account number.

PDS 0001, Subfield 1 (Account Number Type)

Technical details about PDS 0001 (MasterCard Mapping Service Account Number), subfield 1 (Account Number Type) are as follows.

Position 1 of this subfield contains the following.

- A value of 1–6, or the value 8 or 9 if the number in subfield 2 is a virtual account number.
- The value T if the account number in subfield 2 is a real card number.

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PayPass Mapping Service

Position 2 of this subfield contains the value space if GCMS performed the mapping service according to the authorization logs. It contains a C if GCMS performed the mapping service according to a source other than the authorization logs. (This position will contain a C in all retrieval and chargeback messages.)

Values for this subfield are listed in the following table.

Value	Description
TC	Subfield 2 contains a primary account number (PAN). Mapping was based on a source other than the authorization logs.
1	Subfield 2 contains a <i>PayPass</i> [™] account number owned by an issuer, and the issuer is actively participating in the <i>PayPass</i> Mapping Service. Every transaction containing this account range is to be mapped. Mapping was based on the authorization logs.
1C	Subfield 2 contains a <i>PayPass</i> account number owned by an issuer, and the issuer is actively participating in the <i>PayPass</i> Mapping Service. Every transaction containing this account range is to be mapped. Mapping was based on a source other than the authorization logs.
2	Subfield 2 contains a <i>PayPass</i> account number owned by an issuer, and the issuer is actively participating in the <i>PayPass</i> Mapping Service. Not all transactions in this issuer account range are mapped, because the issuer is phasing in the <i>PayPass</i> Mapping Service. Mapping was based on the authorization logs.
2C	Subfield 2 contains a <i>PayPass</i> account number owned by an issuer, and the issuer is actively participating in the <i>PayPass</i> Mapping Service. Not all transactions in this issuer account range are mapped, because the issuer is phasing in the <i>PayPass</i> Mapping Service. Mapping was based on a source other than the authorization logs.
3	Subfield 2 contains a <i>PayPass</i> account number provided by MasterCard and is assigned to an issuer that is actively participating in the <i>PayPass</i> Mapping Service. Mapping was based on the authorizations logs.
3C	Subfield 2 contains a <i>PayPass</i> account number provided by MasterCard and is assigned to an issuer that is actively participating in the <i>PayPass</i> Mapping Service. Mapping was based on a source other than the authorization logs.
4	Subfield 2 contains a <i>PayPass</i> account number provided by MasterCard and is assigned to an issuer that is passively participating in the <i>PayPass</i> Mapping Service by permitting its cardholders to request a <i>PayPass</i> card or device via that Web site. Mapping was based on the authorization logs.
4C	Subfield 2 contains a <i>PayPass</i> account number provided by MasterCard and is assigned to an issuer that is passively participating in the <i>PayPass</i> [™] Mapping Service by permitting its cardholders to request a <i>PayPass</i> card or device via the Web site. Mapping was based on a source other than the authorization logs.

Value	Description
5	Subfield 2 contains a <i>PayPass</i> account number provided by MasterCard and is assigned to a merchant that sponsors the <i>PayPass</i> [™] card or device. The issuer is passively participating in the <i>PayPass</i> Mapping Service. Mapping was based on the authorization logs.
5C	Subfield 2 contains a <i>PayPass</i> account number provided by MasterCard and is assigned to a merchant that sponsors the <i>PayPass</i> card or device. The issuer is passively participating in the <i>PayPass</i> Mapping Service. Mapping was based on a source other than the authorization logs.
6	Subfield 2 contains a <i>PayPass</i> account number provided by MasterCard, and MasterCard sponsors the <i>PayPass</i> card or device. The issuer is passively participating in the <i>PayPass</i> Mapping Service. Mapping was based on the authorization logs.
6C	Subfield 2 contains a <i>PayPass</i> account number provided by MasterCard, and MasterCard sponsors the <i>PayPass</i> card or device. The issuer is passively participating in the <i>PayPass</i> Mapping Service. Mapping was based on a source other than the authorization logs.

PDS 0001, Subfield 2 (Account Number)

Technical details about PDS 0001 (MasterCard Mapping Service Account Number), subfield 2 (Account Number) are as follows.

Subfield 2 contains a virtual or real account number or a primary account number. When issuers receive PDS 0001, the subfield 2 (Account Number) always contains a virtual account number.

This subfield is 6–19 digits in length.

Contents of DE 22 (Point of Service Data Code), Subfield 7 (Card Data Input Mode)

The values of either C (*PayPass* M/Chip and Contact M/Chip transactions, *PayPass* Mapping Service applied) or N (Contactless input, *PayPass* Mapping Service applied) in DE 22 (Point of Service Data Code), subfield 7 (Card Data Input Mode) is provided by GCMS.

Acquirers are not permitted to submit this value. Acquirers always provide a value of A or M in this subfield to indicate that PAN entry occurred via contactless mode. GCMS overlays the acquirer's submitted DE 22, subfield 7 value with N in First Presentment/1240 and Second Presentment/1240 messages in which it maps between a *PayPass* account number and a primary account number, before delivering the message to the issuer.

For the mapping of *PayPass* M/Chip and Contact M/Chip transactions in the *PayPass* Mapping Service, MasterCard will add the value C.

The issuer must provide either the C or N value in any subsequent First Chargeback/1442 or Arbitration Chargeback/1442 messages. The presence of the C or N value in First Chargeback/1442 and Arbitration Chargeback/1442 messages notifies GCMS that it must map the issuer-submitted primary account number to a *PayPass* account number.

Processing Transactions through the PayPass Mapping Service

Transactions involving *PayPass* account numbers must be sent to the MasterCard Worldwide Network for authorization and to GCMS for clearing, because these are the only systems that have access to the *PayPass* Mapping Service database needed to map between *PayPass* account numbers and primary account numbers. Following are the steps performed to accomplish this.

1. The MasterCard Worldwide Network maps a *PayPass* account number to a primary account number (PAN) before sending the authorization message to the issuer, and it maps the PAN back to the *PayPass* account number before sending the authorization response to the acquirer. In both the authorization and authorization response messages, the MasterCard Worldwide Network provides data fields indicating that the MasterCard Authorization System performed the *PayPass* Mapping Service.
2. The acquirer receives an authorization response message containing the *PayPass* account number in DE 2 (Primary Account Number [PAN]), and the PAN in DE 48 (Additional Data—Private Use), subelement 33 (*PayPass* Mapping Information). The acquirer is not required to recognize or store the PAN.
3. The acquirer populates DE 2 in the IPM First Presentment/1240 message with the *PayPass* account number captured by the *PayPass* terminal.
4. GCMS performs the *PayPass* Mapping Service for the First Presentment/1240 and any subsequent life cycle transactions. All clearing messages received by the issuer contain the PAN in DE 2, the *PayPass* account number in PDS 0001, and a value of N in DE 22 (Point of Service Data Code), subfield 7 (Card Data Input Mode). All clearing messages received by the acquirer contain the *PayPass* account number in DE 2, the PAN in PDS 0001, and the acquirer's originally submitted value in DE 22, subfield 7.

DE 22 Values Identify Contactless Transactions to GCMS

Requirements to perform the PayPass Mapping Service for various messages are as follows.

To perform the *PayPass* Mapping Service for First Presentment/1240 messages, GCMS requires that the First Presentment/1240 contain DE 22 (Point of Service Data Code), subfield 7 (Card Data Input Mode) with a value of A or M to indicate PAN entry via a contactless mode. The acquirer must provide one of these values in a First Presentment/1240 message when DE 2 contains a *PayPass* account number.

To perform the *PayPass* Mapping Service for First Chargeback/1442 and Arbitration Chargeback/1442 messages, GCMS requires that the chargeback message contain DE 22, subfield 7 with a value of N to indicate that GCMS performed the *PayPass* Mapping Service for the first presentment. The issuer receives this value in the First Presentment/1240 message and must provide it in any subsequent chargeback message to identify to GCMS when to map a primary account number back to a *PayPass* account number.

Therefore, issuers that participate in *PayPass* must be able to receive and provide DE 22, subfield 7, value N (Contactless input, *PayPass* Mapping Service applied), in IPM clearing messages, even if they do not issue *PayPass* cards. Acquirers neither provide nor receive the N value, because they always use the existing values of A or M to identify contactless transactions.

Processing First Presentment/1240 Messages through the PayPass Mapping Service

Details about the processing of First Presentment/1240 Message through the PayPass Mapping Service are as follows.

When processing a First Presentment/1240, GCMS validates the contents of DE 2 (Primary Account Number [PAN]) against IPM MPE table IP0040T1, as usual. If the Mapping Service Indicator field in table IP0040T1 indicates that DE 2 contains a service-eligible *PayPass* account number (indicated by a value of 1 to 6 in the Mapping Service Indicator field). GCMS checks DE 22, subfield 7 to ensure that it is present and that it contains a value of A or M to indicate PAN entry via a contactless mode. If DE 22, subfield 7 does contain A or M, GCMS continues processing. If DE 22, subfield 7 does not contain A or M, GCMS rejects the transaction because this would be a fraudulent use of the *PayPass* account number.

1. GCMS first attempts to match to the *PayPass* Mapping Service authorization log according to the combination of *PayPass* account number and Banknet Reference Number and Date. The *PayPass* account number is in DE 2. The Banknet Reference Number and Date are present in DE 63 (Transaction Life Cycle ID), subfield 2 (Trace ID) in the IPM First Presentment/1240.
2. If GCMS does not find a match in the *PayPass* Mapping Service authorization log, or if DE 63 is not present in the First Presentment/1240, GCMS attempts to match to the *PayPass* Mapping Service database using the *PayPass* account number in DE 2.
3. If GCMS cannot match the First Presentment/1240 message to either the *PayPass* Mapping Service authorization log or the *PayPass* Mapping Service database, GCMS rejects the transaction.

After successfully mapping the PayPass account number to a PAN, GCMS uses the PAN in its processing. For example, it uses business services in which the issuer of the PAN participates, and it delivers the transaction to the endpoint associated with the issuer of the , as opposed to the PayPass account number. If the transaction contains no errors, GCMS modifies the data as follows before sending the First Presentment/1240 to the issuer:

- Moves the *PayPass* account number from DE 2 to PDS 0001, subfield 2
- Populates DE 2 with the
- Replaces the value in DE 22, subfield 7 with the value N

GCMS also logs the mapped transaction to a *PayPass* Mapping Service First Presentment history file. Any acknowledgement reconciliation messages or reporting created for the acquirer is based on the *PayPass* account number. Any notification reconciliation messages or reporting created for the issuer is based on the .

If the transaction is rejected for any existing GCMS error, GCMS sends the rejected transaction back to the acquirer with the acquirer's originally submitted values in DE 2 and DE 22.

Processing Retrieval Request/1644, First Chargeback/1442, and Arbitration Chargeback/1442 Messages through the PayPass Mapping Service

Details about the processing of Retrieval Request/1644, First Chargeback/1442, and Arbitration Chargeback/1442 messages through the PayPass Mapping Service are as follows.

The issuer populates DE 2 with the primary account number in all retrieval and chargeback messages. In addition, for First Chargeback/1442 and Arbitration Chargeback/1442 messages, the issuer must also populate DE 22, subfield 7 with N. This value is needed to indicate that GCMS must map the primary account number in DE 2 to a *PayPass* account number.

For all Retrieval Request/1644 messages, GCMS attempts to match the primary account number in DE 2 to the *PayPass* Mapping Service First Presentment history file.

For First Chargeback/1442 and Arbitration Chargeback/1442 messages, GCMS attempts to match the primary account number in DE 2 to the *PayPass* Mapping Service First Presentment history file if DE 22, subfield 7 is present and contains a value of N. The value N indicates that GCMS performed the *PayPass* Mapping Service for the First Presentment/1240.

GCMS attempts to match to the history file using the following fields.

Matching Criteria for Retrieval Requests and Chargebacks

GCMS attempts to match this combination of fields in the retrieval request or chargeback message...	To this combination of fields in the <i>PayPass</i> Mapping Service First Presentment history file
DE 2 (Primary Account Number)	Primary Account Number
DE 31 (Acquirer Reference Data)	DE 31

GCMS attempts to match this combination of fields in the retrieval request or chargeback message...	To this combination of fields in the <i>PayPass</i> Mapping Service First Presentment history file
DE 30 (Amounts, Original) subfield 1 (Original Amount, Transaction)	DE 4 (Amount, Transaction)
PDS 0149 (Currency Codes, Amounts, Original), subfield 1 (Currency Code, Original Transaction Amount)	DE 49 (Currency Code, Transaction)
DE 12 (Date and Time, Local Transaction), subfield 1 (Date)	DE 12, subfield 1

If the chargeback message does not contain DE 22 (Point of Service Data Code), subfield 7 (Card Data Input Mode) with a value of C or N, GCMS assumes that it did not perform the *PayPass* Mapping Service at the time of the First Presentment/1240. GCMS continues processing the Retrieval Request/1644, First Chargeback/1442, or Arbitration Chargeback/1442 as it normally does and delivers the message to the acquirer with the primary account number in DE 2 and the issuer's submitted values in DE 22. If, upon receipt, the acquirer does not recognize the transaction because the First Presentment/1240 had actually been submitted with a *PayPass* account number, the acquirer must follow existing dispute resolution rules and procedures that apply when the primary account number is not recognized.

If the chargeback message contains DE 22, subfield 7 with a value of N and GCMS cannot match the chargeback message to the *PayPass* Mapping Service First Presentment history file, GCMS rejects the chargeback message.

If GCMS does successfully match the message to the *PayPass* Mapping Service First Presentment history file, and the message is a First Chargeback/1442, GCMS validates that the chargeback amount is greater than the regional limit for reason codes 4802 and 4837.

If the mapped retrieval or chargeback transaction contains no errors, GCMS modifies the data as follows before sending the message to the acquirer:

- Move the primary account number from DE 2 to PDS 0001, subfield 2
- Populate DE 2 with the *PayPass* account number
- Populate DE 94 (Transaction Originator Institution ID Code) and DE 33 (Forwarding Institution ID Code) with member ID information related to the *PayPass* account number
- Move the value originally submitted by the acquirer in the First Presentment/1240 message to DE 22, subfield 7 if the issuer provided the other DE 22 subfields in the retrieval or chargeback

When GCMS logs the Retrieval Request/1644, First Chargeback/1442, or Arbitration Chargeback/1442 message to its existing Retrieval or Chargeback history files, it logs both the primary account number and the *PayPass* account number. Any acknowledgement reconciliation messages or reports created for the issuer are based on the primary account number. Any notification reconciliation messages or reports created for the acquirer are based on the *PayPass* account number.

Processing Second Presentment/1240 Messages through the PayPass Mapping Service

Details about the processing of Second Presentment/1240 messages through the PayPass Mapping Service are as follows.

The acquirer populates DE 2 with the *PayPass* account number in the Second Presentment/1240. GCMS attempts to match all Second Presentment/1240 messages to the existing Chargeback history file as usual. If GCMS is unable to match the message to the Chargeback history file, it rejects the Second Presentment/1240.

If GCMS successfully matches the Second Presentment/1240 to the Chargeback history file, and the Chargeback history file indicates that DE 2 contains a PayPass account number, GCMS maps it to the primary account number and uses the primary account number in its processing. For example, it uses business services in which the issuer of the primary account number participates, and it delivers the transaction to the endpoint associated with the issuer of the primary account number as opposed to the PayPass account number. If the transaction contains no errors, GCMS modifies the data as follows before sending the Second Presentment/1240 to the issuer:

- Move the *PayPass* account number from DE 2 to PDS 0001, subfield 2
- Populate DE 2 with the primary account number
- Replace DE 22, subfield 7 with the value N if the acquirer provided the other DE 22 subfields in the Second Presentment/1240

Any acknowledgement reconciliation messages or reports created for the acquirer are based on the *PayPass* account number. Any notification reconciliation messages or reports created for the issuer are based on the primary account number.

Processing Fee Collection (Retrieval Fee Billing)/1740 Messages through the PayPass Mapping Service

Details about the processing of Fee Collection (Retrieval Fee Billing)/1740 messages through the PayPass Mapping Service are as follows.

A Fee Collection (Retrieval Fee Billing)/1740 message is used only when an issuer has requested a hardcopy retrieval document, the acquirer fulfills the request via MasterCom, and the acquirer seeks to collect the delivery fee from the issuer as reimbursement for costs associated with delivering the hardcopy document to the issuer.

The acquirer populates DE 2 with the service-eligible *PayPass* account number in the Fee Collection (Retrieval Fee Billing)/1740. GCMS validates the contents of DE 2 against IPM MPE table IP0040T1, as usual. If the Mapping Service Indicator field in table IP0040T1 indicates that DE 2 contains a service-eligible *PayPass* account number, GCMS maps the *PayPass* account number in DE 2 to the primary account number (PAN) using the *PayPass* Mapping Service First Presentment history file.

If GCMS cannot match the Fee Collection (Retrieval Fee Billing)/1740 message to the *PayPass* Mapping Service First Presentment history file, GCMS rejects the transaction.

After successfully mapping the *PayPass* account number to a PAN, GCMS uses the PAN in its processing. For example, it uses business services in which the issuer of the PAN participates, and it delivers the transaction to the endpoint associated with the issuer of the PAN, as opposed to the *PayPass* account number. If the transaction contains no errors, GCMS modifies the data as follows before sending the message to the issuer:

- Move the *PayPass* account number from DE 2 to PDS 0001, subfield 2
- Populate DE 2 with the PAN

Any acknowledgement reconciliation messages or reports created for the acquirer are based on the *PayPass* account number. Any notification reconciliation messages or reports created for the issuer are based on the PAN.

Summary of the Contents of Elements Related to the PayPass Mapping Service

The following chart summarizes the contents of the elements that are affected when GCMS performs the *PayPass* Mapping Service.

Clearing Message	Scenario	DE 2	PDS 0001, Subfield 2	DE 22, subfield 7	DE 94 and DE 33
First Presentment/1240	From acquirer to MasterCard	<i>PayPass</i> account number	Not present	A or M	As provided by acquirer
	From MasterCard to issuer	Primary account number	<i>PayPass</i> account number	N	As provided by acquirer

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PayPass Mapping Service

Clearing Message	Scenario	DE 2	PDS 0001, Subfield 2	DE 22, subfield 7	DE 94 and DE 33
Retrieval Request/1644	From issuer to MasterCard	Primary account number	Not present	As provided by issuer	As provided by issuer
	From MasterCard to acquirer	<i>PayPass</i> account number	Primary account number	A or M, if issuer provided other DE 22 values in the retrieval	Member IDs associated with the <i>PayPass</i> account number
Fee Collection (Retrieval Fee Billing)/1740	From acquirer to MasterCard	<i>PayPass</i> account number	Not present	DE 22 not in message layout	As provided by acquirer
	From MasterCard to issuer	Primary account number	<i>PayPass</i> account number	DE 22 not in message layout	As provided by acquirer
First Charge-back/1442	From issuer to MasterCard	Primary account number	Not present	N	As provided by issuer
	From MasterCard to acquirer	<i>PayPass</i> account number	Primary account number	A, C, or M, if issuer provided other DE 22 values in the chargeback	Member IDs associated with the <i>PayPass</i> account number
Second Presentment/1240	From acquirer to MasterCard	<i>PayPass</i> account number	Not present	A or M	As provided by acquirer
	From MasterCard to issuer	Primary account number	<i>PayPass</i> account number	N	As provided by acquirer
Arbitration Charge-back/1442	From issuer to MasterCard	Primary account number	Not present	N	As provided by issuer
	From MasterCard to acquirer	<i>PayPass</i> account number	Primary account number	A, C, or M, if issuer provided other DE 22 values in the chargeback	Member IDs associated with the <i>PayPass</i> account number

Interchange Compliance Processing

MasterCard performs the *PayPass* Mapping Service for First Presentment/1240 messages, which are analyzed during the interchange compliance process. The details of the interchange compliance process are as follows.

As described in the *Authorization Manual*, transactions for which the MasterCard Authorization System performs the *PayPass* Mapping Service do not contain magnetic stripe data when they are sent to the issuer and logged by the MasterCard Worldwide Network. Therefore, U.S.-acquired First Presentment/1240 messages for which MasterCard performs the *PayPass* Mapping Service may not pass the magnetic stripe quality test within the interchange compliance process. This test requires validation of the magnetic stripe presence at the time of the authorization for specific incentive interchange programs, unless the transaction is exempt.

MasterCard modified the interchange compliance magnetic stripe quality test to exempt transactions in which PDS 0001 is present in the IPM First Presentment/1240 message. The presence of PDS 0001 indicates that MasterCard performed the *PayPass* Mapping Service; and therefore, magnetic stripe data is not expected to be present in the authorization message.

MasterCom Processing

The MasterCom Member Notification file formats and the Image Interface application support PDS 0001 (MasterCard Mapping Service Account Number) and DE 22, subfield 7 (Card Data: Input Mode) to support *PayPass*.

Refer to the *MasterCom Administrator's Manual* for complete details.

Chapter 6 MasterCard inControl Platform

This chapter describes the optional MasterCard inControl processing services as they pertain to clearing processing.

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Overview of the MasterCard inControl Platform

The MasterCard inControl platform is a powerful and flexible system that provides a number of advanced authorization, transaction routing, and alert notification capabilities designed to assist issuers in creating new and enhanced payment products for their consumer and commercial cardholders.

MasterCard inControl fully integrates patented payment technologies with unparalleled global processing capabilities. With the integration of this capability into MasterCard core processing, issuers can benefit from cost efficiencies and speed-to-market for new commercial product development.

With the MasterCard inControl platform, issuers will be able to leverage “off-the-shelf” solutions and create customized offerings to meet the needs of their customers.

Among the advanced features issuers can leverage to support their commercial card portfolios are:

- Enhanced authorization controls that direct how, when, and where cards may be used.
- Personalized real-time communication about transaction activities through a robust alert functionality.
- Improved levels of security, control, data capture, and traceability on every purchase through a limited use number feature that allows authorization, spending limits, and usability controls to be set on a transaction-by-transaction basis.
- Provides enhanced purchase controls for MasterCard commercial cards. In addition to other capabilities, this service platform allows for the generation of a unique MasterCard inControl virtual card number for every transaction.
- Provides cardholders the ability to establish spend-control rules for their pre-existing payment cards to be applied during the authorization process.

Participation in MasterCard inControl is optional.

MasterCard inControl Real Card Spend Control Service

The MasterCard inControl Real Card Spend Control service provides cardholders with the ability to establish spend control rules for their pre-existing payment cards.

The spend control rules for cardholders' payment cards:

- Are enforced during the authorization process.
- Can be defined for both card-present and card-not-present transaction environments
- May result in an alert notification being generated to the cardholder or the transaction being declined on their behalf (depending on the cardholder's pre-defined response rules).

GCMS Processing for inControl Platform

The MasterCard inControl service processes normally in GCMS, with the following exceptions.

- Transactions with the inControl virtual card number (VCN) in data element (DE) 2 (Primary Account Number) are rejected back to the acquirer if mapping to the cardholder's real card number (RCN) cannot be performed. An example would be an unauthorized, fraudulent clearing transaction using an inControl account number.
- PDS 0001 (MasterCard Mapping Service Account Number) is included in the transaction messages sent to the issuer when PAN Mapping has been performed. PDS 0001 contains the inControl VCN. PDS 0001 is not included in transaction messages sent to the acquirer when PAN mapping has been performed.
- Chargebacks are not rejected back to the issuer if there is no mapping for the transaction. MasterCard attempts to map every chargeback, and if this is not successful, processing will proceed as usual.
- A Spend Control RCN Switch has been added to the IPM Member Parameter Extract (MPE) Table IP0040T1—Issuer Account Range. This switch is set to Y when the account range participates in MasterCard inControl Real Card Spend Control services. Rules for the Real Card Spend Control service are enforced during the authorization process. Refer to the *Authorization Manual* for more information.

inControl Mapping Process

The mapping processes for both acquirer-initiated and issuer-initiated transactions are as follows.

MasterCard supports VCN as an optional service for inControl participants. This added layer of security protects issuers and cardholders against the risk of fraudulent acquisition and use of an inControl account number.

MasterCard maps the VCN to the PAN for processing for acquirer-initiated transactions.

Mapping Process for Acquirer-initiated Transactions

Stage	Description
1.	The VCN is sent to the clearing system.
2.	The clearing system maps the VCN to the cardholder primary account number (PAN). The PAN is used during the clearing process. - The first attempt to match to the mapping service authorization log according to the combination of VCN, Banknet Reference Number, and Banknet Date. - VCN is in DE 2 (Primary Account Number [PAN]) - The Banknet Reference Number and Date are present in DE 63 (Transaction Life Cycle ID), subfield 2 (Trace ID) in First Presentment/1240 messages. - If GCMS does not find a match in the mapping service authorization log, or if DE 63 is not present in the First Presentment/1240 message, GCMS attempts to match to the mapping service database using the VCN and registration flag. - If GCMS cannot match the First Presentment/1240 message, GCMS rejects the transaction.
3.	The issuer receives the cardholder's PAN in DE 2 (Primary Account Number [PAN]) and the VCN in PDS 0001 (MasterCard Mapping Service Account Number).

Table 6.1—Mapping Process for Issuer-initiated Transactions

Stage	Description
1.	The RCN is sent in DE 2. This DE 2 account number is used during the clearing process.
2.	Clearing recognizes the transaction as a mapped transaction by checking the virtual presentment history table and maps the cardholder's PAN to the VCN.
3.	The acquirer receives the VCN in DE 2. Note: The acquirer only receives the masked RCN in PDS 0001 (MasterCard Mapping Service Account Number) for retrieval and chargeback requests.

NOTE

Transactions that contain the VCN in DE 2 and which cannot be mapped are rejected back to the sender.

When acquirers receive PDS 0001, the subfield 2 (Account Number) always contains a real, masked card number. The real card number (RCN) will be masked according to PCI guidelines as follows:

- Display the first six digits
- Fill the remaining digits of the real card number with zeros
- Display the final four digits (for example: 1234560000001234 for a 16-digit PAN or 1234560000000001234 for a 19-digit PAN)

Chapter 7 Private Label Program

This chapter describes the MasterCard Private Label Program that offers customers a superior private label transaction processing solution.

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Overview of the Private Label Program

The MasterCard Private Label Program leverages the existing MasterCard payment system infrastructure to provide efficient authorization, clearing, and settlement services for private label card transactions, in addition to value-added products and services that issuers may use in conjunction with their private label programs.

MasterCard has extensive network reach, acceptance, and standardized formats that provide issuers with a robust network processing solution for private label card transactions, thereby addressing the infrastructure limitations of a closed-loop processing model.

In addition to providing a superior private label transaction processing solution, the MasterCard Private Label Program provides issuers with the ability to use many of the world-class, value-added services offered by MasterCard. Issuers may optionally benefit from the array of MasterCard risk management solutions, enhanced transaction processing services, and portfolio performance management expertise to facilitate financial improvement of their portfolios.

These services are provided exclusively for transactions originating from the approved private label card portfolios of MasterCard issuers.

Private Label Program Enhancements

In support of the Private Label Program, MasterCard has implemented the following enhancements.

- **Private Label Merchant Verification Service**—This service provides private label issuers with a turnkey solution for ensuring only their private label merchants' transactions processed over the MasterCard network are authorized.
- **Co-brand Proprietary Transaction Management Service**—This service determines if the transaction occurred at the private label merchant location or other merchant locations. For transactions originating from co-brand proprietary cards, this new service will seamlessly determine whether the transaction occurred at the co-brand partner's merchant location, and if so, the Authorization System will place the appropriate private label product code in the Authorization Request/0100 message before routing the transaction to the issuer.

If the transaction did not occur at the private label merchant location, the Authorization System will populate the MasterCard product code in the Authorization Request/0100 message before routing the transaction to the issuer.

Issuers participating in the Co-brand Proprietary Transaction Management Service that process under the MasterCard Private Label program must also participate in the Private Label Verification Service.

- **Private Label Interchange Program Changes**—The private label interchange structure (IRD 57 [Private Label]) for the U.S. Business Service supports "Product Class Overrides" (that is, the feature used to apply the same business rules and edits, but potentially apply different rates).

Private Label Program Details

Details associated with the Private Label Program, including information about the Co-brand Proprietary Card Program, are as follows.

Under the MasterCard Private Label Program, private label issuers may use MasterCard or Maestro account ranges. The use of these account ranges on an approved private label program facilitates the seamless switching of private label transactions via the four-party model (issuer, acquirer, merchant, and MasterCard). Private label transactions are submitted using IRD 57 (Private Label).

Accounts within the Co-brand Proprietary Card Program also can participate in Account Level Management, if the Account Level Management registration requirements are met.

The Co-brand Proprietary Transaction Management Service will leverage the same authorization and clearing data elements used by Account Level Management or Co-brand Proprietary Transaction Management Service.

The value P in data element (DE) 38 (Approval Code), position 6, indicates that the cardholder account participates in Account Level Management Product Graduation or Co-brand Proprietary Card program.

Private Label Processing

The clearing process ensures that the private label transactions are validated according to the private label processing rules and obtain the appropriate interchange for the specific private label product via the private label interchange structure (IRD 57).

Multiple Private Label product codes have been introduced. (Please refer to the *IPM Clearing Formats* manual to learn about the Private Label product codes). The Private Label product codes also support the Product Class Override (the feature used to apply the same business rules and edits, but potentially apply a different interchange rate).

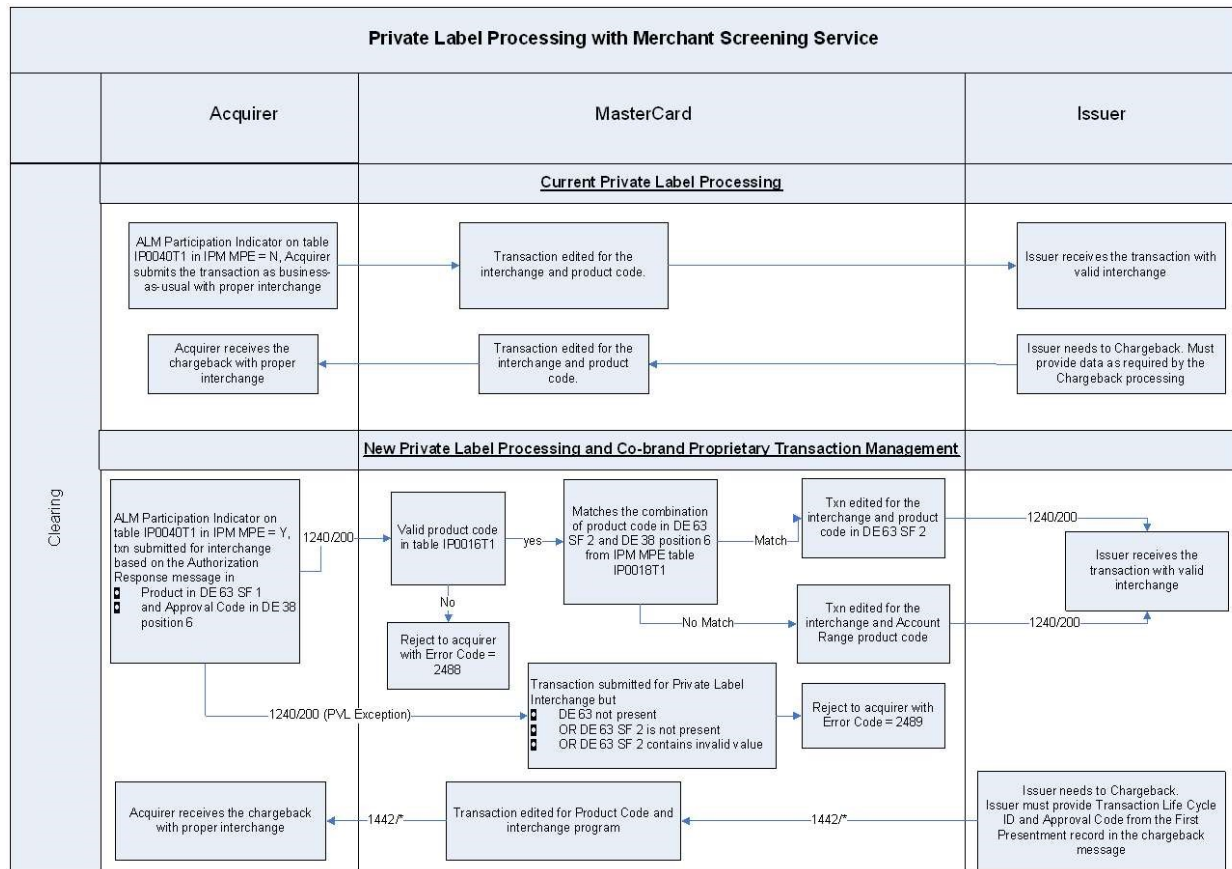
Co-brand Proprietary Card Program Using Account Level Participation Indicator

When processing a Co-brand Proprietary transaction, the clearing system will use the current Account Level Management (ALM) processing to determine if the transaction qualifies for the Co-brand Proprietary Card Program.

The Account Level Participation Indicator on the IPM MPE table IP0040T1 will be set for the issuer account ranges participating in the Co-brand Proprietary Transaction Management Service. In addition, there will be an indicator “Co-brand Participation Switch” which also will be set for these co-brand proprietary account ranges processing under the MasterCard Private Label Program. For Co-brand Proprietary Transaction Management Service, the Authorization and Clearing systems will be account category code of “P” in DE 38 (Approval Code), position 6. Please refer to [Account Level Management](#) for more information about Account Level Management processing.

The following diagram shows the clearing flow for Private Label accounts and Co-brand Proprietary Transaction Management Service.

Figure 7.1—Clearing Flow for Private Label and Co-brand Proprietary Transaction Management Service



GCMS processes the Co-brand Proprietary Card Program as follows:

- Check the IPM MPE table IP0040T1 table to determine whether the Account Level Participation Indicator is set to Y.
- Use DE 63 (Transaction Life Cycle ID), subfield 2 (Trace ID), to determine whether the transaction was authorized through the Dual Message System.
- Determine whether DE 38 (Approval Code), position 6 contains the value P, indicating that the cardholder account participates in either Account Level Management Product Graduation or Co-brand Proprietary Card Transaction Management Service.
- Determine whether the product code in DE 63, subfield 2, positions 1–3 is valid (validated in IPM MPE table IP0016T1 [Brand Products]) and whether the value in positions 10–13 of DE 63, subfield 2 is greater than the Account Level Management Activation Date in IPM MPE table IP0040T1 (Issuer Account Range).
- Validate that the IPM MPE table IP0018T1 (MasterCard Product Graduation Parameters) table contains the combination of DE 38, position 6 and the product from DE 63, subfield 2.
- If the combination is present in IPM MPE table IP0018T1, process the transaction according to the licensed product code in DE 63, subfield 2, positions 1–3. If DE 38, position 6 and DE 63, subfield 2 product code combination cannot be validated in IPM MPE table IP0018T1, the transaction will be processed using the account range product code.
- If the Account Range is Co-brand and Account Level Participation Indicator is set to Y and GCMS determines that the transaction is Private Label, reject the transaction with the error message “DE 63 BANKNET REFERENCE NUMBER MISSING OR INVALID. TRANSACTION CANNOT BE SUBMITTED FOR PRIVATE LABEL” when any of the following conditions exist:
 - DE 63 is not present.
 - DE 63 is present, but DE 63, subfield 2 is not present or contains all nines or spaces and the ALM indicator is set to Y and the Co-brand switch is set to Y.
 - DE 63, subfield 2, positions 1–3 contain an invalid product code.

To ensure that Co-brand Proprietary Card Program transactions are processed in the same manner as their associated first presentment message, MasterCard recommends that the following message elements be managed as “retain and return” fields:

- DE 38 (Approval Code)
- DE 63 (Transaction Life Cycle ID)

Private Label Addendum

The details about the two addenda messages supporting the Private Label Program are as follows.

Private Label Program

Private Label Card Activation Plus Initial Load

Private Label Program participants have conveyed the need to obtain the same data they receive in their closed-loop processing model when they process transactions via the Private Label Program. The receipt of this custom data is integral to customers meeting their business needs as participants in a private label program.

There are two addenda messages that support the Private Label Program:

- Private Label Common Data—supports data fields common to the transaction
- Private Label Line Item Detail—supports data fields specific to the individual items being purchased and included in the transaction

The Private Label Common Data and Private Label Line Item Detail addenda messages will be optional for Private Label First Presentment/1240 messages. The Private Label Common Data addendum message will be conditionally required if the Private Label Line Item Detail addendum message is provided. In addition, the Private Label Common Data addendum message must precede the Private Label Line Item Detail addendum message. If the Private Label Common Data or Private Label Line Item Detail addendum messages are submitted and rejected, the corresponding First Presentment/1240 message will not be rejected.

Layouts for the Private Label Common Data and Private Label Line Item Detail addendum messages can be found in the *IPM Clearing Formats* manual.

Private Label Card Activation Plus Initial Load

MasterCard has expanded the existing card activation at the point-of-sale terminal (POS) functionality to allow card activation messages to be submitted with an initial load. Customers can offer this functionality, making private label cards more attractive to their merchants, by enabling activation of prepaid cards with or without a predefined amount.

Acquirers that want to offer the private label card activation plus initial load functionality must be able to support and value C09 (Card Activation) for PDS 0043 (Program Registration ID) in First Presentment/1240 messages.

Private label card issuers that want to offer the private label card activation plus initial load functionality must be able to support and receive value C09 (Card Activation) for Private Data Subelement (PDS) 0043 (Program Registration ID) in First Presentment/1240 messages.

Participation in the Private Label Program

Issuers and acquirers are not mandated to participate in the MasterCard Private Label Program. Those issuers and acquirers that choose to participate in the program are required to support all provisions of the program.

Chapter 8 Clearing Chip Processing Service

This chapter describes the optional Clearing Chip Processing Service for issuers that choose the Chip to Magnetic Stripe Conversion service.

Clearing Chip Processing Service Overview	8-1
Chip to Magnetic Stripe Conversion	8-1

Clearing Chip Processing Service Overview

MasterCard provides a Clearing Chip Processing service to assist issuers that want to migrate to MasterCard chip technology while minimizing the impact and cost of upgrading their host systems and operations. This On-behalf Service allows issuers to take advantage of the latest chip technology.

Chip to Magnetic Stripe Conversion Service is offered in both the Global Clearing Management System (GCMS) and Authorization System. For additional information about Authorization System Chip to Magnetic Stripe Conversion see the *Authorization Manual*. Clearing and Authorization System On-behalf Services are optional for issuers.

NOTE

Clearing and Authorization System On-behalf Services must be requested individually.

Chip to Magnetic Stripe Conversion

The Chip to Magnetic Stripe Conversion service removes chip-related data in data element (DE) 55 (Integrated Circuit Card [ICC] System-related Data) if it is present when DE 14 (Date Expiration) is greater than or equal to the floor expiration date.

The issuer receives the First Presentment/1240–200 message containing private data subelement (PDS) 0071 (Chip to Magnetic Stripe Conversion Indicator), subfield 1 (On-behalf Service) with a value of 01, indicating Chip to Magnetic Stripe Conversion, and subfield 2 (On-behalf Service) with a value of C, S, or M (based on value in DE 22 [Point of Service Data Code]) indicating that the conversion of the Chip transaction to a magnetic stripe transaction has been completed.

The following lists the actions for the Chip to Magnetic Stripe Conversion service.

If Chip to Magnetic Stripe Conversion is 'Y' for clearing issuer account range...	Then the clearing system will...
DE 55	Remove DE 55
PDS 0071 (Chip to Magnetic Stripe Conversion Indicator)	Will contain
Subfield 1 (On-behalf Service)	01 = Chip to Magnetic Stripe Conversion

Clearing Chip Processing Service

Chip to Magnetic Stripe Conversion

Subfield 2 (On-behalf Service)

C = Conversion of the Chip transaction to magnetic transaction has been completed when DE 22 is 05

S = Conversion of the Chip transaction to magnetic transaction has been completed when DE 22 is 07

M = Conversion of the Chip transaction to magnetic transaction has been completed when DE 22 is 80

Subfield 3 (On-behalf Service)

Blank = No value present

NOTE

The Chip to Magnetic Stripe Conversion service affects issuers only. Acquirers are not affected by this service.

The Chip to Magnetic Stripe Conversion service is optional for issuers.

Issuers must contact their regional MasterCard representative to request this service and identify the account range for which the Chip to Magnetic Stripe Conversion service will support.

Chapter 9 Extended Decimal Precision Service

This chapter describes the conditional Extended Decimal Precision Service that provides customers the option of calculating interchange to six decimal positions for each transaction.

Extended Decimal Precision Service Overview	9-1
Extended Decimal Precision Processing Details	9-1
Participation in Extended Decimal Precision Processing	9-2

Extended Decimal Precision Service Overview

MasterCard provides a service that gives customers in the Europe region the option of calculating interchange to six decimal positions for each transaction. Qualified transactions are totaled using a defined set of criteria, and then rounded.

Participation is at the business service arrangement level. Some domestic business service arrangements require Extended Decimal Precision Service at the business service arrangement level. Customers with transactions occurring within these business service arrangements must also participate in Extended Decimal Precision Service for these transactions.

Acquirers and issuers of participating business service arrangements:

- Cannot use private data subelement (PDS) 0146 (Amounts, Transaction Fee) to calculate the total Interchange Fees.
- Must be able to receive PDS 0147 (Extended Precision Amounts).
- Will not receive reconciliation totals based on PDS 0375 (Member Reconciliation Indicator 1) for their reporting within any business service arrangement subject to the Extended Decimal Precision Service, as the decimal portion of the interchange is not settled at the individual transaction level. For customers using this Financial Reconciliation Option, the totals within a business service arrangement subject to the Extended Decimal Precision Service will be accumulated and returned in acknowledgement reconciliation messages where PDS 0375 contains the value “undefined.” Use of PDS 0375 in other business service arrangements is not affected.

Extended Decimal Precision Processing Details

MasterCard supports a process for calculating interchange fees called Extended Decimal Precision processing.

PDS 0147 (Extended Precision Amounts) holds the interchange fee calculated to six digits. For instance, if the interchange fee is calculated as 1.123456 with a currency exponent of 2, the amount in PDS 0147 would still be 1.123456.

The values in PDS 0147 are summarized, including chargebacks and presentments, using the following criteria:

Extended Decimal Precision Service

Participation in Extended Decimal Precision Processing

- File ID (Inbound to MasterCard)
- Card program identifier and business service type code and ID
- Customer pair
- Message type identifier (MTI) and Function Code
- Data Element (DE) 3 (Processing Code), subfield 1 (Cardholder Transaction Type)
- PDS 0025 (Message Reversal Indicator), subfield 1 (Message Reversal Indicator)
- PDS 0165 (Settlement Indicator), subfield 1 (Settlement Indicator)
- Interchange rate designator (IRD)
- Sending customer's settlement service ID
- Receiving customer's settlement service ID

Participation in Extended Decimal Precision Processing

Participation in the Extended Decimal Precision Service is at the business service arrangement level. Some domestic business service arrangements require Extended Decimal Precision Service at the business service arrangement level. Customers with transactions occurring within these business service arrangements must also participate in Extended Decimal Precision Service for these transactions.

Acquirers with business service arrangements participating in the Extended Decimal Precision Service will notice the following changes:

- PDS 0146 (Amounts, Transaction Fee) in life cycle transactions cannot be summarized to calculate interchange fees.
- Life cycle transactions received by the acquirer contains PDS 0147 (Extended Precision Amounts).
- The extended decimal portion of interchange is not settled at the individual transaction level. It is net settled on a group of transactions. For customers using PDS 0375 (Member Reconciliation Indicator 1) as a Financial Reconciliation Option, the totals within a business service arrangement subject to the Extended Decimal Precision Service will be accumulated and returned in acknowledgement reconciliation messages where PDS 0375 contains the value "undefined." Use of PDS 0375 in other business service arrangements is not affected.

Issuers with business service arrangements participating in the Extended Decimal Precision Service will notice the following changes:

- PDS 0146 (Amounts, Transaction Fee) provided in transactions cannot be summarized to calculate interchange fees.
- Issuers must be prepared to receive new PDS 0147 (Extended Precision Amounts) in transactions.
- The extended decimal portion of interchange is not settled at the individual transaction level. It is net settled on a group of transactions. For customers using PDS 0375 (Member Reconciliation Indicator 1) as a Financial Reconciliation Option, the totals within a business service arrangement subject to the Extended Decimal Precision Service will be accumulated and returned in acknowledgement reconciliation messages where PDS 0375 contains the value “undefined.” Use of PDS 0375 in other business service arrangements is not affected.

IPM MPE Table IP0098T1—Processing Code Restrictions for Card Program Identifier and business service arrangement with an indicator of “6” specifies that a business service arrangement includes extended decimal precision.

Chapter 10 Business Service

This chapter defines business service and describes the types of business service options MasterCard offers.

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Definition of Business Service

A business service is an arrangement with MasterCard between two or more customers that defines, in a manner consistent with MasterCard Standards (or the standards of the other applicable brand), the card program identifier, business rules, and interchange processing requirements for transactions occurring between the participating customers.

An arrangement can be either mandated by MasterCard Standards or voluntarily entered into by the participating customers. Business service processing in Global Clearing Management Service (GCMS) supports current mandated arrangements as well as current and future voluntary arrangements.

Business service functionality provides for flexibility and customization of transaction processing. The particular processing options and fee structures are based on:

- Mutual participation in the arrangement—both the issuer and acquirer agree to participate in the business service arrangement.
- The business rules that are defined by MasterCard for the particular business service arrangement and interchange program.

MasterCard defines a set of qualification criteria and editing rules for each card program identifier within a business service arrangement. Card program identifiers include any of the MasterCard family of brands, including, but not limited to, MasterCard®, Cirrus®, and Maestro®. MasterCard may agree to add additional brands (that are not MasterCard brands) as business needs dictate. The qualification criteria and editing rules are parameter-based and maintained in tables to provide for timely updates and to permit implementation of changes outside the normal MasterCard release schedule.

NOTE

Most major changes, such as changes that affect all customers globally or all customers within a specific region, will continue to be implemented in a standard release schedule.

In GCMS, business services allow customers to customize interchange rules, options, and fee structures for transactions that involve a given card program. The customization also may be based on:

- The acquirer's business country code—the country code associated with the acquiring BIN involved in the transaction. MasterCard establishes the country codes and includes them on the Integrated Product Messages (IPM) Member Parameter Extract (MPE) file.
- The issuer's business country code—the country code associated with the issuing account range involved in the transaction. MasterCard establishes the country codes and includes them on the IPM MPE.
- The interchange program rules that the particular business service agreement and interchange program define. These business rules include:
 - Specific product identification codes
 - Timeliness requirements (such as submission time frames for first presentments)
 - Authorization code requirements
 - Card acceptor business code (MCC) requirements
 - Processing code requirements
 - Other business service and business service ID criteria

The purpose of business service functionality is to:

- Support customers by reducing the development and testing effort required to establish new business arrangements and interchange programs and rates, thereby allowing MasterCard to react to changing market situations quickly.
- Support customers in their business relationships with other customers, including mandated business relationships, such as intraregional and interregional interchange programs. For example, GCMS can assess fees for business service transactions in local currencies. This can simplify the calculation and reconciliation of expected fees for customers.

NOTE

For more information about processing cycles, time frames, and thresholds for clearing transactions, refer to [Processing Cycles and Regulations](#), of this manual.

Types of Business Service Arrangements

Business service arrangements may exist at many levels of customer business relationships. Customers may participate in multiple business service arrangements under a single member ID.

There are five types of business service arrangements, each with a defined hierarchy or “priority” to determine how the system processes transactions.

All customers participate in at least one intraregional business service arrangement and at least five interregional business service arrangements. These arrangements consist of the interchange programs and rates defined by MasterCard (such as International Standard interchange and International Electronic interchange).

The following are the types of arrangements that MasterCard defines.

Business Service Arrangement	Description	System Selection Hierarchy	Geography	Arrangement Type Code (PDS 0158s2)
Customer-to-customer	An arrangement involving a pair of customers, or group of customers. (This business service type has no geographic or business region boundaries.)	First priority	None	8
Intracountry	An arrangement involving all customers within a single country.	Second priority	Single Country	4
Intercountry (formerly Subregional)	An arrangement involving customers in multiple countries or business regions. Participants are not required to be within a single business region.	Third priority	Two or more Countries or Regions	3
Intraregional	An arrangement involving all customers within a business region.	Fourth priority	Single Region	2
Interregional	An arrangement involving all customers in different business regions.	Fifth priority	Two Regions: "From" and "To"	1

Business service arrangements are established in accordance with local laws and regulations. For questions about participation in, or the hierarchy of business arrangement qualification, please contact your MasterCard representative.

Customer-to-Customer Business Service

Customer-to-customer arrangements reflect specific business relationships among customers. Participating customers work with MasterCard to establish common processing standards, interchange programs and rates, and qualifying criteria for the arrangement.

GCMS supports customers' participation in multiple customer-to-customer arrangements.

Intracountry Business Service

The intracountry business service supports business arrangements available to all customers within the same country. Customers work with MasterCard to establish common processing standards, interchange programs and rates, and qualifying criteria for the arrangement.

Intercountry Business Service

Intercountry business service arrangements allow all customers within multiple countries or business regions to enter into an agreement with MasterCard to apply unique fees and editing rules to transactions among participating customers.

NOTE

The definition of the rules for all customer defined arrangements must be consistent with MasterCard Standards (or the standards of the other applicable brands) and established in accordance with the *MasterCard Rules*.

Intraregional Business Services

Intraregional business service arrangements apply to all customers within a single region. All customers currently participate in at least one intraregional business service arrangement, depending on the country that is defined for customers' issuing account ranges, acquiring BINs, or both.

Intraregional arrangements consist of the interchange programs and rates defined by MasterCard, such as the International Electronic Interchange (IEI) and the Issuer/Acquirer Chip incentive interchange rate programs.

Interregional Business Services

Interregional business service arrangements apply to all customers in two different regions. All customers currently participate in at least five interregional business service arrangements, depending on the country that is defined for the customers' issuing account ranges, acquiring BINs, or both.

Interregional arrangements consist of the "International" interchange programs and rates defined by MasterCard (such as International Electronic interchange [IEI] and Corporate Purchasing Data Rate II).

The geographic designation for Interregional arrangements consists of a "from" region and a "to" region.

- The “from” region is defined as the region associated to the value in DE 31 (Acquirer Reference Data), subfield 2 (Acquirer’s BIN), or in the absence of DE 31, the value in DE 94 (Transaction Originator Institution ID Code) of the message.
- The “to” region is defined as the region associated to the value in the DE 2 (Primary Account Number [PAN]), or in the absence of DE 2 the value in DE 93 (Transaction Destination Institution ID Code) of the message.

Participating in Business Service Arrangements

Customers may participate in business service arrangements at the individual issuing account range and acquiring BIN levels. Once the issuer and acquirer are identified, GCMS selects the appropriate business service arrangement for each message on the basis of those in common between the issuer and acquirer.

NOTE

A customer is considered a participant in a business service if at least one issuing account range or acquiring BIN is participating.

Requirements for Customers Participating in Business Service Arrangements

Listed below are customer technical requirements for participation in business service arrangements. Participants must:

- Issue cards or acquire transactions.
- Format all transactions using the appropriate IPM message format.
- Recognize from the IPM MPE or from internal host database tables the parameters used in determining business service arrangement participation.
- Use an approved MasterCard method of file transfer to submit transactions (such as MIP, CONNECT:Direct®, or MasterCard File Express).
- Participate in mandatory testing.

Business Service Features and Qualification Criteria

Each business service has specific requirements—or criteria—that transactions must meet to be processed within that arrangement. When transactions are exchanged between participating customers of an arrangement, GCMS validates the transaction against the established criteria and determines whether the transaction qualifies.

Additionally, IRDs are defined within the arrangement, each with its own unique set of qualification criteria and corresponding interchange fee structure. The criteria available for customization within an arrangement are described in the following table.

Business Service

Business Service Features and Qualification Criteria

Qualification Criteria	Description
Card Program Identifier	The set of card program identifiers in PDS 0158 (Business Activity), subfield 1 (Card Program Identifier) that are valid for the arrangement. Each of the remaining business service setup parameters have unique values for each card program identifier.
GCMS Product Identifier	The set of clearing product codes in PDS 0002 (GCMS Product Identifier), derived from DE 2 (Primary Account Number [PAN]) that are valid for the card program identifier within the business service arrangement.
Transaction Function	The set of transaction functions (Message Type Identifier plus DE 24 [Function Code]) that are valid for the card program identifier within the business service arrangement.
Processing Code/Reversal Indicator	The set of Processing Codes in DE 3 (Processing Code), subfield 1 (Cardholder Transaction Type) that are valid for each transaction function established for the card program identifier within the business service arrangement. Also defines whether reversals in PDS 0025 (Message Reversal Indicator), subfield 1 (Message Reversal Indicator) are permitted for the processing code.
Cardholder “From” Account ID	The set of Cardholder “From” Account ID codes in DE 3 (Processing Code), subfield 2 (Cardholder “From” Account Type Code) that are valid for each transaction function established for the card program identifier within the business service arrangement.
Cardholder “To” Account ID	The set of Cardholder “To” Account ID codes in DE 3 (Processing Code), subfield 3 (Cardholder “To” Account Type Code) that are valid for each transaction function established for the card program identifier within the business service arrangement.
Message Reason Codes/Reversal Indicator	The set of Message Reason Codes in DE 25 (Message Reason Code) that are valid for each card program identifier within the business service arrangement. Defines whether reversals are permitted for the message reason code.
Geography	The valid geographical usage for the brand, expressed as a set of valid regions, country codes, or a combination of both.
Card Acceptor Business (CAB) Programs	The set of CAB programs that are valid for each card program identifier within the business service arrangement.

Additional Features for Business Service Arrangements

Options such as timeliness editing and authorization code requirements may be defined for a business service. In addition, interchange fee structures and optional addendum message requirements must be defined for transactions to be exchanged within the arrangement.

Business Service Calendar and Transaction Timeliness

A “business service” calendar is established by the participants of each arrangement, defining the processing days and holidays to be observed within the arrangement. GCMS uses the information in the calendar for calculating transaction timeliness, when applicable.

If requested, GCMS will perform transaction timeliness editing according to the number of days permitted, considering any excluded days as specified in the business service calendar. several types of dates may be excluded from the interchange timeliness calculation:

- Non-processing days (days of the week such as Sundays)
- Holidays
- Transaction date
- File header date

NOTE

When two or more conditions occur on the same day (for example, Sunday = excluded date, and Processing Date = not excluded), exclusions take precedence and the day will not be counted in the timeliness calculation.

Interchange Rates and Fees Structure

Customer arrangements define, in accordance with MasterCard Standards, Interchange rate designators (IRDs) and corresponding interchange rate structures to be applied to transactions exchanged between participating customers.

In addition, participating customers can specify whether GCMS should calculate interchange fees for bilaterally settled transactions that qualify for the Business Service. For more information about bilaterally settled transactions, please refer to [Bilateral Settlement Activity](#).

Manual Cash Disbursement Accommodation Fee

Customers that participate in an intracountry business service arrangement may establish an accommodation fee for manual (non-ATM) cash disbursements. The issuer pays an accommodation fee to the acquirer for transactions involving a manual (non-ATM) cash disbursement.

Customer-defined manual cash disbursement fees may be calculated as a percentage of the transaction amount, a unit fee in local currency or U.S. dollars, a minimum cash disbursement accommodation fee, or any combination thereof.

Procedures for Applying for a Business Service Arrangement

Instructions on how to apply for a business service arrangement are as follows.

Customers should contact the Customer Operations Services team or the appropriate MasterCard regional office for information about initiating a business service arrangement or modifying an arrangement currently recognized by MasterCard and processed within GCMS.

Certain business service arrangements will be documented and signed by participating customers. All agreements requiring signatures must be signed and submitted to MasterCard before business service testing may begin. In addition, each business service arrangement is subject to and conditioned on the prior written approval of MasterCard.

NOTE

Customers that require additional assistance to support unique local requirements should contact the appropriate regional office.

Identifying Business Service within IPM Messages

GCMS uses the IRD submitted by the sender of the message and the parameters established within the system to select or validate the following information for each transaction:

- Private Data Subelement (PDS) 0158 (Business Activity), subfield 1 (Card Program Identifier)
- PDS 0158, subfield 2 (Business Service Type)
- PDS 0158, subfield 3 (Business Service ID)

Depending on the business activity for the transaction, GCMS applies appropriate processing rules, in accordance with the business service.

The sending customer optionally may submit the business service arrangement type and ID code in the message. In this situation, GCMS will validate only that the values submitted in PDS 0158, subfields 2 and 3 are applicable for the message. GCMS will either select the card program identifier or validate the customer-submitted card program identifier value in PDS 0158, subfield 1. If the system finds the transaction does not qualify for the submitted business service and interchange rate designator, the transaction will be rejected.

Contents of PDS 0158 (Business Activity)

GCMS selects or validates the values in PDS 0158 (Business Activity) for each applicable financial transaction.

The first four subfields are as follows.

Sub-field	Description	Definition	For example...		
1	Card Program Identifier	Three-position code that identifies MasterCard or other applicable brand under whose umbrella transactions are processed.	MCC	=	MasterCard® card
2	Business Service Arrangement Type Code	One-position code that identifies the interchange relationship for the business arrangement.	2	=	Intraregional
3	Business Service ID Code	Unique, six-position code that identifies the specific interchange arrangement assigned to the transaction.	010001	=	U.S. intraregional business service
4	Interchange Rate Designator	Code that specifies the interchange rate to apply to the transaction.	70	=	U.S. intraregional Merit III interchange rate

When sending transactions to GCMS, customers must submit an interchange rate designator in subfield 4¹ and may populate subfields 1, 2, and 3 with either spaces or the appropriate business service data. GCMS will reject any transaction that contains invalid data in PDS 0158, subfields 1 through 4. For all other valid transactions, GCMS will populate subfields 1, 2, and 3 with the system-selected information, and will also populate subfields 5 through 12 of PDS 0158 before forwarding the transaction to the receiving customer.

GCMS derives the information according to evaluation of the message contents against the qualification criteria for business service arrangements in common between the issuer and acquirer. If GCMS cannot find a business service in which to process the transaction, the clearing system will reject the transaction.

PDS 0158, Subfield 1 (Card Program Identifier)

The use of PDS 0158, subfield 1 (Card Program Identifier) by transaction originators is conditional; if used, it may require MasterCard to exercise alternate card program edits, which use the Bank Identification Number (BIN) in the Acquirer Reference Data (ARD) to obtain and validate the card program.

PDS 0158, Subfield 2 (Business Service Arrangement Type Code)

The following table indicates the business service type (located in PDS 0158, subfield 2 [Business Service Arrangement Type Code]) currently defined.

1. Refer to “PDS 0158—Business Activity” in the *IPM Clearing Formats* manual for format exceptions to subfield 4.

Business Service

Identifying Business Service within IPM Messages

PDS 0158, Subfield 2 Value	Business Service Type
1	Interregional
2	Intraregional
3	Intercountry
4	Intracountry
8	Customer-to-Customer Agreement

PDS 0158, Subfield 3 (Business Service ID Code)

PDS 0158, subfield 3 (Business Service ID Code) is a six-position value that identifies the business service to which the transaction is assigned for reconciliation and rules considerations. The following table provides further information.

Type Code	Type Description	ID Code	ID Code Description		
1	Interregional	FFTTnn	FF	=	“from” acquiring region
			TT	=	“to” issuing region
			nn	=	unique number the corporation assigned to each interregional business service
2	Intraregional	RRnnnn	RR	=	business region
			nnnn	=	unique number the corporation assigned to each intraregional business service
3	Intercountry	nnnnnn	nnnnnn	=	unique ID the corporation assigned to each intercountry business service
4	Intracountry	CCC-nnn	CCC	=	ISO numeric country code
			nnn	=	unique number the corporation assigned to each intracountry business service
8	Customer-to-customer	Nnnnnn	Nnnnnn	=	unique number the corporation assigned to each customer-to-customer arrangement on file

Account Management System (AMS) Region Codes

The MasterCard billing/clearing codes, Account Management System (AMS) region codes, and corresponding descriptions are in the following table.

GCMS Code and MCBS (billing) Code	AMS Region Code	Description
01	1	United States
02	A	Canada
03	B	Latin America and the Caribbean
04	C	Asia/Pacific
05	D	Europe
06	E	South Asia/Middle East/Africa

Intraregional ID Codes

The following table lists and describes the intraregional ID codes found in PDS 0158, subfield 3 (Business Service ID Code).

Intraregional ID Code	Description
010001	Intraregional business service 0001 for Region 1 (clearing system region 01).
020001	Intraregional business service 0001 for Region A (clearing system region 02).
030001	Intraregional business service 0001 for Region B (clearing system region 03).
040001	Intraregional business service 0001 for Region C (clearing system region 04).
050001	Intraregional business service 0001 for Region D (clearing system region 05). This business service will be used for “POS” transactions (MasterCard POS, Maestro POS, payment transactions, purchase with cashback, and MasterCard manual cash disbursements).
050002	Intraregional business service 0002 for Region D (clearing system region 05). This business service will be used for “ATM” transactions (MasterCard ATM, Maestro ATM, Maestro manual cash disbursements, Cirrus, and Mobile Phone Top-up).
060001	Intraregional business service 0001 for Region E (clearing system region 06).

Interregional ID Codes

The following table lists and describes the interregional ID codes found in PDS 0158, subfield 3 (Business Service ID Code).

Business Service

Identifying Business Service within IPM Messages

Interregional ID Code	Description
010201	Interregional business service 01 for Region 1 to Region A (clearing system region 01 to 02)
010301	Interregional business service 01 for Region 1 to Region B (clearing system region 01 to 03)
010401	Interregional business service 01 for Region 1 to Region C (clearing system region 01 to 04)
010501	Interregional business service 01 for Region 1 to Region D (clearing system region 01 to 05)
010601	Interregional business service 01 for Region 1 to Region E (clearing system region 01 to 06)
020101	Interregional business service 01 for Region A to Region 1 (clearing system region 02 to 01)
020301	Interregional business service 01 for Region A to Region B (clearing system region 02 to 03)
020401	Interregional business service 01 for Region A to Region C (clearing system region 02 to 04)
020501	Interregional business service 01 for Region A to Region D (clearing system region 02 to 05)
020601	Interregional business service 01 for Region A to Region E (clearing system region 02 to 06)
030101	Interregional business service 01 for Region B to Region 1 (clearing system region 03 to 01)
030201	Interregional business service 01 for Region B to Region A (clearing system region 03 to 02)
030401	Interregional business service 01 for Region B to Region C (clearing system region 03 to 04)
030501	Interregional business service 01 for Region B to Region D (clearing system region 03 to 05)
030601	Interregional business service 01 for Region B to Region E (clearing system region 03 to 06)
040101	Interregional business service 01 for Region C to Region 1 (clearing system region 04 to 01)
040201	Interregional business service 01 for Region C to Region A (clearing system region 04 to 02)
040301	Interregional business service 01 for Region C to Region B (clearing system region 04 to 03)
040501	Interregional business service 01 for Region C to Region D (clearing system region 04 to 05)

Interregional ID Code	Description
040601	Interregional business service 01 for Region C to Region E (clearing system region 04 to 06)
050101	Interregional business service 01 for Region D to Region 1 (clearing system region 05 to 01)
050201	Interregional business service 01 for Region D to Region A (clearing system region 05 to 02)
050301	Interregional business service 01 for Region D to Region B (clearing system region 05 to 03)
050401	Interregional business service 01 for Region D to Region C (clearing system region 05 to 04)
050601	Interregional business service 01 for Region D to Region E (clearing system region 05 to 06)
060101	Interregional business service 01 for Region E to Region 1 (clearing system region 06 to 01)
060201	Interregional business service 01 for Region E to Region A (clearing system region 06 to 02)
060301	Interregional business service 01 for Region E to Region B (clearing system region 06 to 03)
060401	Interregional business service 01 for Region E to Region C (clearing system region 06 to 04)
060501	Interregional business service 01 for Region E to Region D (clearing system region 06 to 05)

NOTE

The IPM MPE contains a complete list of business service arrangements.

PDS 0158, Subfield 4 (Interchange Rate Designator)

For transactions that involve MasterCard card programs, the originator of the message must submit a valid IRD value in PDS 0158, subfield 4 (Interchange Rate Designator).

PDS 0158, subfields 1 through 3 may contain spaces. GCMS will populate these subfields with the system-derived values. If the system cannot find a business service in which to process the transaction, the clearing system will reject the transaction.

For transactions that involve card programs other than MasterCard, the originator of the message must submit a valid IRD value in PDS 0158, subfield 4 (Interchange Rate Designator), if required by the arrangement. Spaces may be submitted in PDS 0158, subfields 1–3, and GCMS will populate these subfields with the system-derived values.

Acquirer Creation of the Outbound Message with Business Activity

Details about the information that acquirers must use to create outbound messages with business activity

The acquirer:

- Uses information provided by MasterCard to identify the country codes of the sender and receiver of the transaction.
- Uses information provided by MasterCard to identify the business arrangements in which the sender and receiver participate.
- Provides the appropriate interchange rate designator (IRD) in PDS 0158, subfield 4 (Interchange Rate Designator) to designate an interchange arrangement within the specified business arrangement.

Issuer Identification of Business Activity within the Inbound Message

The issuer identifies the business service information within the transaction. The following table shows the location of the business service information that the issuer will receive.

Location of the business service information used by the issuer
PDS 0158, subfield 1—Card Program Identifier
PDS 0158, subfield 2—Business Service Arrangement Type Code
PDS 0158, subfield 3—Business Service ID Code
PDS 0158, subfield 4—Interchange Rate Designator (IRD)
PDS 0158, subfield 5—Business Date (GCMS provides this field)
PDS 0158, subfield 6—Business Cycle (GCMS provides this field)
PDS 0158, subfield 7—Card Acceptor Classification Override Indicator
PDS 0158, subfield 8—Product Class Override Indicator
PDS 0158, subfield 9—Corporate Incentive Rates Apply Indicator
PDS 0158, subfield 10—Special Conditions Indicator
PDS 0158, subfield 11—MasterCard Assigned ID Override Indicator
PDS 0158, subfield 12—Future Use Account Level Management Account Category Code
PDS 0158, subfield 13—Future use

Location of the business service information used by the issuer

PDS 0158, subfield 14—Future use

PDS 0158, subfield 15—Future use

Retrieval Request and Retrieval Fee Billing Transactions

PDS 0158 is not required in retrieval request or retrieval fee billing transactions.

When Business Service is Submitted by the Customer

The sending customer may submit business service arrangement information in the message using the following subfields.

- PDS 0158, subfield 1—Card Program Identifier
- PDS 0158, subfield 2—Business Service Arrangement Type Code
- PDS 0158, subfield 3—Business Service ID Code

When the sending customer submits business service arrangement information in the PDSs listed above, GCMS validates only that the submitted arrangement information is applicable for the message. GCMS either selects the card program identifier, if not submitted by the customer, or validates the customer-submitted card program identifier value in PDS 0158, subfield 1. If the submitted information in PDS 0158, subfield 2 and PDS 0158, subfield 3 is not valid for the message or for the GCMS-selected or customer-submitted card program identifier in PDS 0158, subfield 1, GCMS rejects the message.

IF the sender submits...	THEN...
Business service arrangement information (PDS 0158, subfield 2 and subfield 3) ²	• Both the Business Service Arrangement Type Code (PDS 0158, subfield 2) and Business Service ID Code (PDS 0158, subfield 3) must be submitted together. • The Card Program Identifier (PDS 0158, subfield 1) must contain spaces or a valid card program identifier for the business service arrangement information provided. • If IRD validation is required for the message, the IRD also must be present in the message. GCMS validates the transaction against the qualification criteria for the IRD.

2. Card Program Identifier (PDS 0158, subfield 1) may be spaces or may contain a card program identifier value when submitting business service information in PDS 0158, subfield 2 and PDS 0158, subfield 3.

Using the MPE to Select the Card Program Identifier and Business Service Information

GCMS can select or validate the business activity (PDS 0158, subfields 1–4) for all financial transactions. The following outlines the steps that GCMS follows to select the business activity for financial transactions using the IPM Member Parameter Extract (MPE). This includes selection or validation of the card program identifier, selection or validation of the business service arrangement, and validation of the interchange rate designator (IRD), if applicable.

Step	Action
Data and Message Content Validation	
1a.	Validate format requirements of the elements used in the selection process
1b.	Validate syntax and attributes of elements used in the selection process
1c.	Validate content of elements used in the selection process
2.	Determine whether the transaction requires business service processing
Business Service Arrangement Selection	
3a.	Retrieve and Validate Issuer Card Program Identifier and Business Service Arrangement Participation (Standard Process)
3b.	Retrieve and Validate Issuer Card Program Identifier and Business Service Arrangement Participation (Central Acquiring Process)
Business Service Arrangement Validation	
4.	Validate MTI/Function Code/Processing Code/Reversal Indicator Combination
5.	Validate MTI/Function Code/Message Reason Code combination
6.	Determine whether IRD validation is required for the transaction
IRD Validation	
7.	Validate MTI/Function Code/Processing Code/Reversal Indicator combination for the IRD
8.	Validate product codes
9.	Validate CAB programs
10.	Validate transaction currency
11.	Determine whether the issuer account range is exempt from Central Acquiring

The following diagrams depict the flow:

Figure 10.1—Data and Message Content Validation

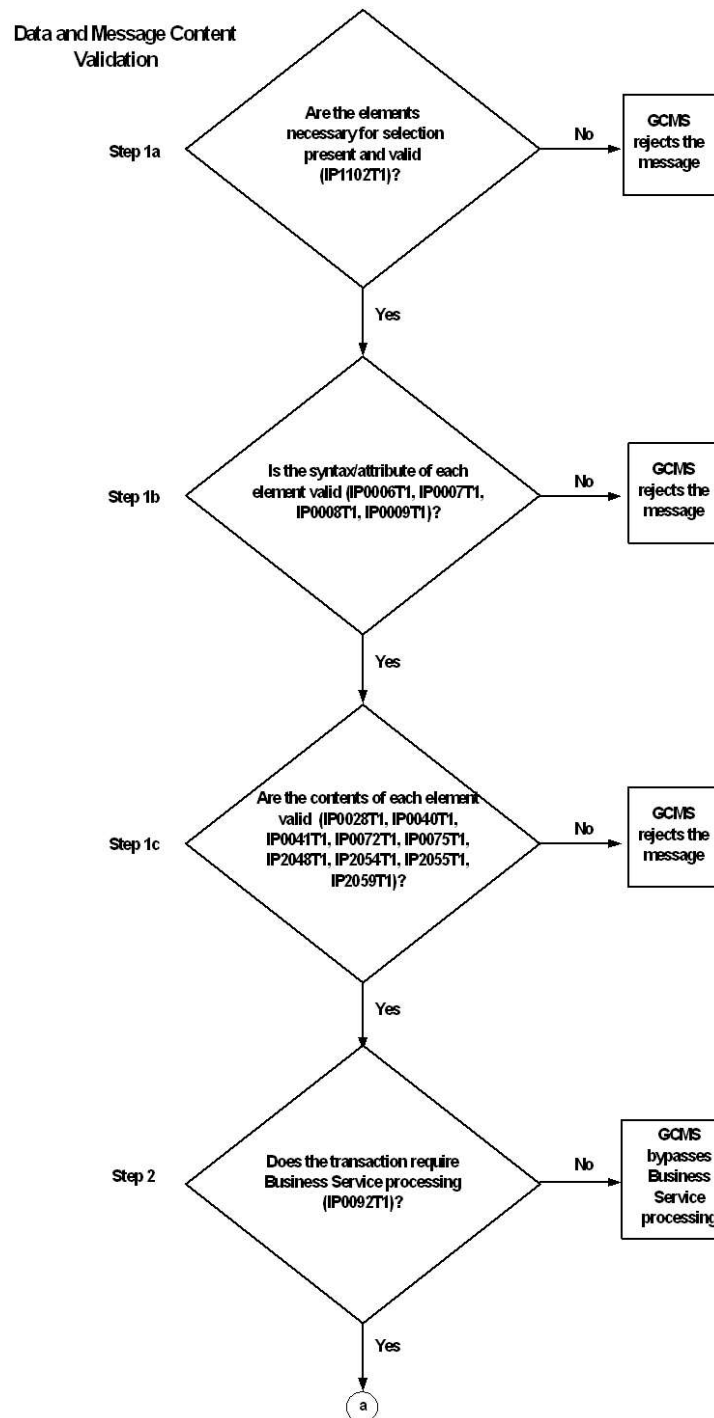


Figure 10.2—Business Service Arrangement Selection and Validation

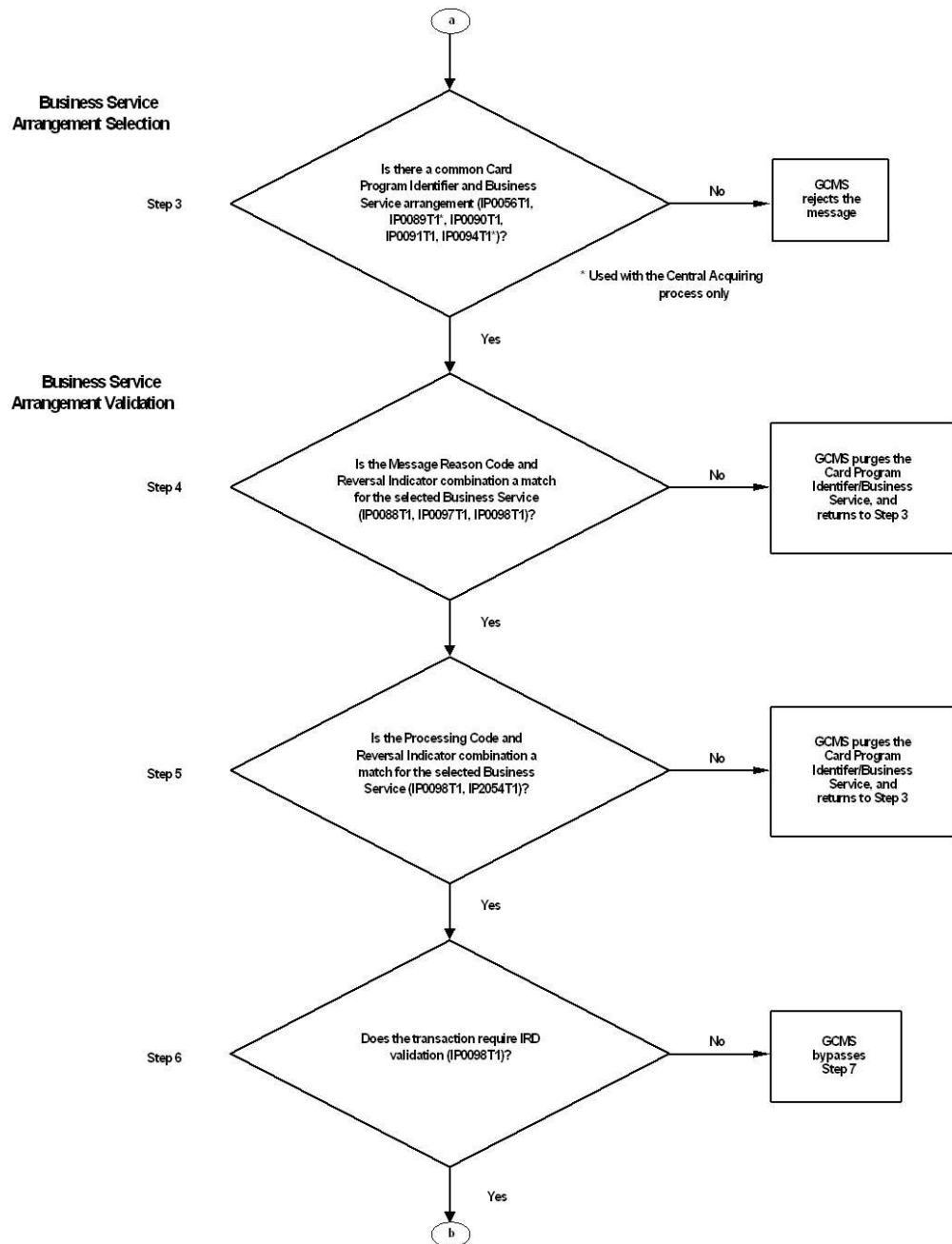
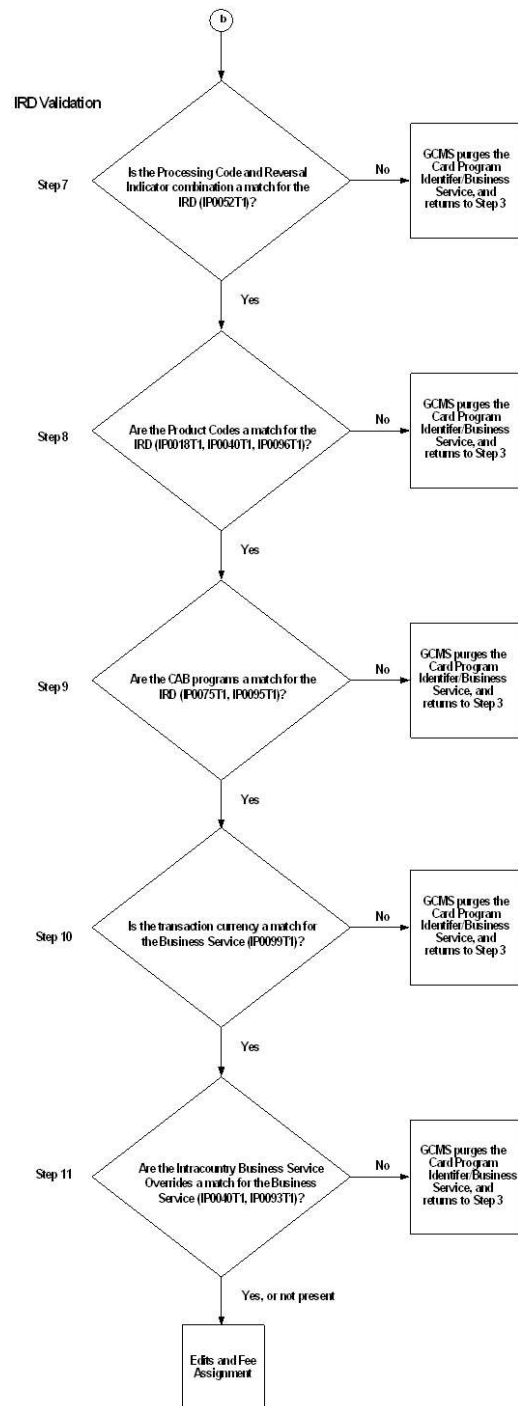


Figure 10.3—IRD Validation



Data and Message Content Validation by GCMS

The following steps describe the process of validating the data and message content.

Step 1: Validate the Elements Used in the Selection Process

Certain elements must be present and valid in each message to begin the process of selecting the card program identifier and business service arrangement. These are the elements used to validate the qualification criteria for card program identifiers and business service arrangements.

The format requirements, syntax/attribute definitions, and content of these critical elements are defined by MasterCard.

Step 1a: Validate Format Requirements

GCMS validates that all the elements necessary for selection are present and valid using Table IP1102T1 Mandatory Field Edits.

The columns in the figure that follows show the elements used in the selection process. The rows in this figure show whether each of these elements is mandatory, conditional, or optional for each transaction function.

Figure 10.4—Table IP1102T1 Format Requirements for Elements Used in Selection

Msg Type/ Message Reason Code	MT	DE2	DE3	DE24	DE25	DE26	DE31	DE43	DE93	DE94	PDS0025*	PDS0026*	PDS0158	PDS0165
1240-200/all	M	M	M	M	O	M	M	M		M	C	•	C	M
1442-450,451,453,454/all	M	M	M	M	M	M	M	M		M	C	•	C	M
1240-205,282/all	M	M	M	M	M	M	M	M		M	C	•	C	M
1644-603/all	M	M	M	M	M	O	M	O		M	C	•	O	M
1740-700/7614	M	M	M	M	M	O	M	O	O	M	C	•	O	M
1740-700/all except 7614	M	C	M	M	M	O	O	O	M	M	C	•	O	M
1740-780/all except 7614	M	C	M	M	M	O	O	O	M	M	C	•	O	M
1740-781/all except 7614	M	C	M	M	M	O	O	O	M	M	C	•	O	M
1740-782/all except 7614	M	C	M	M	M	O	O	O	M	M	C	•	O	M
1644-697/na	M	•	•	M	•	•	•	•	•	•	•	C	•	•
1644-695/na	M	•	•	M	•	•	•	•	•	•	•	•	•	•

*Message Reversal and File Reversal Indicators are present only if the message or file is a reversal.

If one of the elements shown in the previous figure is mandatory for a message but not present, GCMS rejects the message with the following error message (where <fldname> represents the name of the missing element):

735 - <fldname> MUST BE PRESENT

Step 1b: Validate Syntax/Attribute of Selection Elements

GCMS edits the syntax/attribute requirements for all the elements used in the selection process using the following IPM MPE tables:

- IP0006T1 Data Element Attributes
- IP0007T1 Data Element Subfield Attributes
- IP0008T1 PDS Attributes
- IP0009T1 PDS Subfield Attributes

Syntax/Attribute Requirements for Elements Used in the Selection Process³

Name	Element	Syntax/Attribute	Table ID
MTI	First four positions	n-4	IP0006T1
Primary Account Number (PAN)	DE 2	n...19; LLVAR	IP0006T1
Processing Code	DE 3	n-6	IP0007T1
Function Code	DE 24	n-3	IP0006T1
Message Reason Code	DE 25	n-4	IP0006T1
Card Acceptor Business Code	DE 26	n-4	IP0006T1
Acquirer Reference Data	DE 31	n-23; LLVAR	IP0007T1
Card Acceptor Name/Location	DE 43	ans...99; LLVAR	IP0007T1
Transaction Destination Institution ID Code	DE 93	n...11; LLVAR	IP0006T1
Transaction Originator Institution ID Code	DE 94	n...11; LLVAR	IP0006T1
Message Reversal Indicator	PDS 0025	an...7; TAGLLVAR	IP0009T1

3. All of the above elements may not be present in all messages.

Using the MPE to Select the Card Program Identifier and Business Service Information

Name	Element	Syntax/Attribute	Table ID
File Reversal Indicator	PDS 0026	an...7; TAGLLVAR	IP0009T1
Business Activity	PDS 0158	ans...24; TAGLLVAR	IP0009T1
Settlement Method Indicator	PDS 0165	ans...30; TAGLLVAR	IP0009T1

Step 1c: Validate Content of Selection Elements

GCMS edits the content of the elements to ensure the values submitted are valid system values.

Name	Element	Table Name	Table ID
Primary Account Number (PAN)	DE 2	Issuer Account Range Table	IP0040T1
Processing Code	DE 3, subfield 1	DE 3 Processing Code, subfield 1 Cardholder Transaction Type	IP2048T1
Cardholder "From" Account	DE 3, subfield 2	DE 3 Processing Code, subfield 2 Cardholder From Account Type Code	IP2054T1
Cardholder "To" Account	DE 3, subfield 3	DE 3 Processing Code, subfield 3, Cardholder To Account Type Code	IP2055T1
Card Acceptor Business (CAB) Code ⁴	DE 26	Card Acceptor Business Codes (MCCs)	IP0075T1
Acquirer's BIN	DE 31, subfield 2	BIN Table	IP0041T1
Card Acceptor Country Code	DE 43, subfield 6	Country Codes Table	IP0028T1
Transaction Destination Institution ID Code	DE 93	Expanded Member ID Master Table	IP0072T1
Transaction Originator Institution ID Code	DE 94	Expanded Member ID Master Table	IP0072T1
Message Reversal Indicator	PDS 0025	PDS 0025 Message Reversal Indicator, subfield 1 Message Reversal Indicator	IP2059T1

4. The table includes card acceptor business codes that are active and life cycled. If the CAB code provided by the customer is in life cycle status, First Presentment/1240 non-reversal messages will be rejected.

Business Service

Using the MPE to Select the Card Program Identifier and Business Service Information

The IP2nnnT1 series tables contain valid values based on card program identifier/business service arrangement combination. They contain some entries for which the Card Program Identifier field contains all spaces and the Business Service Arrangement Type and Business Service ID fields contain all zeros. These entries represent the default valid values. At this stage of validation, when GCMS is trying to ensure that all of the mandatory fields are present and contain valid values, GCMS uses these default valid values.

Later, after GCMS assigns a specific card program identifier/business service arrangement combination, GCMS may perform edits that require a specific subset of valid values depending on the business service. For these types of edits, GCMS uses the IP2nnnT1 table entries that contain specific values in the Card Program Identifier, Business Service Arrangement Type, and Business Service ID fields.

Step 2: Determine Whether the Transaction Requires Business Service Processing

Not all messages require business service processing. Table IP0092T1 identifies the transaction functions that are eligible for business service processing. If the switch in the table is equal to Y for the transaction function, GCMS performs business service processing.

MasterCard defines the following as the specific transaction functions that are eligible.

MTI	Function Code (DE 24)	Description	Requires Business Service Processing Switch
1240	200	First Presentments	Y
1644	695	File Trailer	N
1644	696	Financial Detail Addendum (inherits business service from associated First Presentment)	N
1644	697	File Header	N
1442	450, 453	First Chargebacks	Y
1240	205, 282	Second Presentments	Y
1442	451, 454	Arbitration Chargebacks	Y
1644	603	Retrieval Requests	Y

MTI	Function Code (DE 24)	Description	Requires Business Service Processing Switch
1740	700, 780, 781, 782, 783	Fee Collections	Y
1740	790	Fee Collection Fund Transfer	Y

Step 3: Business Service Arrangement Selection

Following are the two processes for selecting business service arrangements.

Step 3a (Standard Process): Retrieve and Match Card Program Identifier and Business Service Arrangement Participation

GCMS retrieves the card program identifier and business service arrangement participation information for both customers in the message.

To Retrieve Card Program Identifier and Business Service Arrangement Participation Combinations for the...	Use Element	Table Name	Table ID
Issuer (applies to Presentments, Chargebacks, and Fee Collection Retrieval Fee Billing messages)	DE 2 (expanded to 19 positions)	Issuer Account Range Card Program Identifier and Business Service Arrangement Participation	IP0090T1
Acquirer (applies to Presentments, Chargebacks, and Fee Collection Retrieval Fee Billing messages)	DE 31, subfield 2	Acquiring BIN Card Program Identifier and Business Service Arrangement Participation	IP0091T1
Receiver (applies only to Fee Collection messages other than Fee Collection Retrieval Fee Billing)	DE 93 (expanded to 11 positions)	Member Business Service Arrangements	IP0056T1
Sender (applies only to Fee Collection messages other than Fee Collection Retrieval Fee Billing)	DE 94 (expanded to 11 positions)	Member Business Service Arrangements	IP0056T1

Using the tables listed above, GCMS finds all card program identifier/business service arrangement combinations in common between the two customers.

If none are in common, GCMS rejects the transaction.

Business Service

Using the MPE to Select the Card Program Identifier and Business Service Information

If the two customers have one or more card program identifier/business service arrangement combinations in common, GCMS evaluates each card program identifier/business service arrangement combination that is in common between the customers against the characteristics of the transaction. This process begins with Step 4 as described in the “Business Service Arrangement Validation” subsection later in this section. If one arrangement fails the validation, GCMS returns to Step 3a to evaluate the next higher priority issuer card program identifier/business service arrangement combination.

Step 3b (Central Acquiring Process): Retrieve and Validate Issuer Card Program Identifier and Business Service Arrangement Participation

Currently, Central Acquiring logic applies only to presentments and chargebacks for which the issuer, the acquirer, and the card acceptor are in the Europe region. Central Acquiring logic does not apply to ATM or manual cash advance transactions.

For Central Acquiring, the acquiring BINs do not show all the relevant intracountry business service arrangements in table IP0091T1. Such an approach would be too restrictive for acquirers as they would need to wait until they were set up in table IP0091T1 for a new intracountry arrangement before they could successfully submit transactions in that market. Therefore, for Central Acquiring situations, GCMS considers only the issuing account range participation as defined in table IP0090T1.

GCMS determines whether Central Acquiring logic applies to an intra-European transaction by comparing the acquiring BIN country code (found in table IP0041T1) with the merchant country code (found in DE 43 [Card Acceptor Name/Location], subfield 6 [Card Acceptor Country Code] of the transaction). If these country codes are the same, the Standard Process (defined in Step 3a above) applies. If the country codes are not the same, the Central Acquiring Process applies, as defined in this subsection.

For the Central Acquiring process, GCMS retrieves the card program identifier and business service arrangement participation information for the issuer only.

To Retrieve Card Program Identifier and Business Service Arrangement Participation Combinations for the...	Use Element	Table Name	Table ID
Issuer (applies to presentments and chargebacks)	DE 2 (expanded to 19 positions)	Issuer Account Range Card Program Identifier and Business Service Arrangement Participation	IP0090T1

GCMS then evaluates each card program identifier/business service arrangement combination in which the issuer participates, in the sequence in which they are provided in table IP0090T1, to determine whether the acquirer accepts the card program identifier, and whether the geography and Central Acquiring permission are appropriate.

To determine whether the acquirer accepts the card program identifier of the card program identifier/business service arrangement combination being evaluated, GCMS checks all the table IP0041T1 entries for the acquiring BIN. If the contents of the Card Program Identifier field in any of the acquiring BIN table IP0041T1 entries match the card program identifier of the card program identifier/business service arrangement combination being evaluated, GCMS considers the arrangement eligible for further processing. Otherwise, GCMS discards the current arrangement and returns to Step 3b to evaluate the next higher priority issuer card program identifier/business service arrangement combination.

NOTE

Table 94 is called only when the business service level equals 4 Intra or 3 Inter. It is not called for M2M.

To validate the geography of the arrangement, GCMS looks up the issuer's card program identifier/business service arrangement combination in table IP0094T1 Geographic Restrictions. Table IP0094T1 restricts business service arrangements at either the country code level or the region level.

If table IP0094T1 has no entry for the card program identifier/business service arrangement combination, GCMS considers the card program identifier/business service arrangement combination to have no geographic restrictions and, therefore, it is eligible for further processing.

If table IP0094T1 has at least one entry for the card program identifier/business service arrangement combination, the business service arrangement combination has at least one geographic restriction. GCMS evaluates each of these entries to ensure that the transaction meets at least one of the table IP0094T1 geographic restrictions as follows:

Business Service

Using the MPE to Select the Card Program Identifier and Business Service Information

- If the table IP0094T1 entry contains a country code in the Country field, GCMS compares the merchant country code (found in DE 43 [Card Acceptor Name/Location], subfield 6 [Card Acceptor Country Code] of the transaction) with the Country field in table IP0094T1.
- If the table IP0094T1 entry contains a region code on the Region field, GCMS determines the region associated with the merchant country code of the transaction and compares it with the Region field in table IP0094T1.
- If the merchant country or region matches the table IP0094T1 country or region, GCMS considers the card program identifier/business service arrangement combination eligible for further processing.
- If none of the table IP0094T1 entries for the business service arrangement matches the merchant country/region of the transaction, GCMS discards the current arrangement and returns to Step 3b to evaluate the next higher priority issuer card program identifier/business service arrangement combination.

If the issuer arrangement being evaluated is not a customer-to-customer arrangement, GCMS evaluates the issuer card program identifier/business service arrangement combination against the characteristics of the transaction. This process begins with Step 4 as described in the “Business Service Arrangement Validation” subsection later in this section.

If the arrangement fails the validation, GCMS returns to Step 3b to evaluate the next higher priority issuer card program identifier/business service arrangement combination. If the issuer arrangement being evaluated is a customer-to-customer arrangement, GCMS continues its Central Acquiring process by validating acquirer participation in this customer-to-customer business service arrangement. GCMS does this by looking up the combination of acquirer BIN, customer-to-customer business service arrangement, and card program identifier in table IP0091T1.

If no matching entry is in table IP0091T1, the acquirer does not participate in the customer-to-customer business service arrangement; therefore, it cannot be used. GCMS discards the current customer-to-customer business service arrangement and returns to Step 3b to evaluate the next higher priority issuer card program identifier/business service arrangement combination. If a matching entry is in table IP0091T1 for the customer-to-customer business service arrangement, GCMS continues its Central Acquiring process by validating Central Acquiring permission. To do this, GCMS looks up the issuer's customer-to-customer business service arrangement in table IP0089T1 Business Service Switches.

- If the table IP0089T1 entry contains a Y in the Central Acquired Switch field, the customer-to-customer business service arrangement cannot be used, because an appropriate intracountry business service arrangement should be used instead for the centrally acquired transactions. Therefore, GCMS discards the current customer-to-customer arrangement and returns to Step 3b to evaluate the next higher priority issuer card program identifier/business service arrangement combination.
- If the table IP0089T1 entry contains an N in the Central Acquired Switch field, or table IP0089T1 has no entry for the specified customer-to-customer business service arrangement, GCMS evaluates this M2M business service arrangement against the characteristics of the transaction beginning with Step 4, within the Central Acquiring process. If current M2M fails validation, GCMS returns to Step 3B.

GCMS Validation of Business Service Arrangement

GCMS validates the qualification criteria for a card program identifier/business service arrangement combination.

If the transaction does not meet all of the qualification criteria for the arrangement, including criteria for the submitted IRD, GCMS discards the current card program identifier/business service arrangement combination and returns to Step 3 to evaluate the next higher priority card program identifier/business service arrangement combination. This process continues until the transaction qualifies for an arrangement, or there are no more arrangements in common.

GCMS evaluates business service arrangements according to the sequence in which the entries appear in the optimized table IP0090T1, because the entries are provided in this table in sequence by the correct priority. This process allows GCMS to select the most appropriate card program identifier/business service combination for the transaction.

When the transaction satisfies all qualifying criteria for a card program identifier/business service arrangement combination, including IRD criteria, GCMS assigns this information to the message in PDS 0158 (Business Activity).

NOTE

GCMS evaluates all original and reversal financial transactions, with the exception of Collection Only transactions, against the qualification parameters for all eligible card program identifiers and business service arrangements unless otherwise noted.

NOTE

Collection Only transactions bypass all qualification criteria except for Message Reason Code validation. Selection of the card program identifier and business service arrangement for Collection Only transactions is based only on issuing Account Range and Acquirer BIN (or sending and receiving member ID) participation and priority, and Message Reason Code validation.

When GCMS is unable to select an arrangement for the message or to validate the customer-submitted arrangement information in PDS 0158 (Business Activity), GCMS rejects the message. GCMS generates a Message Exception/1644 message with an error code indicating the fields in error and the reason for the error. GCMS generates one Message Exception/1644 message with one error code for each card program identifier and business service arrangement combination evaluated. (Or if IRD validation is required for the message, GCMS generates one Message Exception/1644 message with an error code for each card program identifier/business service arrangement/IRD combination evaluated.)

Step 4: Validate the Message Reason Code and Reversal Indicator for the Card Program Identifier/Business Service Arrangement Combination

In some messages, such as First Presentment/1240 messages, DE 25 (Message Reason Code) is an optional field. If DE 25 is not present in the message, GCMS performs this step using spaces for the message reason code.

GCMS first looks up the combination of Card Program Identifier, Business Service Arrangement Type, and Business Service ID in table IP0088T1 to determine whether it is masked to another business service arrangement.

- If table IP0088T1 has no entry that matches all of these values, the business service arrangement is not masked and GCMS will perform all table lookups using the actual card program identifier and business service arrangement values.
- If table IP0088T1 has an entry that matches all of these values, GCMS obtains the related “Masked Card Program Identifier,” “Masked Business Service Arrangement Type,” and “Masked Business Service ID” and will perform table IP0097T1 and IP0098T1 lookups using these masked values instead of the actual card program identifier and business service arrangement values.

GCMS then looks up the combination of MTI, Function Code, Message Reason Code, Card Program Identifier, Business Service Arrangement Type, and Business Service ID, in table IP0097T1. When performing this lookup, GCMS uses the masked card program identifier and business service arrangement values if table IP0088T1 indicates that the business service arrangement is masked.

If table IP0097T1 has no entry that matches all of these values, GCMS discards the current arrangement and returns to Step 3 to select the next card program identifier/business service arrangement combination.

If table IP0097T1 has an entry that matches all of these values, GCMS obtains the value in the table IP0097T1 Reversal Indicator field.

- If this value is B, the table IP0097T1 entry is valid for both reversal and non-reversal transactions, and GCMS continues processing with Step 5.
- If this value is R, the table IP0097T1 entry is valid only for reversal transactions. If the transaction is a reversal, indicated by PDS 0025, subfield 1 (Message Reversal Indicator) being present in the transaction and containing a value of R, GCMS continues processing with Step 5. If the transaction is not a reversal, GCMS discards the current arrangement and returns to Step 3 to select the next card program identifier/business service arrangement combination.
- If this value is N, the table IP0097T1 entry is valid only for non-reversal transactions. If the transaction does not contain PDS 0025, subfield 1 with a value of R, it is not a reversal and GCMS continues processing with Step 5. Otherwise, GCMS discards the current arrangement and returns to Step 3 to select the next card program identifier/business service arrangement combination.

Step 5: Validate the Processing Code and Reversal Indicator for the Card Program Identifier/Business Service Arrangement Combination

GCMS first looks up the value in DE 3 (Processing Code), subfield 2 (Cardholder From Account Type Code) of the transaction in table IP2054T1 and obtains its related masked value. The masked value is located immediately following the actual value. GCMS will perform table IP0098T1 and IP0052T1 lookups using the masked DE 3, subfield 2 value in place of the actual DE 3, subfield 2 value.

GCMS then looks up the combination of MTI, Function Code, Processing Code, Card Program Identifier, Business Service Arrangement Type, and Business Service ID, in table IP0098T1. GCMS uses the masked DE 3 and masked business service arrangement values where appropriate.

If table IP0098T1 has no entry that matches all of these values, GCMS discards the current arrangement and returns to Step 3 to select the next card program identifier/business service arrangement combination.

If table IP0098T1 has an entry that matches all of these values, GCMS obtains the value in the table IP0098T1 Reversal Indicator field.

- If this value is B, the table IP0098T1 entry is valid for both reversal and non-reversal transactions, and GCMS continues processing with Step 6.
- If this value is R, the table IP0098T1 entry is valid only for reversal transactions. If the transaction is a reversal, indicated by PDS 0025, subfield 1 (Message Reversal Indicator) being present in the transaction and containing a value of R, GCMS continues processing with Step 6. If the transaction is not a reversal, GCMS discards the current arrangement and returns to Step 3 to select the next card program identifier/business service arrangement combination.
- If this value is N, the table IP0098T1 entry is valid only for non-reversal transactions. If the transaction does not contain PDS 0025, subfield 1 with a value of R, it is not a reversal and GCMS continues processing with Step 6. Otherwise, GCMS discards the current arrangement and returns to Step 3 to select the next card program identifier/business service arrangement combination.

Step 6: Determine Whether IRD Validation is Required for the Transaction

GCMS looks at the table IP0098T1 entry found in Step 5 validation and checks the “Requires IRD Validation Switch” field.

- If this field contains Y, GCMS performs IRD validation (beginning with Step 7) and determines the correct interchange fee using the IRD submitted in PDS 0158 (Business Activity), subfield 4 (Interchange Rate Designator) of the transaction.
- If this field contains N, GCMS performs IRD validation (beginning with Step 8) and determines the correct interchange fee using an IRD value of spaces.

Interchange Rate Designator (IRD) Validation

Following are the steps for validating the interchange rate designator.

Step 7: Validate the Processing Code and Reversal Indicator for the IRD

If IRD validation is not required for the transaction, GCMS omits Step 7 and continues processing with Step 8.

Otherwise, GCMS looks up the combination of MTI, Function Code, Processing Code, Card Program Identifier, Business Service Arrangement Type, Business Service ID, and interchange rate designator (IRD), in table IP0052T1. To perform this lookup, GCMS uses:

- The masked value for DE 3, subfield 2, as described in Step 5
- The actual (unmasked) values for the card program identifier/business service arrangement combination
- The actual interchange rate designator in the IRD field

If table IP0052T1 has no entry that matches all of these values, GCMS discards the current arrangement and returns to Step 3 to select the next card program identifier and business service arrangement combination.

If table IP0052T1 has an entry that matches all of these values, GCMS obtains the value in the table IP0052T1 Reversal Indicator field.

- If this value is B, the table IP0052T1 entry is valid for both reversal and non-reversal transactions, and GCMS continues processing with Step 8.
- If this value is R, the table IP0052T1 entry is valid only for reversal transactions. If the transaction is a reversal, indicated by PDS 0025, subfield 1 (Message Reversal Indicator) being present in the transaction and containing a value of R, GCMS continues processing with Step 8. If the transaction is not a reversal, GCMS discards the current arrangement and returns to Step 3 to select the next card program identifier/business service arrangement combination.
- If this value is N, the table IP0052T1 entry is valid only for non-reversal transactions. If the transaction does not contain PDS 0025, subfield 1 with a value of R, it is not a reversal and GCMS continues processing with Step 8. Otherwise, GCMS discards the current arrangement and returns to Step 3 to select the next card program identifier/business service arrangement combination.

Step 8: Validate Product Codes for the IRD

GCMS looks up the combination of Card Program Identifier, Business Service Arrangement Type, Business Service ID, and interchange rate designator (IRD) in Masked Business Services and Interchange Rate Designators table (IP0087T1) to see whether it is masked to another business service arrangement and IRD.

Spaces are used in the IRD field for look-up when IRD validation is not required as described in Step 6.

- If there is no entry in table IP0087T1 that matches all of these values, the Business Service Arrangement is not masked and GCMS performs table IP0096T1 look-up using the actual Card Program Identifier, Business Service Arrangement Type, Business Service ID, IRD, and GCMS Product ID values.
- If there is an entry in table IP0087T1 that matches all of these values, GCMS obtains the related Masked Card Program Identifier, Masked Business Service Arrangement Type, Masked Business Service ID, Masked Interchange Rate Designator, and GCMS Product ID and performs table IP0096T1 look-up using these masked values instead of the actual Card Program Identifier, business service arrangement, and IRD values.

NOTE

Product code validation process is bypassed when the message is a life cycle transaction and the Product reassignment switch on table IP0040T1 is set to Y or the message is a first presentment and the first presentment reassignment switch on table IP0040T1 is Y.

GCMS looks up the value in DE 2 (Primary Account Number) of the transaction in table IP0040T1 by finding the table entries for which the DE 2 PAN falls within the “Issuer Account Range—Low” and “Issuer Account Range—High” values in table IP0040T1. There may be more than one entry in table IP0040T1 for the issuer account range. GCMS chooses the table IP0040T1 entry for which the Card Program Identifier matches the card program identifier of the card program identifier/business service arrangement combination being evaluated. From this table IP0040T1 entry, GCMS obtains the related “GCMS Product ID” for use in table IP0096T1.

The Product Class feature provides the ability to vary interchange rates by product grouping, while maintaining common interchange structures. The Product Class Override Indicator is used in the interchange product override functionality. Override of interchange rates by product code is accomplished by assigning a Product Class Override Indicator to one or more product codes that would be associated with a given interchange rate value.

An example would be Product Class Override Indicator MCC (Consumer) being used to indicate a specific rate for a given IRD and Product Class Override Indicator. This Product Class Override Indicator MCC would be used for product codes MDS, MDH, MCE, MCC, MCG, MPL, and MDP, thereby avoiding the repetition of each of these product code rates in the appropriate tables in the member profile extract (MPE). This helps MasterCard to limit the number of entries in the MPE tables, reducing the delivery time to our customers.

Please refer to the *IPM Clearing Formats* manual to learn about the Product Class Override Indicator associated with each product code.

GCMS looks up the combination of Card Program Identifier, Business Service Arrangement Type, Business Service ID, interchange rate designator (IRD), and GCMS Product ID, in table IP0096T1. To perform this lookup, GCMS uses:

- The actual (unmasked) values for the card program identifier/business service arrangement combination
- The interchange rate designator in the IRD field (if IRD validation is required), or a space in the IRD field (if IRD validation is not required), as described in Step 6
- The GCMS Product ID from table IP0040T1 in the product ID field

IF...	THEN...
There is no entry in table IP0096T1 that matches all the values mentioned in the previous bullet list	GCMS discards the current business service arrangement and returns to Step 3 to select the next card program identifier/business service arrangement combination.
There is an entry in table IP0096T1 that matches all the values mentioned in the previous bullet list	GCMS proceeds to Step 9 to continue validating the IRD.
There is an entry in table IP0096T1 that matches all the values mentioned in the previous bullet list, and - the Card Program Identifier associated with this entry is other than CIR, - the transaction is an ATM transaction (DE 3 [Processing Code], subfield 1 [Cardholder Transaction Type], value of 1), and - at least one entry for this account range in table IP0040T1 contains a GCMS Product ID of MCE, MEC, or MBE (denoting a MasterCard Electronic account range).	GCMS discards the current business service arrangement and returns to Step 3 to select the next Card Program Identifier/Business Service Arrangement combination. This is because ATM transactions involving MasterCard Electronic cards must qualify for a business service that supports Cirrus.

Step 9: Validate CAB Programs for the IRD

GCMS looks up the value in DE 26 (Card Acceptor Business Code/MCC) of the transaction in table IP0075T1. There may be more than one entry in table IP0075T1 for the DE 26 value.

For each entry in table IP0075T1 applicable to the DE 26 value, GCMS obtains the related “Card Acceptor Business (CAB) Program” for use in table IP0095T1.

GCMS then looks up the combination of Card Program Identifier, Business Service Arrangement Type, Business Service ID, interchange rate designator (IRD), and Card Acceptor Business (CAB) Program, in table IP0095T1. GCMS uses Masked Card Program Identifier, Masked Business Service Arrangement Type, Masked Business Service ID, and Masked Interchange Rate Designator if found in step 8. Spaces are used in the IRD field for look up when IRD validation is not required as described in Step 6.

If table IP0095T1 has an entry that matches all of these values, GCMS proceeds to Step 10 to continue validating the business service.

Otherwise, GCMS returns to table IP0075T1 and obtains the next table IP0075T1 entry for the DE 26 value and looks up its Card Acceptor Business (CAB) Program and business service/IRD information in table IP0095T1.

If GCMS does not find an entry in table IP0095T1 that matches the business service arrangement/IRD and any one of the Card Acceptor Business (CAB) Programs in the relevant table IP0075T1 entries, GCMS discards the current business service arrangement and returns to Step 3 to select the next card program identifier/business service arrangement combination.

Step 10: Validate Transaction Currency for the Business Service

Currently, GCMS performs Step 10 only when both the issuer and acquirer are in the Europe region. However, this functionality could be made available, if needed, to customers in other regions.

GCMS looks up the combination of Card Program Identifier, Business Service Arrangement Type, and Business Service ID, in table IP0099T1. To perform this lookup, GCMS uses the actual (unmasked) values for the card program identifier/business service arrangement combination.

- If table IP0099T1 has no entry for the business service arrangement, GCMS proceeds to Step 11 to continue validating the business service.
- If table IP0099T1 has an entry for the business service arrangement, GCMS obtains the value in the Transaction Currency Code field and compares it to DE 49 (Currency Code, Transaction) in the message.

If the transaction currencies match, GCMS proceeds to Step 11 to continue validating the business service.

Otherwise, GCMS discards the current business service arrangement and returns to Step 3 to select the next card program identifier/business service arrangement combination.

Step 11: Check for Intracountry Business Service Overrides

Currently, GCMS performs Step 11 only when both the issuer and acquirer are in the Europe region. However, this functionality could be made available, if needed, to customers in other regions.

For intracountry business services, GCMS looks up the combination of Business Service Arrangement Type, Business Service ID, Issuer Account Range—Low, and Issuer Account Range—High, in table IP0093T1. To perform this lookup, GCMS uses:

- The actual (unmasked) values for the business service arrangement combination
- The Issuer Account Range—Low and Issuer Account Range—High fields from the relevant table IP0040T1 entry

If table IP0093T1 has no entry that matches all of these values, GCMS continues processing as described in the “Edits and Fee Assignment” section of this chapter.

If table IP0093T1 has an entry that matches all of these values and the Card Program Identifier of the card program identifier/business service arrangement being validated is MSI (Maestro) or CIR (Cirrus), GCMS discards the current business service arrangement and returns to Step 3 to select the next card program identifier/business service arrangement combination.

If table IP0093T1 has an entry that matches all of these values and the Card Program Identifier being validated is other than MSI or CIR, GCMS checks that the issuing account range country code (found in table IP0040T1) and the merchant country code (found in DE 43 [Card Acceptor Name/Location], subfield 6 [Card Acceptor Country Code] of the transaction) are the same.

- If so, GCMS continues processing as described in the “Edits and Fee Assignment” subsection of this section.
- Otherwise, GCMS discards the current business service arrangement and returns to Step 3 to select the next card program identifier/business service arrangement combination.

Enforcement of Business Service Arrangements

MasterCard will enforce the use of the Business Service Arrangement for First Presentment/1240 and optionally life cycled transactions between acquirers and issuers outlined in this section.

If all customers in a country have agreed to participate in the pricing agreement, MasterCard is obliged to ensure that applicable transactions receive that pricing.

The Business Service Selection Enforcement Code will be set to F (Business Service Arrangement is mandatory for First Presentment/1240 messages) for designated Business Service Arrangements.

This means that First Presentment/1240 transactions occurring between an acquirer BIN and an issuer account range associated with the intracountry Business Service Arrangements whose Business Service Selection Enforcement Code has been set to F (mandatory Business Service Arrangement) must be submitted for an interchange program that is valid for that intracountry Business Service Arrangement.

If GCMS processes a First Presentment/1240 transaction occurring between an acquirer and an issuer, and it is submitted with an IRD that does not qualify for the intracountry Business Service Arrangement but qualifies for a less restrictive business service such as the regional business Service Arrangement, GCMS will reject the transaction with the following error codes:

- **2425**—PDS 0158 (Business Activity), subfield 4 (Interchange Rate Designator) is not valid for enforced Business Service Arrangement and Acceptance Brand ID code.
- **2451**—Submitted Business Service Arrangement is not valid. Must be submitted for enforced Business Service Arrangement.

Business Service

Using the MPE to Select the Card Program Identifier and Business Service Information

First Chargeback/1442, Second Presentment/1240, or Arbitration Chargeback/1442 transactions that contain an IRD that applies to the respective regional Business Service Arrangement will still be permitted.

The Business Service Selection Enforcement Code does not apply to the following transactions:

- Fee Collection/1740 messages. Existing functionality as it pertains to Fee Collection/1740 messages remains unchanged.
- Collection Only (On-Us and intraprocessor) transactions
- Transactions qualifying for an intracountry Business Service Arrangement submitted with an airline card acceptor business code (MCC in the range of 3000 to 3299)

Countries with established Business Service Arrangements fall into one of two Business Service Arrangement categories. Default or Non-Default.

Default Business Service Arrangements

Intracountry Business Service Arrangements have been set up in GCMS. These arrangements are established as *default*, which means that all acquiring BINs and all issuing account ranges identified for this country are automatically included as participants.

Their participation in the enforced intracountry Business Service Arrangement program will be finalized once the Business Service Selection Enforcement Code has been updated from “space” (default value, not a mandatory Business Service Arrangement) to F (mandatory Business Service Arrangement).

Life Cycle Processing Supported by GCMS

GCMS supports life cycle activity processing when changes are made to certain system parameters or qualification parameters for card program identifiers, business service arrangements, and IRDs. This allows credits, reversals, and exception items such as chargebacks and retrievals to continue to be processed with the original settings, while new activity (such as First Presentment-originals) is processed using the new settings.

A Life Cycle Indicator is associated with specific qualification parameters, which GCMS uses to determine the valid messages (MTI/Function Code/Processing Code/Reversal Indicator combinations) for a given parameter. The Life Cycle Indicator codes associated with each parameter are as follows:

Code	Description
A	All transaction types are valid.
L	Only Life Cycle transactions are valid.

Using the MPE to Select the Card Program Identifier and Business Service Information

A Life Cycle Indicator parameter exists in the following IPM MPE tables and associated parameters:

Table ID	Name	Life cycle indicator added to parameter
IP0036T1	Default Business Service	For combination of card program identifier/business service arrangement type/business service arrangement ID
IP0056T1	Member Business Service Arrangement Participation	For combination of card program identifier/business service arrangement type/business service arrangement ID/member ID
IP0075T1	Card Acceptor Business Codes (MCCs)	Card Acceptor Business Code
IP0075T1	Card Acceptor Business Codes (MCCs)	Card Acceptor Business Program
IP0076T1	MasterCard Assigned IDs	MasterCard Assigned IDs
IP0090T1	Issuer Account Range Card Program Identifier and Business Service Arrangement Participation	For combination of card program identifier/business service arrangement type/business service arrangement ID/issuer account range-low/issuer account range-high
IP0091T1	Acquiring BIN Card Program Identifier and Business Service Arrangement Participation	For combination of card program identifier/business service arrangement type/business service arrangement ID/acquiring BIN
IP0096T1	Card Program Identifier/Product Restrictions	GCMS Product ID For combination of card program identifier/business service arrangement type/business service arrangement ID/interchange rate designator
IP0094T1	Geographic Restrictions for Card Program Identifier/Business Service Arrangement	Country Code For combination of card program identifier/business service arrangement type/business service arrangement ID
IP0094T1	Geographic Restrictions for Card Program Identifier/Business Service Arrangement	Region For combination of card program identifier/business service arrangement type/business service arrangement ID
IP0095T1	Card Acceptor Business Program Restrictions (new)	Card Acceptor Business (CAB) Program For combination of card program identifier/business service arrangement type/business service arrangement ID/interchange rate designator

When a parameter has a life cycle indicator of L, only life cycle transactions, as defined by MasterCard, are valid for the parameter value.

Example

A business service arrangement has the following setup for CAB programs:

Table 10.1—CAB Program Setup for Business Service Arrangement 4/123456

CAB Program	Life Cycle Indicator
V001	A = All
A001	L = Life Cycle Only

In the above example, the CAB Program value for A001 has a Life Cycle Indicator value of L-Life Cycle Only. In this instance, GCMS will accept transactions that are defined as life cycle transactions only if the card acceptor business code in DE 26 is assigned to the A001 CAB program.

The following table indicates the transaction types that are defined by MasterCard as life cycle transactions:

MTI	Function Code	Processing Code	Reversal Indicator
1240	200	All Processing Codes	R
1240	200	20	Space
1240	205	All Processing Codes	All Reversal Indicator values
1240	282	All Processing Codes	All Reversal Indicator values
1442	450	All Processing Codes	All Reversal Indicator values
1442	451	All Processing Codes	All Reversal Indicator values
1442	453	All Processing Codes	All Reversal Indicator values
1442	454	All Processing Codes	All Reversal Indicator values
1644	603	All Processing Codes	All Reversal Indicator values
1740	700	All Processing Codes	All Reversal Indicator values
1740	780	All Processing Codes	All Reversal Indicator values
1740	781	All Processing Codes	All Reversal Indicator values
1740	782	All Processing Codes	All Reversal Indicator values

GCMS Edits, Fee Assignments, and Fee Calculation

GCMS edits, fee assignments, and fee calculation are described as follows.

Edits

The IP2nnT1 series tables contain valid values based on card program identifier/business service arrangement combination. After GCMS assigns a specific card program identifier/business service arrangement combination, GCMS may perform edits that require specific valid values depending on the business service. For these types of edits, GCMS uses the IP2nnnT1 table entries that contain specific values in the Card Program Identifier, Business Service Arrangement Type, and Business Service ID fields. Valid-value edits that are not specific to a business service arrangement are performed using the default values of spaces and zeros in the card program identifier/business service arrangement combination fields.

GCMS also performs other edits, depending on the business service assigned, and does not use the IPM MPE for these edits.

If the transaction fails any edits, GCMS rejects the transaction. Otherwise, GCMS continues processing and determines the fees applicable to the transaction.

Fee Assignment

GCMS looks up the transaction and business service information in table IP0052T1. Table IP0052T1 contains pointers to tables IP0053T1 and IP0057T1. Table IP0053T1 contains the fee groups that are assigned to the transaction. Table IP0057T1 contains override pointers to table IP0053T1.

GCMS already looked up the Card Program Identifier, Business Service Arrangement Type, Business Service ID, IRD, MTI, Function Code, and Processing Code information in table IP0052T1, in step 7 of this process. GCMS now looks at the fee code pointer information in the table IP0052T1 entry.

If the IP0052T1 field “Product Class—Card Acceptor Override Pointer” contains all zeros, GCMS disregards it and instead looks up the value from table IP0052T1 “Fee Code Pointer” in the “Fee Code Pointer” field in table IP0053T1. GCMS then calculates the fees as described in the “Fee Calculation” section of this article.

If the IP0052T1 field “Product Class—Card Acceptor Override Pointer” contains a non-zero value, it indicates that an override may exist for the interchange rate and represents a pointer to table IP0057T1.

GCMS searches table IP0057T1 in accordance with the pointer obtained from table IP0052T1. Each pointer may have multiple entries. The multiple entries represent a number of different override rates that can be applied. On the basis of a predetermined hierarchy, GCMS searches until the first matching entry is found. If no match is found, no override applies.

The criteria combinations are listed below in hierarchical order of selection:

1. The MasterCard Assigned ID, in combination with the product class and card acceptor business code (MCC)
2. The MasterCard Assigned ID, in combination with the product class and card acceptor business type

3. The MasterCard Assigned ID, in combination with the product class
4. The MasterCard Assigned ID, in combination with the card acceptor business code (MCC)
5. The MasterCard Assigned ID, in combination with the card acceptor business type
6. The MasterCard Assigned ID
7. The product class, in combination with the card acceptor business code (MCC)
8. The product class, in combination with the card acceptor business type
9. The card acceptor business code (MCC)
10. The card acceptor business type
11. The product class

If GCMS finds an entry in table IP0057T1 that matches the combination of one of the criteria listed in the hierarchy above, GCMS then looks up the value from that table IP0057T1 entry's "Fee Code Pointer" in the "Fee Code Pointer" field in table IP0053T1. GCMS then applies the appropriate rate types and calculates the fees as described in the "Fee Calculation" section of this article.

If GCMS does not find an entry in table IP0057T1 that matches the combination of one of the criteria listed in the hierarchy above, GCMS uses the base rate. GCMS then calculates the fees as described in the "Fee Calculation" section of this article.

Fee Calculation

Table IP0053T1 contains multiple entries for the same Fee Code Pointer. Each entry contains the Payment Party (issuer, acquirer, or internal entity), the interchange rate (if applicable) and rate direction, the interchange unit fee (if applicable) and its direction, the currency code and exponent for the unit fee (if applicable), and any minimum or maximum fee limits and direction.

NOTE

The IPM MPE file does not provide the rates and fees for customer-to-customer business service arrangements, because this information is proprietary. The customer-to-customer business service arrangement and IRD parameters are stored in the IPM MPE file, but the "Fee Code Pointer" and "Product Class—Card Acceptor Override Pointer" fields in table IP0052T1 that normally point to the correct fee entries in tables IP0057T1, IP0053T1, or both, contain all zeros for customer-to-customer arrangements.

The table IP0053T1 entries are grouped by Rate Type. For example, Rate Type 001 is the interchange fee and Rate Type 014 is the first-level corporate incentive discount (currently applies only to intra-European transactions). For Rate Types other than 001, GCMS determines whether to apply the fees according to internal programming logic. For example, GCMS applies the Rate Type 014 first-level corporate incentive discount only if the transaction is accompanied by the required addendum elements. Participating customers understand the conditions in which the various Rate Types apply to business service arrangements in which they participate.

The Rate Types are as follows:

- 000—Cash Advance Fee (applies to manual cash disbursement transactions)
- 001—Interchange Fee
- 002—Merchant Investment Fee
- 010—IVA on interchange fee (specific to Mexico processing)
- 013—ATM Late Presentment Fee (Currently specific to Europe processing. Applies to non-reversal First Presentment ATM transactions for which the transaction date is older than 45 days.
- 014—First-level Corporate incentive discount (applies when one corporate IRD can have different rates, depending on the presence of valid addendum data. Currently specific to Europe processing.)
- 015—Purchase with Cash Back (applies only to the cash back portion of a purchase with cash back transaction)
- 016—Rewards Program
- 017—Second-level Corporate Incentive discount (applies when the transaction qualifies for neither the First-level Corporate incentive discount nor the U.K. Summary VAT Incentive discount, but the acquirer provides information in PDS 0502 [Custom Identifier]. Currently specific to Europe processing.)
- 018—New UK Summary VAT Incentive Interchange (applies when the transaction does not qualify for the First-level Corporate Incentive discount, but the acquirer submits the data needed for MasterCard to generate the U.K. Summary VAT Invoice on behalf of the merchant. Required data is:
 - PDS 0508 [Customer Code],
 - PDS 0596 [Card Acceptor Tax ID], in which subfield 1 [Card Acceptor Tax ID] contains the correct tax ID and subfield 2 [Card Acceptor Tax ID Provided Code] contains a value of “Y”,
 - PDS 0597 [Total Tax Amount],
 - PDS 0600 [Card Acceptor Reference Number],
 - PDS 0641 [Product Code],
 - PDS 0642 [Item Description],
 - PDS 0647 [Extended Item Amount], with a non-zero value, and,
 - PDS 0682 [Detail Tax Amount 1].)
- 019—Merchant Interchange
- 020—Europe Enhanced Value

Chapter 11 Settlement Service

This chapter defines the settlement service, and the various settlement service levels; it describes how GCMS supports the settlement services.

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Definition of Settlement Service

The definition of MasterCard's settlement services is as follows.

MasterCard settlement services provide the method by which MasterCard and customers transfer funds to complete settlement for clearing and billing activities. A settlement service is a facility within which funds are exchanged between customers and MasterCard to settle transaction and fee amounts. Each settlement service supports a reconciliation currency that MasterCard and its customers may exchange. Refer to the *Settlement Manual* for details about each settlement service.

DEFINITION

Reconciliation currency is the currency in which a customer is paid or pays for the settlement of its activity. Reconciliation currency also is referred to as payment currency or settlement currency.

Calculating Net Positions

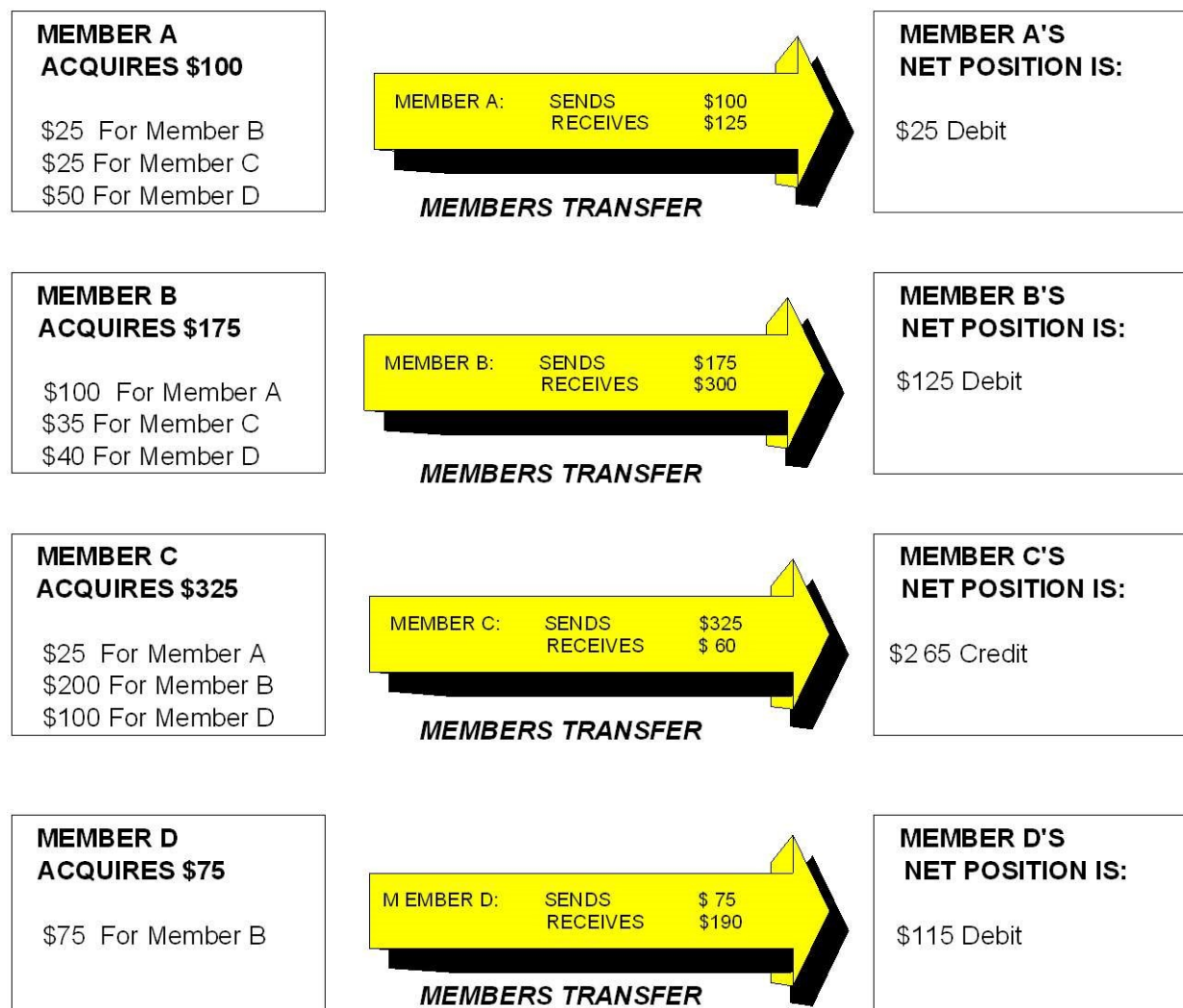
The following diagram shows how MasterCard settles transactions among four customers—A, B, C, and D.

Settlement Service

Definition of Settlement Service

MasterCard receives incoming transaction data from each member between 08:00 and the end of the sixth clearing (08:00) the next day. In the below example, settlement occurs after 08:00 a.m. MasterCard applies the interchange fees during each clearing to each applicable transaction. The boxes below show the net amount that each member has submitted during processing.

After the Settlement Service cutoff MasterCard advises the global settlement bank of each member's net position and advises members of their positions.



Settlement Service Levels

MasterCard requires each customer to select the settlement service levels in which it wants to participate and to maintain a settlement account in the appropriate currency. The following explains settlement service functionality, which allows customers to customize settlement processing criteria for their transaction data.

The Global Clearing Management System (GCMS) will determine the settlement service, account, and associated currency for each payment party according to customer selected options.

Customers choose the settlement service levels and corresponding reconciliation currency that they want to support their specific settlement needs. Customers optionally may designate their participation in specific settlement services; however, all customers are required to participate in at least one regional settlement service. Clearing activity between two customers usually is settled at the lowest possible common settlement service level. If a customer pair does not settle in a common settlement service, the customers settle at their respective regional settlement service accounts. The defined regional default service for the customer will be used if no other settlement service can be applied to the transaction.

GCMS supports the settlement service levels listed in the following table.

Settlement Service Level	Description
Bilateral	Customers participating in a bilateral agreement instruct MasterCard to clear their transactions through GCMS applying all appropriate business rules. The customers settle these transactions directly rather than through the MasterCard Settlement Account Management (S.A.M.) system.
Intracurrency	Customers participating in an intracurrency settlement service adhere to a common settlement calendar, settlement cutoff, and reconciliation currency for their transactions. MasterCard settles these transactions for both parties on the same day. Interchange fees are calculated in the reconciliation currency, minimizing currency conversion impacts to the customers participating in the intracurrency settlement agreement. Customers that participate in intracountry interchange may settle transactions through intracurrency settlement services or regional settlement services. Transactions that qualify for intracountry interchange, but not intracurrency settlement service, are processed as regional settlement transactions; however, intracountry interchange is still applied. A member ID may participate in multiple intracurrency settlement services. The participating customers must all agree on one reconciliation currency for each intracurrency service. Intracurrency settlement is an optional settlement service, and MasterCard must approve any agreements.

Settlement Service

Settlement Service Selection Process

Settlement Service Level	Description
Regional	A settlement agreement involving customers that may settle in different currencies and that may use different settlement banks. This is the default agreement; that is, transactions settled by MasterCard that do not qualify for intracurrency settlement are automatically settled in a regional settlement service. Transactions that qualify for regional settlement are settled in U.S. dollars or a local currency approved by MasterCard, at a settlement bank defined by MasterCard. Each member ID must participate in at least one regional settlement service. If a customer participates in more than one regional settlement service, it must designate one regional settlement service as the “default” service, with no selection criteria. For the other regional settlement services, the customer must define specific settlement service selection criteria to indicate the circumstances in which GCMS should select each of the other regional services.

DEFINITION

Base currency is the currency that MasterCard uses as the basis for settlement calculations. All transaction currencies are converted against this currency when determining the customer reconciliation amount in the reconciliation currency. Summing all reconciliation amounts in base reconciliation currency will net to zero.

Customers may specify more than one account within each settlement service to segregate settlement activity according to criteria within the transaction, such as card program, transaction currency, account range, or BIN. However, each account must be in the currency supported by the agreement.

NOTE

The Global Settlement Services department must approve all settlement arrangements requested by a customer.

Settlement Service Selection Process

Details about the settlement service selection process is as follows.

The hierarchy for settlement service selection is bilateral, intracurrency, then regional. The settlement service selection process evaluates customer participation in this order. If no intracurrency settlement service agreement exists in which both customers participate, MasterCard assigns each payment party's regional settlement service and account information.

Transactions are qualified for a settlement service agreement that is in effect at the time that GCMS processes the transaction. For financial exception items (chargebacks, second presentments, and fee collections) this may result in the assignment of a different settlement service from the time that GCMS originally processed the transaction as a first presentment.

If, during the settlement service selection process, it is determined that the transaction qualifies for multiple settlement services within the same level, GCMS will use the parameters with the most specific matching criteria; otherwise, the parameters with the most recent effective date and time are used.

To illustrate the settlement service selection process, assume that the following customers participate in settlement service agreements, with no additional criteria specified, as shown in the following table.

Customer	Intracurrency	Regional
001234	X	X
005678	X	X
009876		X

Assume that customers 001234 and 005678 participate in the same intracurrency settlement agreement.

According to the information above, the following settlement services would be selected:

Transactions from 001234 to/from 005678⇒ Intracurrency settlement

Transactions from 005678 to/from 009876⇒ Regional settlement

Transactions from 009876 to/from 001234⇒ Regional settlement

Settlement Service Selection

Customers optionally may use the following elements to specify how GCMS should select the settlement service and associated account for their submitted clearing data.

- Data Element (DE) 49 (Currency Code, Transaction)
- Private Data Sublement (PDS) 0158 (Business Activity), subfield 1 (Card Program Identifier)
- Account Range (DE 2 [Primary Account Number])
- DE 31 (Acquirer Reference Data), subfield 2 (Acquirer's BIN)
- Issuing/Acquiring Activity (MTI plus DE 24 [Function Code])

Settlement service selection criteria are communicated to MasterCard via the Net Settlement Agreement. These options may be applied for either of the GCMS supported settlement service levels: intracurrency and regional.

NOTE

GCMS does not perform settlement service selection for Collection Only transactions because these transactions are submitted for reporting purposes only.

Settlement Service Parameters

Customers may use the following optional parameters to specify how GCMS should select the settlement account associated to the settlement service for their submitted clearing data.

Table 11.1—Settlement Service Parameters

IPM Parameter	Element	Usage
Transaction Currency	DE 49 (Currency Code, Transaction)	If selected by the customer, this may be used for settlement service/transfer agent assignment (TAA) selection. This element identifies the currency associated with the amount in DE 4 (Amount, Transaction).
Card Program Identifier	PDS 0158 (Business Activity), subfield 1 (Card Program Identifier)	If selected by the customer, this may be used for settlement service/TAA selection.
Account Range	Derived from DE 2 (Primary Account Number [PAN])	If selected by the customer, this may be used for the settlement service/TAA selection. This element identifies the account range associated with the cardholder account number of the transaction.
Acquiring BIN	DE 31 (Acquirer Reference Data), subfield 2 (Acquirer's BIN)	If selected by the customer, this may be used for settlement service/TAA selection. This element identifies the acquiring BIN associated with the acquirer of the transaction.
Issuing/Acquiring/Both Activity	Transaction Function (MTI plus DE 24 [Function Code])	If selected by the customer, this may be used for settlement service/TAA selection. The transaction function is used to classify a transaction as issuing and acquiring activity. Fee collection messages are considered an acquirer transaction for the sending ICA when this option is used.

NOTE

The customer's transfer agent (TA) may be the customer or a separate entity that the customer authorizes to settle with MasterCard on its behalf.

DEFINITION

A TAA is a combination of the customer's transfer agent (TA) and the customer bank account number.

The following is an example of the settlement service selection process. Assume both customers participate in an intracurrency service using Canada Dollars (CAD) as the reconciliation currency. Member ID 001234 is both an issuer and an acquirer. This customer has criteria established for the Intracurrency 1 settlement service. The customer chooses to settle only its issuing activity submitted with a transaction currency of Canada Dollars (CAD). Member ID 005678 is an issuer only and has not specified criteria in order for transactions to qualify in this service.

The transaction is a First Presentment/1240 message and the transaction currency is CAD. The transaction is sent by member ID 001234 and received by member ID 005678.

Member	Settlement Service	Txn Cur	CPI	Acct Rg	Acq BIN	Iss/Acq Act	TAA	Txn Qualify
001234	Intracurrency 1 CAD	CAD	—	—	—	Issuing	11111	No
005678		—	—	—	—	—	22222	Yes
Transaction meets criteria for each customer?		√	—	—	—	No	—	No

GCMS determines the classification of acquiring activity or issuing activity based on member ID (sending or receiving) within the message:

- Sending—DE 94 (Transaction Originator Institution ID Code)
- Receiving—DE 93 (Transaction Destination Institution ID)

In first presentments the sending customer is identified as the acquirer and the receiving customer is identified as the issuer.

In the example above, the transaction does not qualify for the service, because it did not meet the criteria of member ID 001234 that only its issuing activity should be settled within this service. Since member ID 001234 is sending the first presentment, it is acting in the capacity of an acquirer.

In first chargebacks, the sending customer is identified as the issuer and the receiving customer is identified as the acquirer.

In the example above, the transaction qualifies for the service, because it meets the customer's criteria that only its issuing activity should be settled within this service. Since member ID 001234 is sending the first chargeback, it is acting in the capacity of an issuer.

Settlement Service Participation and Criteria Selection

Customers designate new or changed settlement account information using the Net Settlement Information Form (NSIF). Customers may also select criteria by which MasterCard will select an appropriate settlement service and transfer agent assignment for their transactions.

These criteria will be on the NSIF. Selection criteria for existing settlement services or accounts may be submitted using the NSIF. The NSA is in the *Settlement Manual*.

The bilateral and intracurrency settlement agreement information is distributed to customers via the Integrated Product Messages (IPM) Member Parameter Extract (MPE). Customers can use this information as the selection criteria in their own settlement service selection process. For example, by using the selection criteria, customers determine when they can submit chargeback transactions in their local currency as opposed to U.S. dollars.

Intracurrency Settlement Service Selection

GCMS will verify the possible intracurrency settlement services in which both the sending and receiving customers participate. All criteria associated with each customer's participation are also used in the selection process.

The following information is applicable for customers participating in an intracurrency settlement service agreement. Customers who do not participate in an intracurrency settlement service agreement may disregard this section.

Intracurrency settlement service level specific features include the following:

- A common settlement currency used for all payment parties
- A common settlement calendar used for all payment parties
- A common settlement cutoff(s) used for all payment parties
- A common settlement date interval used for all payment parties
- A common value date interval used for all payment parties

Step 1—Settlement Service Selection

GCMS compares the possible intracurrency settlement services in which both the sender and receiver participate to determine whether there are any common intracurrency settlement service agreements, as follows:

- If the customer pair has only one common intracurrency settlement service agreement, that service is selected and used in the subsequent validation process.
- If the customer pair has multiple common intracurrency settlement service agreements, the common settlement service agreement with the most specific matching criteria is selected. Otherwise, the common settlement service agreement with the most recent effective date is selected and used in the subsequent validation process.

Example 1

Customer 001234 and customer 005678 both participate in intracurrency settlement agreements with the specified criteria in the following table.

Settlement Service
Settlement Service Selection Process

Customer	Settlement Service ID	Trn Cur	CPI	Acct Rg	Acq BIN	Iss/Acq Act	Effective Date
001234	Intracurrency 1	Not Specified	Not Specified	Not Specified	Not Specified	Not Specified	1 Dec 2003
	Intracurrency 2	CAD	Not Specified	Not Specified	Not Specified	Not Specified	15 May 2004
005678	Intracurrency 1	Not Specified	Not Specified	Not Specified	Not Specified	Not Specified	1 Dec 2003
	Intracurrency 2	CAD	Not Specified	Not Specified	Not Specified	Not Specified	15 May 2004
009012	Intracurrency 3	Not Specified	Not Specified	Not Specified	Not Specified	Not Specified	1 Dec 2003

Transactions submitted between customer 001234 and customer 005678 with a transaction currency of Canada Dollars (CAD) and processed on or after 15 May 2004 will be qualified for the Intracurrency 2 settlement agreement. These transactions could be qualified for either the Intracurrency 1 or the Intracurrency 2 settlement service agreement. However, the Intracurrency 2 agreement specifying all transactions with a transaction currency of CAD contains more specific criteria, and is thus the selected settlement service agreement.

Transactions submitted between customer 001234 and customer 005678 with a transaction currency other than CAD will be qualified for the Intracurrency 1 settlement agreement.

Transactions submitted between customer 001234 and customer 009012 do not have an intracurrency settlement agreement in common and, therefore, would use the regional settlement service selection.

Example 2

Customer 001234 and customer 005678 both participate in intracurrency settlement agreements with the specified criteria in the following table.

Cus-tomer	Settlement Service ID	Trn Cur	CPI	Acct Rg	Acq BIN	Iss/Acq Act	Effective Date
001234	Intracurrency 1	Not Specified	Not Specified	Not Specified	Not Specified	Not Specified	1 Dec 2003
	Intracurrency 2	Not Specified	Not Specified	Not Specified	Not Specified	Not Specified	15 May 2004
005678	Intracurrency 1	Not Specified	Not Specified	Not Specified	Not Specified	Not Specified	1 Dec 2003
	Intracurrency 2	Not Specified	Not Specified	Not Specified	Not Specified	Not Specified	15 May 2004

Settlement Service

Settlement Service Selection Process

Transactions submitted between customer 001234 and customer 005678 on or after 15 May 2004 could be qualified for either the Intracurrency 1 or the Intracurrency 2 settlement agreement. There are no criteria for either service to help the system decide. Therefore, the selection process will use the most recent effective date and qualify transactions between these customers in the Intracurrency 2 service.

The above example (Example 2) is included to explain GCMS functionality. In reality, customers would add specific criteria to one of these settlement service selection setups, or delete one, instead of defining two settlement services with no selection criteria.

Step 2—Settlement Service and TAA Selection

For each payment party (the sender and the receiver), identify all transfer agent assignments that meet each customer's criteria specified within the common settlement services identified in Step 1.

Step 2a—Settlement Service and Issuer TAA Selection

Settlement service is assigned according to one of the following:

- If there is only one intracurrency settlement service in common and only one TAA for each payment party that matches the transaction data, GCMS assigns that settlement service and TAA combination to the transaction for each payment party.
- If there are multiple settlement services and/or TAA combinations with customized assignment criteria that match the transaction data, the issuing customer's assignment that has the most specific criteria matching the transaction is used to determine the service and the issuing customer TAA.
- If there are multiple TAA assignments for the issuing customer that match the transaction data, the assignment with the most recent effective date is used.

Step 2b—Acquirer TAA Selection

Once the settlement service and TAA are assigned for the issuing customer, the acquiring customer's TAA is selected from those identified within the selected settlement service that match the transaction criteria:

- If there is only one TAA for the acquirer within the selected settlement service, that assignment is used for the acquirer's settlement.
- If there are multiple TAA combinations with customized assignment criteria that match the transaction data, the assignment that has the most specific criteria matching the transaction is used to determine the acquiring customer's TAA.
- If there are multiple TAA assignments for the acquiring customer that match the transaction data, the assignment with the most recent effective date is used.

Example

To illustrate the TAA selection process, assume that both customers participate in the Intracurrency 1 service and that customer 001234 is the issuing customer with the specified criteria shown in the following table.

Settlement Service ID	Customer	TAA Acct and Cur	Txn Cur	CPI	Acct Rg	Acq BIN	Iss/ Acq Act	Effective Date
Intracurrency 1	001234	XXXX, HKD	Not Specified	DMC	Not Specified	Not Specified	Not Specified	1 Dec 2004
Intracurrency 2	001234	YYYY, HKD	HKD	MCC	Not Specified	Not Specified	Not Specified	1 Jan 2004
Intracurrency 2	001234	ZZZZ, HKD	Not Specified	MCC, MSI	Not Specified	Not Specified	Not Specified	1 Feb 2004
Intracurrency 1	005678	AAAA, HKD	HKD	MCC, MSI	Not Specified	Not Specified	Not Specified	1 Mar 2004
Intracurrency 2	005678	BBBB, HKD	Not Specified	MCC	Not Specified	Not Specified	Not Specified	1 Jan 2004
Intracurrency 2	005678	CCCC, HKD	HKD	Not Specified	Not Specified	Not Specified	Not Specified	1 Feb 2004

Transactions submitted with a transaction currency of HKD that are assigned a card program identifier of MCC will be assigned the settlement service ID Intracurrency 2 for both customers, and TAA of YYYY for customer 001234 because it has the issuer's most specific criteria that match the transaction. Because the transaction meets both of the acquirer's TAA criteria for the Intracurrency 2 agreement, the TAA of CCCC would be chosen because it is the assignment with the most recent effective date.

Step 3—Transaction Amount and Fee Calculation

The transaction amount is converted to the intracurrency account currency (reconciliation currency), if necessary. Additionally, the interchange fees are calculated in the intracurrency account currency (reconciliation currency).

Regional Settlement Service Selection

Regional settlement services are qualified independently and do not require both the sender and receiver to participate in the same regional level settlement service. If the transaction does not qualify for intracurrency settlement, it is qualified for settlement at the regional level.

Settlement Service

Settlement Service Selection Process

The regional settlement service level specific features include the following:

- Each regional service specifies a settlement calendar.
- Each regional service specifies settlement cutoff time(s).
- Each regional service specifies a settlement date interval.
- Each regional service specifies a settlement value date interval.

Step 1—Settlement Service and TAA Selection

The settlement service selection process described in the previous section does not apply to transactions processed at the regional settlement service level. Regional level services are qualified independently for the sender and receiver against the customer's specified criteria, as follows:

- If only one regional settlement service and TAA combination is established for a payment party that matches the transaction data, GCMS assigns that TAA and account currency to the transaction.
- If multiple settlement services and/or TAAs are established with customized assignment criteria for a payment party that matches the transaction data, GCMS assigns the settlement service and TAA combination with the most specific criteria. If more than one settlement service and TAA combination have the same level of specificity, the TAA with the most recent effective date is selected.
- The default settlement service and TAA are selected when no selection criteria are defined that match the transaction.

Example 1

To illustrate the service selection process, assume that a customer participates in settlement service agreements with the specified selection criteria shown in the following table.

Customer	Settlement Service ID	TAA Acct and Cur	Trn Cur	CPI	Acct Rg	Acq BIN	Iss/Acq Act
001234	Regional 1	XXXX, USD	Not Specified	Not Specified	Not Specified	Not Specified	Not Specified
001234	Regional 2	YYYY, CAD	CAD	Not Specified	Not Specified	Not Specified	Not Specified

Transactions submitted with a transaction currency of CAD will be assigned the settlement service ID Regional 2 and account YYYY because it has the most specific criteria that match the transaction. Transactions submitted with any transaction currency other than CAD would be assigned to the settlement service ID Regional 1 and account XXXX.

Example 2

To illustrate the settlement service TAA account selection process, assume that a customer participates in the regional settlement service agreements as specified in the following table.

Customer	Settlement Service ID	TAA Acct and Cur	Txn Cur	CPI	Acct Rg	Acq BIN	Iss/Acq Act	Effective Date
005678	Regional 1	VVVV, USD	USD	Not Specified	Not Specified	Not Specified	Not Specified	1 Jan 2004
	Regional 1	XXXX, USD	USD	Not Specified	Not Specified	Not Specified	Not Specified	15 Jan 2004
	Regional 2	YYYY, CAD	CAD	MCC	Not Specified	Not Specified	Not Specified	1 Jan 2004
	Regional 2	ZZZZ, CAD	CAD	DMC	Not Specified	Not Specified	Not Specified	15 Jan 2004
	Regional 3	AAAA, USD	Not Specified	Not Specified	Not Specified	Not Specified	Not Specified	1 Jan 2004

The optional settlement service selection criteria defined above can have multiple occurrences per customer and are used to determine or restrict settlement account selection. Each unique grouping represents the criteria used to select a specific member ID, TA, and TAA combination. The more specific the criteria defined by the customer, the more combinations of member ID, TA, and TAA will exist.

In this example, all transactions with a transaction currency of USD will be settled in USD via the Regional 1 Service in account VVVV before 15 Jan 2004 and will be settled in account XXXX on or after 15 Jan 2004. All transactions with a card program identifier of MCC or DMC and a transaction currency of CAD will be settled in CAD via the Regional 2 Service. However, transactions with a card program identifier of MCC will be settled using account YYYY and transactions with DMC will be settled using account ZZZZ. All other transactions will settle in USD via the Regional 3 Service in account AAAA.

Step 2—Transaction Amount and Fee Calculation

The transaction amount is converted through U.S. dollars to the TAA account currency (reconciliation currency). Interchange fees are calculated in U.S. dollars and converted to each TAA account currency.

Settlement Date Cycle Calculation

Once the appropriate settlement service has been identified for each payment party, the settlement date is assigned.

Settlement Service

Fee Calculation Routines for Settlement Service Levels

The settlement date is the date on which the Settlement Account Management (S.A.M.) system determines the customers' final net settlement positions and generates the settlement advisements for customers and transfer agents.

A single transaction may qualify for a different regional settlement service for each payment party, which may result in the use of a different settlement date for each customer. Transactions qualifying for the same intracurrency agreements will always result in the same settlement date for each customer. The settlement date rules include the following:

- If the settlement bank is closed, GCMS will not assign that date as a settlement date. For regional services, the U.S. settlement holidays are used.
- Settlement holiday dates are expressed in relation to Central Site time, from a St. Louis, Missouri, USA perspective.
- Certain settlement agreements may optionally delay their settlement. Two methods are used to delay settlement:
 - Generate the settlement advisements a specific number of days after the transactions have been processed. The delayed settlement advisements result in delayed funds movement.
 - Generate the settlement advisements as scheduled, but delay the funds movement by a specific number of days after the advisement.

NOTE

In addition to the six primary clearing cycles, a seventh clearing cycle exists for Mexico domestic switching transactions. For more information on the seven clearing cycles, refer to the [Clearing Times](#) section.

Fee Calculation Routines for Settlement Service Levels

GCMS uses the settlement service level to determine the currency in which to calculate fees. The following table describes how GCMS calculates fees for each settlement service level.

Settlement Service Level	Fee Calculation Method
Intracurrency	- Transaction amounts and fixed fees are converted to the reconciliation currency (if necessary). - Fees are calculated in the reconciliation currency. - Fees are converted to U.S. dollars for reporting purposes.
Regional	- Transaction amounts and fixed fees are converted to U.S. dollars (if necessary). - Fees are calculated in U.S. dollars. - Transaction amounts and calculated fees are converted to each customer's reconciliation currency and remain in U.S. dollars for reporting purposes.

System-Provided Data in PDS 0159 (Settlement Data)

GCMS creates PDS 0159 (Settlement Data) in IPM-format messages sent to the receiving customer to provide reconciliation and settlement information for each clearing transaction that has settlement impact. This element contains nine subfields.

PDS 0159 Data that GCMS will Provide	Description
Settlement Service Transfer Agent ID Code	Populated according to the Transfer Agent ID selected for the receiving customer
Settlement Service Transfer Agent Account	Populated according to the Transfer Agent Assignment bank account number for the receiving customer
Settlement Service Level Code	1 = Regional
	3 = Intracurrency
Settlement Service ID Code	Populated according to the settlement service ID selected for the receiving customer
Settlement Foreign Exchange Rate Class Code	Populated according to the currency conversion rate type used:
	F = Fixed; indicates that a fixed rate was used to convert from base currency to receiver's payment currency
	M = Market; indicates that a market rate was used to convert from base currency to receiver's payment currency
	N = Not applicable; no conversion performed

Settlement Service

Settlement Service Advisements

PDS 0159 Data that GCMS will Provide	Description
Reconciliation Date	Populated with the GCMS processing date (located in PDS 0158 [Business Activity], subfield 5 [Business Date]) associated with the message
Reconciliation Cycle	Populated with the GCMS processing cycle (located in PDS 0158 [Business Activity], subfield 6 [Business Cycle]) associated with the message
Settlement Date	Populated with the date on which net settlement positions are determined. This date matches the date of the corresponding Settlement Advisement generated from the MasterCard Settlement Account Management (S.A.M.) system. If GCMS assigns a settlement service in which the customer does not provide the settlement date, this field contains the appropriate settlement service date, as calculated by GCMS for the receiving customer. If GCMS assigns a settlement service in which the customer is required to provide the settlement date, this field contains the customer submitted settlement date. This date is adjusted for each settlement service level and settlement service ID.
Settlement Cycle	Populated with the appropriate settlement service settlement cycle determined by GCMS

Settlement Service Advisements

MasterCard offers settlement reporting to the customer, the transfer agent, or both. The customer advisement provides a settlement report for each settlement date and settlement service. The transfer agent advisement provides a settlement report for each settlement date and settlement service and itemizes settlement positions by customer.

A unique settlement advisement is generated for each TAA within a settlement service. If a customer has the same settlement account designated for multiple intracurrency and regional settlement services, a unique settlement advisement is generated for each settlement service.

Customer Settlement Advisements

Customers optionally receive settlement advisements for all settlement positions for clearing activity resulting from one settlement service date and cutoff cycle.

Customer settlement advisements serve as notification to a customer of outstanding settlement positions resulting from a settlement service cutoff. This either provides the customer a method to ensure that appropriate funds are in place to effect settlement or notifies the customer about funds that will be available.

NOTE

For more information about settlement advisements and the NSIF, refer to the *Settlement Manual*.

Chapter 12 Currency Conversion

This chapter describes the currency conversion process, including how GCMS calculates and rounds amounts during currency conversion.

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Currency Conversion Overview

Currency conversion is a service that MasterCard performs during clearing to calculate non-U.S. dollar settlement positions. This process enables customers to:

- Acquire transactions in multiple currencies and issue cards that are billed in currencies preferred by cardholders. For each transaction, MasterCard acts as the intermediary between the acquirer and the issuer to convert the acquired transaction currency amounts to the issuer-designated cardholder billing currency. (Refer to Amount and Currency Definitions.)
- Settle in currencies that best align with their local business practices. MasterCard buys and sells currencies to support settlement of multiple currencies for its customers. MasterCard uses currency conversion rates for calculating customer net settlement positions. MasterCard guarantees these rates for each supported currency before each Global Clearing Management System (GCMS) processing day.

NOTE

The interchange, currency conversion, foreign exchange, and Currency Conversion Assessment examples in this chapter do not necessarily reflect actual rates used.

NOTE

“Currency conversion” and “foreign exchange” are used interchangeably in the context of the information presented in this chapter.

Amount and Currency Definitions

Definitions of cardholder billing amount and transaction amount are as follows.

DEFINITION

Cardholder billing amount is the International Organization for Standardization (ISO) name for Data Element (DE) 6. Although MasterCard adheres to the ISO name for this data element, the cardholder billing amount is actually the transaction amount in issuer currency, which MasterCard transmits to the issuer in this data element. Issuers determine the eventual billing to the cardholder.

DEFINITION

Transaction amount is the ISO name for DE 4, in which MasterCard transmits the transaction amount. The transaction amount is in the currency appearing on the Transaction Information Document (TID) in a first presentment. If no currency is identified on the TID, the transaction is deemed to have taken place in the currency that is legal tender at the point of interaction.

Refer to the *MasterCard Dictionary* on MasterCard OnLine® for other currency-related definitions.

Rates Used for Currency Conversion

The currency conversion calculations use the rates shown in the following table.

For...	The currency conversion calculations use...
Transactions that qualify for intracurrency settlement	Wholesale mid rates. ¹
All other transactions	Wholesale buy (bid) and sell (ask) rates plus any applicable percentage adjustments.

Except as otherwise provided in the MasterCard Standards, MasterCard will convert all transaction amounts processed through GCMS into the equivalent reconciliation currency amount for settlement.

When necessary, MasterCard will convert the transaction using the appropriate buy, sell, or fixed rates to calculate acquirer and issuer amounts. Other arrangements are defined for those customers participating in bilateral and intracurrency settlement agreements.

NOTE

For more information about participation in bilateral agreements, refer to the *Settlement Manual*.

Fixed Cross Rates Class

The fixed cross rate class supports currency conversion involving currencies that are managed against currencies other than U.S. dollar. This rate class aids MasterCard in complying with the following monetary policies.

- European Monetary Union (EMU) regulations requiring conversion of currencies transitioning to the euro at the fixed rate to the euro that is established by the EMU for the transition period.
- Other policies as defined from time to time by the monetary authorities in the countries where MasterCard does business and MasterCard has been informed of said policies.

MasterCard converts each transaction using the appropriate rates to calculate acquirer and issuer amounts.

Following are some additional characteristics of fixed cross rates:

1. If fixed rates exist for a given currency pair, MasterCard will use them in lieu of wholesale rates.

- While wholesale rates will continue to be set only against a USD reference currency, fixed cross rates may be set against a non-USD reference currency. For example, if a European country chooses to change its national currency to the euro, MasterCard will establish a fixed cross rate for that national currency to EUR.
- The rate file will not contain both a fixed cross rate and a wholesale rate for the same currency pair. If MasterCard implements a fixed cross rate for a currency pair that already has a wholesale rate, MasterCard will delete the wholesale rate so that the only entry in the rate file for the given currency pair is the fixed cross rate.
- GCMS selects the fixed cross rate class record only when the source and target currencies match the source and reference currency pair identified in the rate record. All other currency conversions occur using the wholesale rate class records for the source currency to the USD base, USD base to the target currency, or both.
- MasterCard places the same fixed cross rate in all three rate type fields (buy, mid, sell).
- This rate file does not contain two fixed cross rates involving the same source currency. For example, the GBP to USD and the GBP to EUR rates cannot both be fixed cross rates. MasterCard may effect exceptions to this condition in the future, depending on changing business requirements.

Example

Assume that GCMS processes a transaction in which:

- The transaction currency is GBP.
- The acquirer's payment currency is USD.
- The issuer's payment currency is EUR.

GCMS will calculate:

- The USD acquirer's payment amount using the GBP:USD wholesale buy rate
- The EUR issuer's payment amount using the GBP:EUR fixed cross buy rate

This example assumes that the GBP currency is migrating to EUR, and therefore, a "fixed" cross rate class currency conversion rate has been established for the currency pair GBP:EUR. The T057 Currency Conversion Rate File would contain the following entries.

Source Currency	Reference Currency	Rate Class			Buy Rate	Mid Rate	Sell Rate
GBP	EUR	F	=	Fixed Cross Rate	0.60	0.60	0.60
GBP	USD	M	=	Wholesale	0.53	0.54	0.55
EUR	USD	M	=	Wholesale	0.81	0.82	0.83

Method Used for Currency Conversion

MasterCard converts non-U.S. dollar transaction amounts in clearing messages into equivalent U.S. dollar amounts (or the appropriate reference currency if a fixed cross rate applies) for the following purposes.

- For the determination of interchange fees and cash disbursement fees
- As the basis for determining reconciliation amounts and transaction amounts in issuer currency

Currency Exponents

For the calculation method MasterCard uses to convert non-U.S. dollar transaction amounts in clearing messages into equivalent U.S. dollar amounts, GCMS uses currency exponents as described below.

The Member Parameter Extract (MPE) T067 (daily updates) and T068 (full file replacement), table IP0017T1: Currency Code and Exponents table provide customers with currency codes and associated currency exponents for each currency supported by MasterCard.

The currency exponent indicates the number of significant digits to the right of the decimal point that are displayed when communicating amounts in the associated currency. This position (underlined in the examples that follow) will be referred to as the minor currency unit position.

Table 12.1—Examples of Currency Exponent Positioning

Currency Description	Currency Code	Currency Exponent	Currency Amount
Japanese Yen	392/JPN	0	0
U.S. Dollar	840/USD	2	0.0 <u>0</u>
Tunisian Dinar	788/TND	3	0.00 <u>0</u>

Rounding of GCMS Currency Conversions

When GCMS performs currency conversion calculations, it carries six positions to the right of the decimal for each calculation before rounding the amount.

- If the number in the low order position is equal to or greater than 5, the number in the minor currency position is increased by a value of 1 to round the amount.

Example: 17.559048 results in 17.56

- If the number in the low order position is less than 5, the low order positions are truncated without rounding the amount.

Example: 17.530011 results in 17.53

When GCMS performs multiple currency conversion calculations before it derives a final amount, GCMS performs the calculations on the interim amounts using the full six positions to the right of the decimal. GCMS determines the final amount by rounding the amount to the currency exponent.

For example:

Interchange Variable Fee + Unit Fee: $2.119080 + 0.016420 = 2.135500$

Rounded Interchange Fee: 2.135500 results in 2.14

NOTE

When GCMS converts the transaction amount in transaction currency to reconciliation currency, if no fixed cross rate exists for the currency pair, GCMS first converts the amount to the global base currency (U.S. dollars) and rounds to the currency exponent. Then GCMS converts the global base amount to reconciliation currency and rounds to the reconciliation currency exponent. If a fixed cross rate exists for the currency pair, GCMS converts directly from the transaction currency to the reconciliation currency using the fixed cross rates.

The following table explains when GCMS rounds amounts to the number of positions to the right of the decimal point specified by the currency exponent. (All examples given in this chapter show two positions to the right of the decimal point, for U.S. dollars). For all calculations other than those listed below, GCMS performs calculations using six positions to the right of the decimal point.

1. After GCMS calculates acquirer and issuer base amounts
2. After GCMS calculates amounts resulting from a Currency Conversion Assessment or a cash disbursement fee (if any of these are applicable.)
3. After GCMS completes the calculation of the total interchange fee
4. After GCMS completes the calculation of acquirer and issuer reconciliation amounts
5. After GCMS completes the calculation of a cardholder billing amount

GCMS may round amounts several times during one calculation process if several of the situations shown above occur. For example, if GCMS converts a transaction amount to a base amount, then calculates the interchange fee, then calculates the reconciliation amount, it could round twice as it converts the transaction amount to the reconciliation amount, and once as it calculates the fee amount.

Currency Conversion

Currency Conversion Overview

Table 12.2—GCMS Rounding

	IF...	THEN GCMS rounding...
1.	GCMS calculates a base amount in USD	Occurs after GCMS calculates the base amount.
	GCMS calculates a base amount in a currency other than USD	Occurs after GCMS calculates the base amount in the non-USD currency. If the non-USD base amount is subsequently converted to a USD base amount, GCMS rounds: • Once when converting to the non-USD base amount, and • Again, after converting the non-USD base amount to the USD base amount.
2.	GCMS calculates Currency Conversion Assessment or a cash disbursement fee (if applicable)	Occurs after GCMS calculates amounts resulting from a Currency Conversion Assessment or a cash disbursement fee. If amounts resulting from a Currency Conversion Assessment or a cash disbursement fee must be converted to a different currency after it is calculated, GCMS rounds: • Once after the calculation of amounts resulting from a Currency Conversion Assessment or the cash disbursement fee, and • Again after its conversion to the different currency.
3.	GCMS calculates an interchange fee	Occurs after GCMS has completed calculation of the interchange fee. If the interchange fee consists only of a variable fee, GCMS rounding occurs after GCMS has calculated the variable fee. If the interchange fee consists of both a variable fee and a unit fee, GCMS rounding occurs after GCMS has calculated the variable fee and summed the variable fee with the unit fee. (All interim calculations use the full six positions to the right of the decimal point.) If the interchange fee must be converted subsequently to a different currency, GCMS rounds: • As part of the process of calculating the interchange fee, and • Again after conversion of the interchange fee to the different currency.

IF...	THEN GCMS rounding...
4. GCMS calculates a reconciliation amount	Occurs after GCMS has completed calculation of the reconciliation amount. If other calculations apply to reach the reconciliation amount, rounding may occur in several places in the conversion process. For example, if the transaction amount is converted to a base amount and then to the reconciliation currency, then GCMS rounds: • Once after the conversion to the base amount, and • Again after conversion to the reconciliation currency.
5. GCMS calculates a cardholder billing amount	Occurs after GCMS has completed calculation of the cardholder billing amount. If other calculations apply to reach the cardholder billing amount, rounding may occur in several places in the conversion process. For example, if the transaction amount is converted to a base amount and then to the cardholder billing currency, GCMS rounds: • Once after the conversion to the base amount, and • Again after conversion to the cardholder billing amount.

GCMS Minimal Rounding

GCMS rounds to the number of positions specified by the currency exponent in the following situations:

- After GCMS calculates a cash disbursement fee
- After GCMS completes the calculation of acquirer and issuer payment amounts in acquirer/issuer payment currency
- After GCMS completes the calculation of a cardholder billing amount
- After GCMS completes the calculation of an interchange fee in issuer/acquirer payment currency

NOTE

When GCMS converts the transaction amount in transaction currency to the (euro) issuer/acquirer payment currency, GCMS first converts the amount to the base currency (USD), and carries six positions to the right of the decimal (no rounding). Then GCMS converts the USD base amount to the euro, and rounds to the euro currency exponent.

GCMS only rounds amounts to the number of positions to the right of the decimal point specified by the currency exponent, once they are calculated in the final (issuer/acquirer payment currency, cardholder billing currency) currency, as shown in the following table.

Table 12.3—GCMS Minimal Rounding to Currency Exponent

IF GCMS has...	THEN GCMS rounding to the nearest currency exponent...
Calculated interchange fees in payment currencies	Occurs after GCMS has completed calculation of the interchange fee in acquirer/issuer currency.
Calculated an Acquirer/Issuer payment	Occurs after GCMS has completed calculation of the acquirer/issuer payment amount.
Calculated a Cardholder billing amount	Occurs after GCMS has completed calculation of the cardholder billing amount.

Currency Conversion Calculations

The currency conversion calculations in GCMS processing depend on the settlement service type that the transaction is assigned.

- Regional
- Intracurrency

Currency Conversion for First Presentments Qualifying for Regional Settlement

GCMS processing performs currency conversion using buy and sell currency conversion rates for transactions that do not qualify for intracurrency settlement.

NOTE

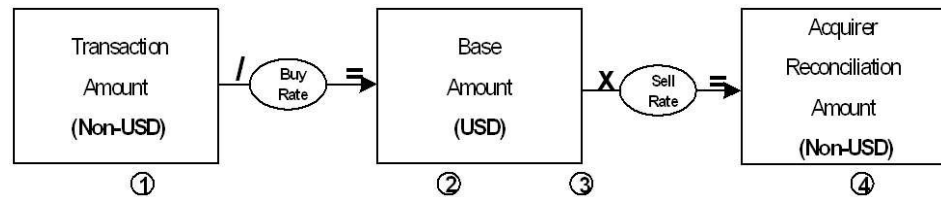
Transactions originating in Europe and submitted to the MasterCard® Debit Switch (MDS) before GCMS processing will already contain a USD base amount calculated by MDS if the transaction destination is also issued in Europe. GCMS uses this USD base amount as the Acquirer Base Amount instead of calculating the USD amount based on DE 4 (Amount, Transaction).

Acquirer Process in Currency Conversions for First Presentments Qualifying for Regional Settlement

The process of converting the transaction currency for the acquirer can differ according to the transaction currency and the acquirer reconciliation currency involved in the transaction.

IF the transaction currency and the acquirer reconciliation currency...	THEN GCMS converts the transaction amount to the Base Amount using the...	AND converts the Base Amount to the Acquirer Reconciliation Amount using the...
Differ	Buy rate	Sell rate
Are the same	Buy rate	Buy rate

Figure 12.1—Transaction Currency Differs from Acquirer Reconciliation Currency



Step	Action
1.	Transaction Amount—Each transaction is conducted in a currency agreed upon by a merchant and a cardholder. The value of the transaction in the transaction currency is referred to as the transaction amount.
2.	Acquirer Base Amount—The transaction amount is converted to U.S. dollars using the buy rate associated with the transaction currency. The transaction amount in U.S. dollars is referred to as the Acquirer Base Amount. NOTE: If the transaction currency is U.S. dollars, the transaction amount is the Acquirer Base Amount.
3.	Interchange Fee Amount—The acquirer variable interchange fee amounts are calculated by multiplying the percentage rate and the Acquirer Base Amount. The resulting variable interchange fee amount is summed with the fixed interchange fee component (the unit fee) to determine the total interchange fee amount in U.S. dollars.
4.	Acquirer Net Reconciliation Amount—The Acquirer Base Amount minus the acquirer interchange fee amount equals the Acquirer Net Reconciliation Amount in U.S. dollars. If the acquirer does not settle in U.S. dollars, the Acquirer Base Amount and total interchange fee amount in U.S. dollars are converted using the sell rate associated with the acquirer's reconciliation currency. The settlement amount is calculated by subtracting the total interchange fee amount from the Acquirer Base Amount in the reconciliation currency.

NOTE

The transaction amount is the Acquirer Base Amount when the transaction currency is U.S. dollars.

Example

The following example shows currency conversion calculations for a purchase transaction where the transaction currency differs from the acquirer reconciliation currency. In this case, the transaction currency is in New Zealand Dollars (NZD) and the acquirer reconciliation currency is in Australian Dollars (AUD).

Interchange	1.57% + USD 0.10

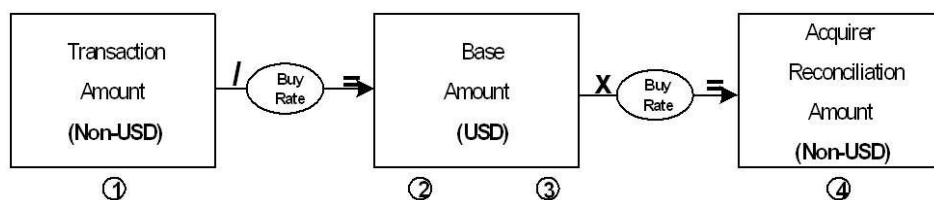
Currency Conversion

Currency Conversion Calculations

FX Rates	Buy	Sell
New Zealand Dollars (NZD):USD	1.8811	1.8836
Australian Dollars (AUD):USD	1.5295	1.5307

Step	Action
1.	Transaction Amount 1000 New Zealand Dollars (NZD)
2.	Base Amount Acquirer Base Amount = Transaction Amount/NZD:USD Buy Rate NZD 1000 / 1.8811 = USD 531.603849 rounded to USD 531.60
3.	Interchange Fee Amounts Variable Interchange = Acquirer Base Amount x Interchange Rate Variable Interchange = USD 531.60 x .0157 = USD 8.346120 Fixed Interchange = USD 0.10 Total Interchange = Variable Interchange + Fixed Interchange USD 8.346120 + USD 0.10 = USD 8.446120, rounded to USD 8.45
4.	Acquirer Net Reconciliation Amount Acquirer Net Reconciliation (U.S. dollars) = Acquirer Base Amount – Total Interchange USD 531.60 – USD 8.45 = USD 523.15 Acquirer Net Reconciliation in local reconciliation currency (Australian Dollars) = (Acquirer Base Amount x Sell Rate) – (Acquirer Total Interchange Amount x Sell Rate) USD 531.60 x 1.5307 = AUD 813.720120, rounded to AUD 813.72 USD 8.45 x 1.5307 = AUD 12.934415, rounded to AUD 12.93 AUD 813.72 – AUD 12.93 = AUD 800.79

Figure 12.2—Transaction Currency Same as Acquirer Reconciliation Currency



Step	Action
1.	Transaction Amount—Each transaction is conducted in a currency agreed upon by a merchant and a cardholder. The value of the transaction in the transaction currency is referred to as the transaction amount.
2.	Acquirer Base Amount—The transaction amount is converted to U.S. dollars using the buy rate associated with the transaction currency. The transaction amount in U.S. dollars is referred to as the Acquirer Base Amount. NOTE: If the transaction currency is U.S. dollars, the transaction amount is the Acquirer Base Amount.
3.	Interchange Fee Amount—The acquirer variable interchange fee amounts are calculated by multiplying the percentage rate and the Acquirer Base Amount. The resulting variable interchange fee amount is summed with the fixed interchange fee component to determine the total interchange fee amount in U.S. dollars.
4.	Acquirer Net Reconciliation Amount—The Acquirer Base Amount minus the acquirer interchange fee amount equals the Acquirer Net Reconciliation Amount in U.S. dollars. Conversion to a non-U.S. dollar reconciliation currency depends on its relation to the transaction currency. The reconciliation and transaction currency codes are the same; therefore, the transaction amount in transaction currency is used to determine the reconciliation amount to avoid rounding impacts from currency conversion. The acquirer interchange fee amount in U.S. dollars is converted using the buy rate associated with the acquirer's reconciliation currency. The Acquirer Net Reconciliation Amount is the transaction amount in transaction/reconciliation currency minus the interchange fee in reconciliation currency.

Example

The following example shows currency conversion calculations for a purchase transaction where the transaction currency differs from the acquirer reconciliation currency. In this case, the transaction currency is in New Zealand Dollars (NZD) and the acquirer reconciliation currency is in Australian Dollars (AUD).

Interchange		1.57% + USD 0.10
FX Rates	Buy	Sell
Canada dollars (CAD):USD	1.4595	1.4605
Step	Action	
1.	Transaction Amount 1000 Canada dollars (CAD)	
2.	Base Amount Acquirer Base Amount = Transaction Amount / CAD:USD Buy Rate CAD 1000 / 1.4595 = USD 685.166153, rounded to USD 685.17	

Currency Conversion

Currency Conversion Calculations

Step	Action
3.	Interchange Fee Amounts Variable Interchange = Acquirer Base Amount x Interchange Rate Variable Interchange = USD 685.17 x .0157 = USD 10.757169 Fixed Interchange = USD 0.10 Total Interchange = Variable Interchange + Fixed Interchange USD 10.757169 + USD 0.10 = USD 10.857169, rounded to USD 10.86 4.
4.	Acquirer Net Reconciliation Amount Acquirer Net Reconciliation (U.S. dollars) = Acquirer Base Amount – Total Interchange USD 685.17 – USD 10.86 = USD 674.31 Acquirer Net Reconciliation in reconciliation currency = Transaction Amount – (Total Interchange x Buy Rate) USD 10.86 x 1.4595 = CAD 15.850170, rounded to CAD 15.85 CAD 1000 – CAD 15.85 = CAD 984.15

Issuer Process in Currency Conversions for First Presentments Qualifying for Regional Settlement

The process of converting the transaction currency for the issuer depends on the transaction, issuer reconciliation, and cardholder billing currencies.

This affects calculation of the:

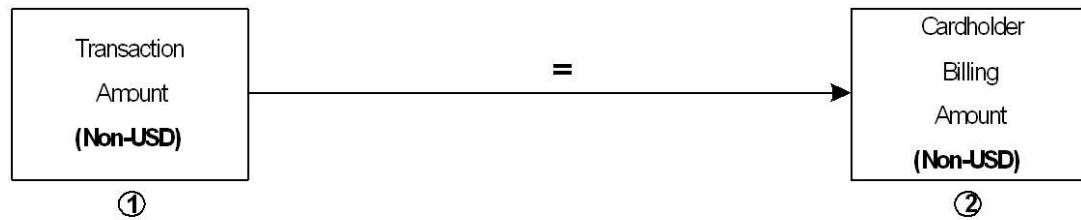
- Cardholder Billing Amount
- Issuer Reconciliation Amount

Issuer Calculation of the Cardholder Billing Amount

Calculation of the Cardholder Billing Amount depends on whether the transaction currency is the same as the cardholder billing currency.

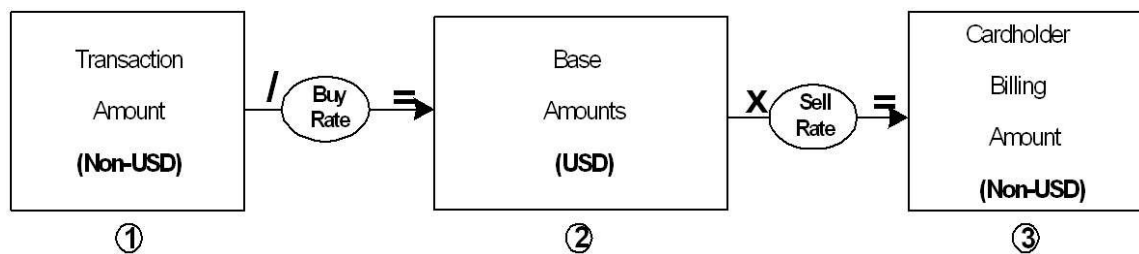
IF the transaction currency and the cardholder billing currency...	THEN GCMS ...	AND GCMS...
Are the same	Does not perform any conversions	
Differ	Uses the buy rate to convert to the Base Amount	Uses the sell rate to convert to the Cardholder Billing Amount.

Figure 12.3—Transaction Currency Equals Cardholder Billing Currency



Step	Action
1.	Transaction Amount—Each transaction is conducted in a currency agreed upon by a merchant and a cardholder. The value of the transaction in the transaction currency is referred to as the transaction amount.
2.	Cardholder Billing Amount—If the transaction and cardholder billing currency codes are the same, the Transaction Amount is the Cardholder Billing Amount.

Figure 12.4—Transaction Currency Does Not Equal Cardholder Billing Currency



Currency Conversion

Currency Conversion Calculations

Step	Action
1.	Transaction Amount—Each transaction is conducted in a currency agreed upon by a merchant and a cardholder. The value of the transaction in the transaction currency is referred to as the transaction amount.
2.	Acquirer Base Amount—The transaction amount is converted to U.S. dollars using the buy rate associated with the transaction currency. The transaction amount in U.S. dollars is referred to as the Acquirer Base Amount. NOTE: If the transaction currency is U.S. dollars, the transaction amount is the Acquirer Base Amount. Currency Conversion Assessment—The buy rate is adjusted by the Currency Conversion Assessment to determine the Adjusted Buy Rate. The Issuer Adjusted Base Amount is calculated by converting the transaction amount to U.S. dollars using the adjusted buy rate. The Acquirer Base Amount is subtracted from the Issuer Adjusted Base Amount to determine the Currency Conversion Assessment in USD.
3.	Cardholder Billing Amount—The Acquirer Base Amount is also the Cardholder Billing Amount in U.S. dollars. Conversion to a non-U.S. dollar cardholder billing currency depends on its relationship to the transaction currency. If the transaction and cardholder billing currency codes are the same, the Transaction Amount is the Cardholder Billing Amount. If the transaction and cardholder billing currency codes are different, the Acquirer Base Amount in U.S. dollars is converted using the sell rate associated with the cardholder billing currency.

Example

The following example shows currency conversion calculations for a purchase transaction where the transaction currency does not equal the cardholder billing currency. In this case, the transaction currency is in New Zealand Dollars (NZD) and the cardholder billing currency is in Australian Dollars (AUD).

Interchange	1.57% + USD 0.10
Currency Conversion Assessment	1%

FX Rates	Buy	Sell
New Zealand Dollars (NZD):USD	1.8811	1.8836
Australian Dollars (AUD):USD	1.5295	1.5307

Step	Action
1.	Transaction Amount 1000 New Zealand Dollars (NZD)
2.	Base Amounts Acquirer Base Amount = Transaction Amount / Buy Rate Acquirer Base = NZD 1000 / 1.8811 = USD 531.603849, rounded to USD 531.60 Issuer Adjusted Base Amount = Transaction Amount / [Buy Rate/(1 + Currency Conversion Assessment)] NZD 1000 / (1.8811 / 1.01) = USD 536.919959, rounded to USD 536.92 Currency Conversion Assessment Currency Conversion Assessment = Issuer Adjusted Base Amount – Acquirer Base Amount USD 536.92 – USD 531.60 = USD 5.32
3.	Cardholder Billing Amount Cardholder Billing Amount = (Acquirer Base Amount x Sell Rate) USD 531.60 x 1.5307 = AUD 813.720120, rounded to AUD 813.72
4.	Currency Conversion Assessment Currency Conversion Assessment = Currency Conversion Assessment (USD) x Sell Rate 5.32 x 1.5307 = AUD 8.143324, rounded to AUD 8.14

Calculating the Issuer Reconciliation Amount

Calculation of the Issuer Reconciliation Amount depends on differences or equivalencies among the transaction currency, the issuer reconciliation currency, and the cardholder billing currency.

IF the transaction currency...	AND the transaction currency...	THEN GCMS converts to the Base Amount using the...	AND GCMS converts to the Issuer Reconciliation Amount using the...
Differs from the issuer reconciliation currency	N/A	Buy rate	Sell rate
Is the same as the issuer reconciliation currency	Differs from the cardholder billing currency	Buy rate	Buy rate
Is the same as the issuer reconciliation currency	Is the same as the cardholder billing currency	Buy rate	Buy rate

Use the flowcharts on the following pages to calculate the Issuer Reconciliation Amount for either scenarios I, II, and III:

Currency Conversion

Currency Conversion Calculations

- Scenario I: Transaction Currency equals issuers Reconciliation Currency and does not equal the Cardholder Billing currency. (Currency Conversion Assessment applies.)
- Scenario II: Transaction Currency does not equal Issuer Reconciliation Currency and equals Cardholder Billing Currency. (Currency Conversion Assessment does not apply.)
- Scenario III: Transaction, Issuer Reconciliation and Cardholder Billing Currencies are equal. (Currency Conversion Assessment does not apply.)

Scenario I: Transaction Currency Equals Issuer Reconciliation Currency and does not Equal Cardholder Billing Currency



Step	Action
1.	Transaction Amount—Each transaction is conducted in a currency agreed upon by a merchant and a cardholder. The value of the transaction in the transaction currency is referred to as the transaction amount.
2.	Acquirer Base Amount—The transaction amount is converted to U.S. dollars using the buy rate associated with the transaction currency. The transaction amount in U.S. dollars is referred to as the Acquirer Base Amount. NOTE: If the transaction currency is U.S. dollars, the transaction amount is the Acquirer Base Amount. Currency Conversion Assessment—The buy rate is adjusted by the Currency Conversion Assessment rate to determine the Adjusted Buy Rate. The Issuer Adjusted Base Amount is calculated by converting the transaction amount to U.S. dollars using the adjusted buy rate. The Acquirer Base Amount is subtracted from the Issuer Adjusted Base Amount to determine the Currency Conversion Assessment in USD.

Step	Action
3.	Interchange Fee Amount—The issuer variable interchange fee amounts are calculated by multiplying the percentage rate and the Acquirer Base Amount. The resulting variable interchange fee amount is added to the fixed interchange fee component to determine the total interchange fee amount in U.S. dollars.
4.	Issuer Net Reconciliation Amount—The Acquirer Base Amount plus the Currency Conversion Assessment (when applicable) minus the issuer interchange fee amount equals the Issuer Net Reconciliation Amount in U.S. dollars. If the reconciliation and transaction currency codes are the same, the transaction amount in transaction currency is used to determine the reconciliation amount to avoid rounding impacts from currency conversion. The issuer interchange fee amount in U.S. dollars is converted using the buy rate associated with the issuer's reconciliation currency. The Currency Conversion Assessment in U.S. dollars is converted using the sell rate associated with the issuer's reconciliation currency. The Issuer Net Reconciliation Currency is the transaction amount in transaction/reconciliation currency plus the Currency Conversion Assessment in reconciliation currency minus the interchange fee in reconciliation currency.

Example

The following example shows currency conversion calculations for a purchase transaction where the transaction currency is equal to the issuer reconciliation currency and does not equal the cardholder billing currency. Currency Conversion Assessment applies. In this case, the transaction currency is in New Zealand Dollars (NZD) and the issuer cardholder billing currency is in Australian Dollars (AUD).

Interchange	1.57% + USD 0.10	
Currency Conversion Assessment	1%	

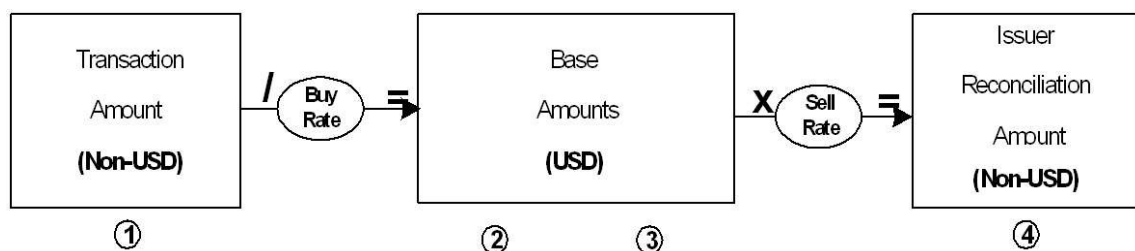
FX RATES	Buy	Sell
New Zealand Dollars (NZD):USD	1.8811	1.8836
Australian Dollars(AUD):USD	1.5295	1.5307

Currency Conversion

Currency Conversion Calculations

Step	Action
1.	Transaction Amount 1000 New Zealand Dollars (NZD)
2.	Base Amounts Acquirer Base Amount = Transaction Amount / Buy Rate NZD 1000 / 1.8811 = USD 531.603849, rounded to USD 531.60 Issuer Adjusted Base Amount = Transaction Amount / [Buy Rate/(1 + Currency Conversion Assessment)] NZD 1000 / (1.8811 / 1.01) = USD 536.919959, rounded to USD 536.92 Currency Conversion Assessment Currency Conversion Assessment = Issuer Adjusted Base Amount – Acquirer Base Amount USD 536.92 – USD 531.60 = USD 5.32
3.	Interchange Fee Amounts Variable Interchange = Acquirer Base Amount x Interchange Rate USD 531.60 x .0157 = USD 8.346120 Fixed Interchange = USD 0.10 Total Interchange = Variable Interchange + Fixed Interchange USD 8.346120 + USD 0.10 = USD 8.446120, rounded to USD 8.45
4.	Issuer Net Reconciliation Amount Issuer Net Reconciliation Amount (U.S. dollars) = (Acquirer Base Amount + Currency Conversion Assessment) – Total Interchange (USD 531.60 + 5.32) – USD 8.45 = USD 528.47 Issuer Net Reconciliation Amount in local reconciliation currency = (Transaction Amount in transaction currency) + (Currency Conversion Assessment x Sell Rate) – (Issuer Total Interchange Amount x Buy Rate) Issuer Net Reconciliation Amount in local reconciliation currency (Australian Dollars) + USD 5.32 x 1.8836 = NZD 10.020752, rounded to NZD 10.02 – USD 8.45 x 1.8811 = NZD 15.895295, rounded to NZD 15.90 NZD 1000 + NZD 10.02 – NZD 15.90 = NZD 994.12

Scenario II: Transaction Currency does not Equal Issuer Reconciliation Currency, and Equals Cardholder Billing Currency



Step	Action
1.	Transaction Amount—Each transaction is conducted in a currency agreed upon by a merchant and a cardholder. The value of the transaction in the transaction currency is referred to as the transaction amount.
2.	Acquirer Base Amount—The transaction amount is converted to U.S. dollars using the buy rate associated with the transaction currency. The transaction amount in U.S. dollars is referred to as the Acquirer Base Amount. NOTE: If the transaction currency is U.S. dollars, the transaction amount is the Acquirer Base Amount. Currency Conversion Assessment does not apply.
3.	Interchange Fee Amount—The issuer variable interchange fee amounts are calculated by multiplying the percentage rate and the Acquirer Base Amount. The resulting variable interchange fee amount is added to the fixed interchange fee component to determine the total interchange fee amount in U.S. dollars.
4.	Issuer Net Reconciliation Amount—The Acquirer Base Amount minus the issuer interchange fee amount equals the Issuer Net Reconciliation Amount in U.S. dollars. If the reconciliation and transaction currency codes are not the same, the Acquirer Base Amount and the issuer total interchange fee amount in U.S. dollars are converted using the sell rate associated with the issuer's reconciliation currency. The Issuer Net Reconciliation Amount is the transaction amount in reconciliation minus the interchange fee amount in reconciliation currency.

Example

The following example shows currency conversion calculations for a purchase transaction where the transaction currency does not equal the Issuer Reconciliation Currency and equals the Cardholder Billing Currency. Currency Conversion Assessment does not apply.

Interchange	1.57% + USD 0.10	
Currency Conversion Assessment	1%	

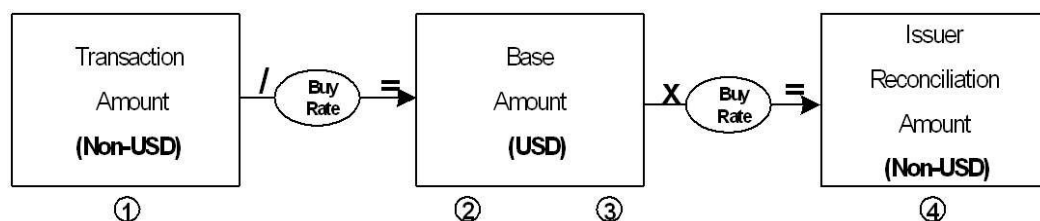
FX RATES	Buy	Sell
New Zealand Dollars (NZD):USD	1.8811	1.8836
Australian Dollars (AUD):USD	1.5295	1.5307

Currency Conversion

Currency Conversion Calculations

Step	Action
1.	Transaction Amount 1000 New Zealand dollars (NZD)
2.	Base Amounts Acquirer Base Amount = Transaction Amount / Buy Rate NZD 1000 / 1.8811 = USD 531.603849, rounded to USD 531.60
3.	Interchange Fee Amounts Variable Interchange = Acquirer Base Amount x Interchange Rate USD 531.60 x .0157 = USD 8.346120 Fixed Interchange = USD 0.10 Total Interchange = Variable Interchange + Fixed Interchange USD 8.346120 + USD 0.10 = USD 8.446120, rounded to USD 8.45
4.	Issuer Net Reconciliation Amount Issuer Net Reconciliation Amount (U.S. dollars) = (Acquirer Base Amount) – (Total Interchange Amount) (USD 531.60 – USD 8.45 = USD 523.15) Issuer Net Reconciliation Amount in local reconciliation currency = (Acquirer Base Amount x Sell Rate) – (Issuer Total Interchange Amount x Sell Rate) Issuer Net Reconciliation Amount in local reconciliation currency (Australian Dollars) USD 531.60 x 1.5307 = AUD 813.720120, rounded to AUD 813.72 – USD 8.45 x 1.5307 = AUD 12.934415, rounded to AUD 12.93 AUD 813.72 – AUD 12.93 = AUD 800.79

Scenario III: Transaction, Issuer, Reconciliation, and Cardholder Billing Currencies are Equal



Step	Action
1.	Transaction Amount—Each transaction is conducted in a currency agreed upon by a merchant and a cardholder. The value of the transaction in the transaction currency is referred to as the transaction amount.
2.	Base Amount—The transaction amount is converted to U.S. dollars using the buy rate associated with the transaction currency. The transaction amount in U.S. dollars is referred to as the base amount. NOTE: If the transaction currency is U.S. dollars, the transaction amount is the base amount. Currency Conversion Assessment does not apply.

Step	Action
3.	Interchange Fee Amount—The issuer variable interchange fee amounts are calculated by multiplying the percentage rate and the Acquirer Base Amount. The resulting variable interchange fee amount is summed with the fixed interchange fee component to determine the total interchange fee amount in U.S. dollars.
4.	Issuer Net Reconciliation Amount—The Acquirer Base Amount minus the issuer interchange fee amount results in the Issuer Net Reconciliation Amount in U.S. dollars. If the reconciliation and transaction currency code is the same, the transaction amount in transaction currency is used to determine the reconciliation amount to avoid rounding impacts from currency conversion. The issuer interchange fee amount in U.S. dollars is converted using the buy rate associated with the issuer's reconciliation currency. The Issuer Net Reconciliation Amount is the transaction amount in transaction/reconciliation currency minus the interchange fee amount in reconciliation currency.

Example

The following example shows currency conversion calculations for a purchase transaction where the transaction, issuer reconciliation, and cardholder billing currencies are all equal. Currency Conversion Assessment does not apply. In this case, all three currencies are Canada Dollars (CAD).

Interchange	1.57% + USD 0.10
Currency Conversion Assessment	N/A

FX Rates	Buy	Sell
Canada Dollars (CAD):USD	1.4595	1.4605

Step	Action
1.	Transaction Amount 1000 Canada dollars (CAD)
2.	Base Amount Issuer Adjusted Base Amount = Transaction Amount / Buy Rate CAD 1000 / 1.4595 = USD 685.166153, rounded to USD 685.17

Currency Conversion

Currency Conversion Calculations

Step	Action
3.	Interchange Fee Amounts Variable Interchange = Base Amount x Interchange Rate USD 685.17 x .0157 = USD 10.757169 Fixed Interchange = USD 0.10 Total Interchange = Variable Interchange + Fixed Interchange USD 10.757169 + USD 0.10 = USD 10.857169, rounded to USD 10.86
4.	Issuer Net Reconciliation Amount Issuer Net Reconciliation Amount (U.S. dollars) = Base Amount – Total Interchange USD 685.17 – USD 10.86 = USD 674.31 Issuer Net Reconciliation Amount in local reconciliation currency = Transaction Amount – (Total Interchange x Buy Rate) USD 10.86 x 1.4595 = CAD 15.850170, rounded to 15.85 CAD 1000 – 15.85 = CAD 984.15

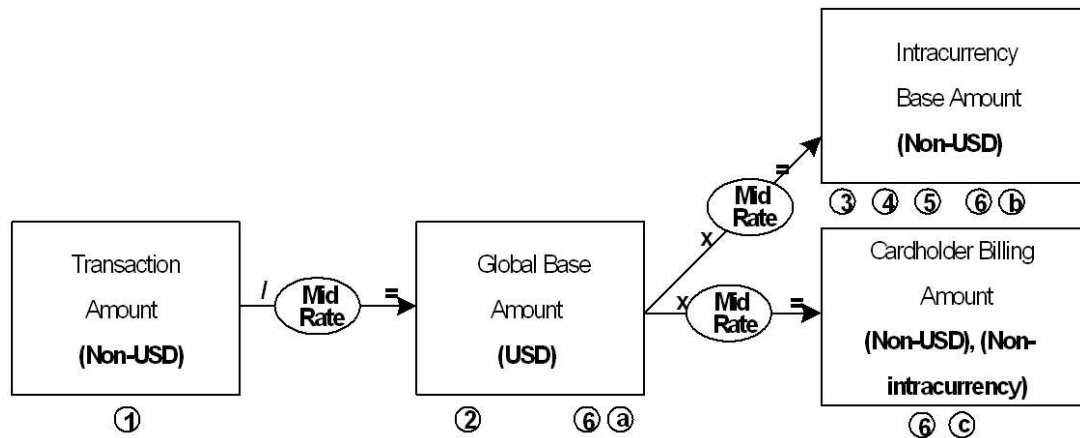
Currency Conversion for First Presentments Qualifying for Intracurrency Settlement

GCMS processing of intracurrency settlement transactions uses mid rates when performing currency conversion.

When a transaction qualifies for intracurrency settlement, MasterCard calculates:

- An intracurrency base amount in the currency of the intracurrency settlement service (intracurrency reconciliation currency)
- The acquirer and issuer interchange fees against the intracurrency base amount in the intracurrency reconciliation currency
- The acquirer and issuer settlement amounts in the intracurrency reconciliation currency

Figure 12.5—Transactions that Qualify for Intracurrency Settlement



The steps involved in each currency conversion calculation are explained in the following table.

Step	Action
1.	Transaction Amount—Each transaction is conducted in a currency agreed upon by a merchant and a cardholder. The value of the activity in the transaction currency is referred to as the transaction amount.
2.	Global Base Amount—The transaction amount is converted to U.S. dollars, the MasterCard global base currency, using the mid rate associated with the transaction currency. NOTE: If the transaction currency is U.S. dollars, the transaction amount is the global base amount. Currency Conversion Assessment—Currency Conversion Assessment is not applied to intracurrency settlement transactions.
3.	Intracurrency Base Amount—The global base amount is converted to the intracurrency reconciliation currency using the mid rate associated with the intracurrency reconciliation currency. NOTE: If the transaction currency is the reconciliation currency, the transaction amount is the intracurrency base amount. However, for reporting purposes, GCMS does convert all non-U.S. dollar amounts to a U.S. dollar amount, as shown in the preceding figure.
4.	Interchange Fee Amount—Both the acquirer and issuer interchange fee amounts are calculated by multiplying the percentage rate and the intracurrency base amount. The resulting variable interchange fee amount is added to the fixed fee to determine the total interchange fee amount in the intracurrency reconciliation currency. If the fixed fee is expressed in U.S. dollars, it is converted to the intracurrency reconciliation currency using a mid rate before the interchange calculations are performed.

Currency Conversion

Currency Conversion Calculations

Step	Action
5.	Acquirer and Issuer Net Reconciliation Amount—The intracurrency base amount adjusted by the interchange fee amount equals the net reconciliation amount for the acquirer and issuer in the intracurrency reconciliation currency.
6.	Cardholder Billing Amount—The intracurrency base amount is also the Cardholder Billing Amount in the intracurrency reconciliation currency. Conversion to a different cardholder billing currency depends on its relation to the transaction currency. 1. If the cardholder billing currency is U.S. dollars, the global base amount is the Cardholder Billing Amount. 2. If the cardholder billing currency is the intracurrency reconciliation currency, the intracurrency base amount is the Cardholder Billing Amount. 3. If the cardholder billing currency is not U.S. dollars, the intracurrency reconciliation currency, or the transaction currency, the global base amount is multiplied by the mid rate associated with the cardholder billing currency to calculate the Cardholder Billing Amount.

NOTE

If the cardholder billing and transaction currency codes are the same, the transaction amount in transaction currency equals the Cardholder Billing Amount.

Example

In this example, the transaction currency is Nepalese Rupee (NPR) and the intracurrency currency is Indian Rupee (INR). The billing currency is NPR.

Intracountry Interchange	1.57% + INR 20

FX RATES	Buy	Mid	Sell
Indian Rupee (INR):USD	43.36	43.3675	43.375
Nepalese Rupee (NPR):USD	68.33	68.33	68.33

Step	Action
1.	Transaction Amount 1000 Nepalese Rupee (NPR)
2.	Global Base Amount Global Base Amount (USD) = Transaction Amount / Mid Rate (NPR:USD) NPR 1000 / 68.33 = USD 14.634860, rounded to USD 14.63

Step	Action
3.	Intracurrency Base Amount Intracurrency Base Amount = Global Base Amount x Mid Rate (INR:USD) USD 14.63 x 43.3675 = INR 634.466525, rounded to INR 634.47
4.	Interchange Fee Amounts Variable Interchange = Intracurrency Base Amount x Interchange Rate INR 634.47 x .0157 = INR 9.961179 Fixed Interchange = INR 20.00 Total Interchange = Variable Interchange + Fixed Interchange INR 9.961179 + INR 20.00 = INR 29.961179, rounded to INR 29.96
5.	Acquirer/Issuer Net Reconciliation Amount Net Reconciliation Amount = Intracurrency Base Amount – Total Interchange INR 634.47 – INR 29.96 = INR 604.51
6.	Cardholder Billing Amount Cardholder Billing Amount = NPR 1000 The transaction currency and cardholder billing currency codes are the same; therefore, the transaction amount equals the Cardholder Billing Amount.

Customer Currency Conversion for Chargebacks (All Cycles)

Customers must meet specific requirements for submission of chargeback amounts (including currency conversion of chargeback amounts) depending on the phase of the chargeback life cycle.

Customer Requirements for Submitting First Chargeback Amounts

The following requirements apply to the amount that issuers may submit in first chargebacks.

- An issuer must not charge back a transaction for an amount that exceeds the full amount of the transaction presented by the acquirer. The only exception is if the disputed amount must be converted to U.S. dollars, in which case the chargeback may be for an amount greater than the transaction amount originally presented by the acquirer.
- An issuer may charge back a transaction for less than the full amount of the transaction.
- The issuer should include the amount resulting from a Currency Conversion Assessment (if applicable) in the chargeback amount that the issuer presents to MasterCard.
- Full chargebacks for ATM transactions (identified by a value of 01 in DE 3, subfield 1):
 - May include the processing fee (less the decline fee)
 - Should include the surcharge amount (access fee, direct charging fee, or convenience fee), when applicable in DE 54 (Amounts Additional), subfield 2 (Additional Amount, Amount Type) has a value of 42. When DE 54 is in a chargeback message, the surcharge amount must be provided in the same currency of the chargeback message as indicated in DE 49 (Currency Code, Transaction).
 - Should not include switch fees
- Partial chargebacks for ATM transactions should not include:
 - Transaction processing fees (including the decline fee)
 - Surcharge amounts (such as, ATM access fees, direct charging fees, or convenience fees)
 - Switch fees

Customer Requirements and Guidelines for Charging Back a Partial Amount

The rules and guidelines that customers charging back a transaction for less than its full amount must abide by are as follows.

To charge back a transaction for an amount less than the full amount of the transaction, customers should submit a First Chargeback/1442 message containing DE 24 (Function Code) value of 453. This identifies the first chargeback as a partial chargeback, which indicates that the first chargeback amount differs from the original transaction amount. Customers must identify subsequent second presentments and arbitration chargebacks as partial when the previous transaction was a partial first chargeback or a partial second presentment. The customer must include the partial Currency Conversion Assessment in the chargeback amount.

Customer Requirements for Charging Back a Purchase with Cash Back Transaction

A Purchase with Cash Back transaction is a Debit MasterCard transaction in which a purchase was conducted and cash was dispensed by the card acceptor at the point of interaction.

In the First Presentment/1240 messages, the total amount of the transaction (purchase plus cash) must be submitted in DE 4 (Amount, Transaction). The cash back portion of the transaction must be identified in DE 54 (Amounts, Additional), subfield 5 (Additional Amount, Amount) in the same currency as the transaction amount contained in DE 4.

Customers should follow the chargeback procedures for Purchase with Cash Back transactions described in, “Processing Chargeback Messages.” To charge back all or part of the purchase amount but not the cash back amount of a Purchase with Cash Back transaction, the customer must subtract the cash back portion from the cardholder billing amount. If the currency of the cash back portion differs from the currency of the cardholder billing amount, the customer must perform the following calculation:

- Remove any assessments or fees added to the cardholder billing amount.
- Use the process described in the “Currency Conversion Calculations” section to convert the cash back portion in DE 54 to the cardholder billing currency, applying the same exchange rates used by GCMS.
- Subtract the converted DE 54 amount from the DE 4 amount of the First Presentment/1240 to obtain the purchase amount.
- The revised DE 4 will now contain the purchase amount only.

When charging back all or a part of the purchase portion but not the cash back portion of a Purchase with Cash Back transaction, the customer must submit a First Chargeback/1442 message containing DE 24 (Function Code) value of 453.

Currency Conversion for Customers in the U.S. Region Processing a Chargeback Message

A U.S. issuer processing a chargeback message will not convert the message nor indicate any conversion therein but will process it in U.S. dollars via the First Chargeback/1442 message.

The chargeback amount submitted in DE 4 (Amount, Transaction) should not exceed the transaction amount previously provided to the issuer in DE 4 of the First Presentment/1240.

For partial chargebacks, the chargeback amount submitted in DE 4 of the chargeback message should be less than the transaction amount previously provided to the issuer in DE 4 of the first presentment. If an issuer submits multiple partial chargebacks for one first presentment, the total of the partial chargebacks must not exceed the transaction amount previously provided to the issuer in DE 4 of the first presentment.

Currency Conversion

Currency Conversion Calculations

Currency Conversion for Customers Outside the U.S. Region Processing a Chargeback Message

An issuer not in the U.S. region processing a chargeback message will determine the currency of the chargeback amount as follows.

IF...	AND...	THEN...
The issuer sending the chargeback and the acquirer receiving the chargeback participate in the same intracurrency settlement agreement and the transaction qualifies for the intracurrency agreement based on customer specified criteria.	The disputed amount is in the intracurrency reconciliation currency	The issuer processes the chargeback in the currency of the intracurrency settlement agreement.
	The disputed amount is not in the intracurrency reconciliation currency (for example, it is stated in the transaction currency or in the issuer billing currency)	The issuer is required to pre-convert the disputed amount to U.S. dollars and then to the intracurrency reconciliation currency. The rate used for the pre-conversion should be the current or previous day's mid rate .
The issuer sending the chargeback and the acquirer receiving the chargeback do not participate in the same intracurrency settlement agreement, or if the issuer is in region D and the transaction is not intra-Europe.	The disputed amount is in U.S. dollars	The issuer processes the chargeback in U.S. dollars.
	The disputed amount is not in U.S. dollars (for example, it is stated in the transaction currency or in the issuer billing currency)	The issuer is required to pre-convert the disputed amount to U.S. dollars. The rate used for the pre-conversion should be the current or previous day's sell rate .

Rates To Be Used for Pre-Conversion in Chargeback Processing

Customers should use the following rates when pre-converting chargeback amounts.

NOTE

Customers must use MasterCard published rates when pre-converting chargeback amounts.

Chargeback Submitted for GCMS Processing Day	FX Rate File Received Calendar Day	Currency Update/1644 Messages Received in Clearing Transmission with Processing Day
Monday	Saturday	Saturday
Tuesday	Monday	Monday
Wednesday	Tuesday	Tuesday
Thursday	Wednesday	Wednesday

Chargeback Submitted for GCMS Processing Day	FX Rate File Received Calendar Day	Currency Update/1644 Messages Received in Clearing Transmission with Processing Day
Friday	Thursday	Thursday
Saturday	Friday	Friday

Pre-Conversion Calculation for a Chargeback in Intracurrency Settlement Currency

If the issuer sending a chargeback and the acquirer receiving the chargeback participate in the same intracurrency settlement agreement, and the transaction qualifies for the agreement according to customer specified criteria, and the disputed amount is in the reconciliation currency, no pre-conversion is required.

The issuer may process the chargeback using the amount in intracurrency reconciliation currency.

If the disputed amount is not in the intracurrency reconciliation currency, the issuer should use the intracurrency settlement amount (represented in DE 5 [Amount, Reconciliation]).

To calculate a chargeback in the intracurrency reconciliation currency, the issuer first converts the disputed amount to U.S. dollars by dividing it by the appropriate mid rate. The issuer then multiplies the resulting U.S. dollar amount by the mid rate associated with the intracurrency reconciliation currency.

Example—Chargeback in the intracurrency reconciliation currency

The following example shows currency conversion calculations for a chargeback that resulted from a disputed purchase transaction. The issuer billing currency is Cambodian Riel and the intracurrency reconciliation currency is Thai Baht.

Currency	Mid Rate
Cambodian Riel (KHR):USD	3893:1
Thai Baht (THB):USD	37.1:1

Currency Conversion

Currency Conversion Calculations

Step	Action
1.	Disputed Amount 50,000.00 Cambodian Riel (KHR)
2.	Chargeback Amount in U.S. Dollars Chargeback Amount (USD) = Disputed Amount / KHR:USD Mid Rate KHR 50,000.00 / 3893 = USD 12.843565, rounded to USD 12.84
3.	Chargeback Amount in the intracurrency reconciliation currency Chargeback Amount (THB) = Chargeback Amount (USD) x THB:USD Mid Rate USD 12.84 x 37.1 = THB 476.364000, rounded to THB 476.36

Pre-Conversion Calculation for a Chargeback in U.S. Dollars

To calculate a chargeback in U.S. dollars, the issuer divides the disputed amount by the sell rate associated with the disputed amount.

Example—Chargeback in U.S. Dollars

The following example shows currency conversion calculations for a chargeback that resulted from a purchase transaction. The disputed amount is in Canada dollars and the acquirer receiving the chargeback does not participate in an intracurrency settlement agreement with the issuer.

Currency	Sell Rate
Canada dollars (CAD):USD	1.5124:1

Step	Action
1.	Disputed Amount 500.00 Canada dollars (CAD)
2.	Chargeback Amount in U.S. dollars Chargeback Amount (USD) = Disputed Amount / CAD:USD Sell Rate CAD 500.00 / 1.5124 = USD 330.600370, rounded to USD 330.60

NOTE

The chargeback amount presented by the issuer to MasterCard in U.S. dollars should include amounts resulting from a Currency Conversion Assessment, if applicable.

Acquirer Processing of Second Presentments

An acquirer processes a second presentment for the same or lesser amount of the chargeback received from the issuer in U.S. dollars, without any further currency conversion.

For intra-European transactions only. An acquirer may process a second presentment for the same or lesser amount of the chargeback received from the issuer either:

- In the currency of the chargeback, as specified in DE 4 (Amount Transaction) of the First Chargeback/1442 message or
- In the acquirer payment currency used for settlement of the chargeback, as specified in DE 5 (Amount, Reconciliation) of the First Chargeback/1442 message.

Acquirers cannot process a second presentment for an amount greater than the issuer's chargeback, but the acquirer may process a second presentment for a lesser amount.

Acquirers can initiate partial amount second presentments when an issuer has charged back the full amount of the original financial presentment and, through communication with the merchant, the acquirer is accepting responsibility for a portion of the disputed amount. Acquirers notify MasterCard and issuers that the second presentment is for less than the full amount of the initial chargeback by providing a value of 282 in DE 24 (Function Code) of the Second Presentment/1240 message.

Processing of Arbitration Chargebacks

An arbitration chargeback should use the same currency as the currency used in the second presentment. An arbitration chargeback is processed for the same or lesser amount of the second presentment received from the acquirer in intracurrency reconciliation currency or U.S. dollars, without any further currency conversion.

An arbitration chargeback may not be for an amount in excess of the acquirer's second presentment, but it may be for a lesser amount. The issuer notifies the acquirer that the arbitration chargeback is for less than the full amount of the second presentment by providing a value of 454 in DE 24 (Function Code) of the Arbitration Chargeback/1442 message.

If the acquirer has initiated the second presentment for an amount less than the original chargeback amount, and DE 24 contains a value of 282 in the Second Presentment/1240 message, then the issuer should identify the subsequent Arbitration Chargeback/1442 as partial by providing a value of 454 in DE 24, if applicable.

Currency Conversion of Arbitrations

Arbitration proceedings can be filed for amounts expressed in different currencies depending on the location where the transaction took place.

Currency Conversion

Currency Conversion Calculations

- Europe intraregional transactions can be filed in either EUR or USD currencies
- Intracountry U.K. transactions can be filed in GBP, EUR, or USD currencies
- Intracountry Mexico can be filed in either MXN or USD currencies
- All other transactions must be filed in USD currency

When arbitration has been initiated, it is always for an amount that may not exceed the full amount of the arbitration chargeback, but it may be for a lesser amount.

GCMS Currency Conversion for Chargebacks (All Cycles)

Currency conversion calculations in GCMS processing depend on the settlement service type that the transaction is assigned.

- Regional
- Intracurrency

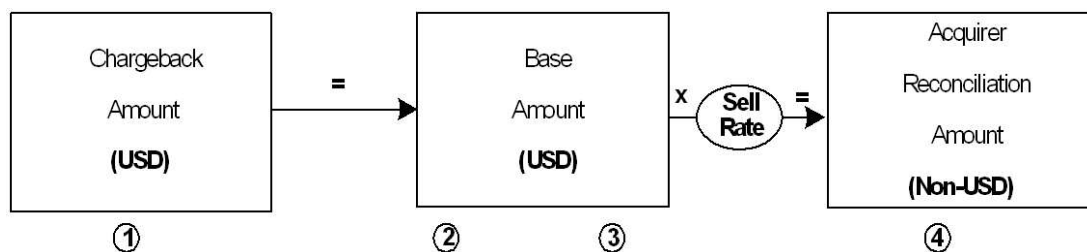
Currency Conversion for Chargebacks Qualifying for Regional Settlement

GCMS processing performs currency conversion using buy and sell currency conversion rates for transactions that do not qualify for intracurrency settlement.

Acquirer Process

When the chargeback is submitted in U.S. dollars and the acquirer settles in a currency other than the U.S. dollar, the following currency conversion process is used.

Figure 12.6—Acquirer Settles in a Currency Other than U.S. Dollars



Step	Action
1.	Chargeback Amount—The disputed amount in U.S. dollars
2.	Base Amount—The chargeback amount in U.S. dollars

Step	Action
3.	Interchange Fee Amount—The acquirer variable interchange fee amounts are calculated by multiplying the percentage rate and the Acquirer Base Amount. The resulting variable interchange fee amount is added to the fixed fee to determine the total interchange fee amount in U.S. dollars. If the fixed fee is specified in a currency other than U.S. dollars, it is converted to U.S. dollars using the current buy rate.
4.	Acquirer Net Reconciliation Amount—The Acquirer Base Amount minus the acquirer interchange fee amount equals the Acquirer Net Reconciliation Amount in U.S. dollars. Conversion to a different settlement currency may be required, depending on the acquirer's reconciliation currency. If the acquirer's reconciliation currency is not U.S. dollars, the acquirer's base amount and total interchange fee amount in U.S. dollars are multiplied by the sell rate associated with the acquirer's reconciliation currency. The Acquirer Base Amount in acquirer reconciliation currency minus the total interchange fee in acquirer reconciliation currency is the Acquirer Net Reconciliation Amount in reconciliation currency.

Example

The following example shows currency conversion calculations for a chargeback:

Interchange	1.57% + USD 0.10

FX RATES	Buy	Sell
Australian Dollars (AUD):USD	1.5295	1.5307

Step	Action
1.	Chargeback Amount 531.60 U.S. Dollars (USD)
2.	Base Amount Acquirer Base Amount = Chargeback Amount Acquirer Base Amount = USD 531.60

Currency Conversion

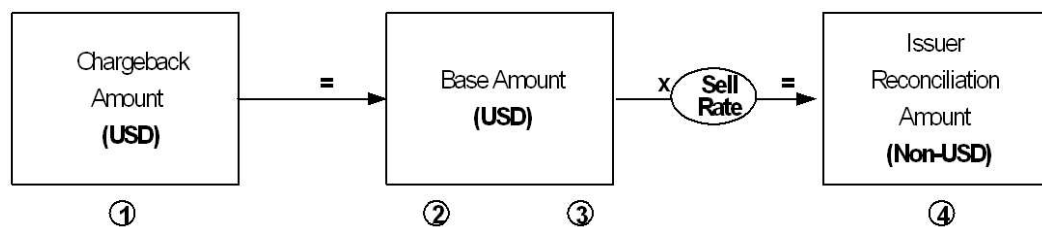
Currency Conversion Calculations

Step	Action
3.	Interchange Fee Amounts Variable Interchange = Acquirer Base x Interchange Rate USD 531.60 x .0157 = USD 8.346120 Fixed Interchange = USD 0.10 Total Interchange = Variable Interchange + Fixed Interchange USD 8.346120 + USD 0.10 = USD 8.446120, rounded to USD 8.45
4.	Acquirer Net Reconciliation Amount Acquirer Net Reconciliation (U.S. dollars) = Acquirer Base Amount – Total Interchange USD 531.60 – USD 8.45 = USD 523.15 Acquirer Net Reconciliation in local settlement currency (Australian Dollars) = (Acquirer Base Amount x Sell Rate) – (Acquirers Total Interchange Amount x Sell Rate) USD 531.60 x 1.5307 = AUD 813.720120, rounded to AUD 813.72 USD 8.45 x 1.5307 = AUD 12.934415, rounded to 12.93 AUD 813.72 – AUD 12.93 = AUD 800.79

Issuer Process

The currency conversion process used to calculate issuer reconciliation amount is dependent on the issuer reconciliation currency.

Figure 12.7—Issuer Settles in a Currency Other Than U.S. Dollars



Step	Action
1.	Chargeback Amount—The disputed amount in U.S. dollars
2.	Base Amount—The chargeback amount in U.S. dollars

Step	Action
3.	Interchange Fee Amount—The issuer interchange fee amounts are calculated by multiplying the percentage rate and the Acquirer Base Amount. The resulting variable interchange fee amount is added to the fixed fee to determine the total interchange fee amount in U.S. dollars. If the fixed fee is specified in a currency other than U.S. dollars, it is converted to U.S. dollars using the current buy rate.
4.	Issuer Net Reconciliation Amount—The Issuer Adjusted Base Amount minus the issuer interchange fee amount equals the Issuer Net Reconciliation Amount in U.S. dollars. Conversion to a different reconciliation currency may be required, depending on the issuer's reconciliation currency. If the issuer's reconciliation currency is not U.S. dollars, the issuer's base amount and total interchange fee amount in U.S. dollars are multiplied by the sell rate associated with the issuer's reconciliation currency. The base amount in issuer reconciliation currency minus the total interchange fee in issuer reconciliation currency is the Issuer Net Reconciliation Amount in reconciliation currency.

Example

The following example shows currency conversion calculations for a purchase chargeback.

NOTE

The following example illustrates currency conversion, not funds flow. Typically the issuer initiates the chargeback to the acquirer so the funds would flow from the acquirer back to the issuer.

Interchange	1.57% + USD 0.10
Currency Conversion Assessment	N/A

FX RATES	Buy	Sell
Australian Dollars (AUD):USD	1.5295	1.5307

Step	Action
1.	Chargeback Amount 531.60 U.S. Dollars (USD)
2.	Issuer Adjusted Base Amount Issuer Adjusted Base Amount = Transaction Amount USD 531.60 Amount resulting from a Currency Conversion Assessment GCMS does not apply amounts resulting from a Currency Conversion Assessment to chargebacks but issuers may include Amount resulting from a Currency Conversion Assessment in a chargeback amount.

Currency Conversion

Currency Conversion Calculations

Step	Action
3.	Interchange Fee Amounts Variable Interchange = Acquirer Base Amount x Interchange Rate USD 531.60 x .0157 = USD 8.346120 Fixed Interchange = USD 0.10 Total Interchange = Variable Interchange + Fixed Interchange USD 8.346120 + USD 0.10 = USD 8.446120, rounded to USD 8.45
4.	Issuer Net Reconciliation Amount Issuer Net Reconciliation Amount (U.S. dollars) = Issuer Adjusted Base Amount – Total Interchange USD 531.60 – USD 8.45 = USD 523.15 Issuer Net Reconciliation in reconciliation currency (Australian Dollars) = (Issuer Adjusted Base Amount x Sell Rate) – (Issuers Total Interchange Amount x Sell Rate) USD 531.60 x 1.5307 = AUD 813.720120, rounded to AUD 813.72 USD 8.45 x 1.5307 = 12.934415, rounded to AUD 12.93 AUD 813.72 – AUD 12.93 = AUD 800.79

Currency Conversion for Chargebacks Qualifying for Intracurrency Settlement

When the customer submits Chargeback transaction amounts in the intracurrency reconciliation currency, the transaction amount is the reconciliation amount.

The Cardholder Billing Amount is not provided in chargebacks.

Currency Conversion for Settlement of Fee Collection Messages

Fee Collection messages may be in any currency unless the transaction qualifies for intracurrency settlement agreement.

If the transaction qualifies for an intracurrency settlement, it must be submitted in the currency of the intracurrency arrangement.

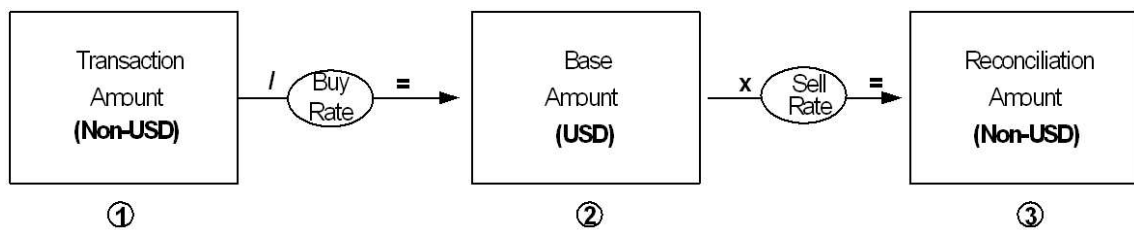
Currency Conversion for Fee Collections Qualifying for Regional Settlement

Details about the currency conversion for fee collections qualifying for regional settlement are as follows.

The following apply to currency conversion for fee collections qualifying for regional settlement.

- When a Fee Collection message is submitted in U.S. dollars, the currency conversion impact is determined by the reconciliation currency.
- If the transaction and reconciliation currencies are the same, no currency conversion is required. The Fee Collection transaction amount equals the settlement amount.
- If the sender settles in a currency other than the U.S. dollar or the transaction currency, currency conversion will occur as described in the following information.
- If the receiver settles in a currency other than the U.S. dollar, currency conversion will occur as described in the following information.

Figure 12.8—Fee Collection Qualifying for Refund Settlement



Step	Action
1.	Transaction Amount—The Fee Collection transaction amount in New Zealand dollars (NZD)
2.	Base Amount—The Fee Collection transaction amount in U.S. dollars
3.	Reconciliation Amount—If the reconciliation currency is not U.S. dollars or the transaction currency, the base amount in U.S. dollars is multiplied by the sell rate associated with the reconciliation currency. The Base Amount in reconciliation currency is the Reconciliation Amount for both sender and receiver.

Example—Fee Collection Transaction for Regional Settlement

The following example shows currency conversion calculations for a miscellaneous charge submitted in a Fee Collection message in New Zealand dollars for a sender that settles in Australian dollars.

FX RATES	Buy	Sell
Australian dollars (AUD):USD	1.5295	1.5307
New Zealand dollars (NZD):USD	1.8811	1.8836

Currency Conversion

Currency Conversion Calculations

Step	Action
1.	Fee Collection Transaction Amount 10.00 New Zealand dollars (NZD)
2.	Base Amount Base Amount = Transaction Amount/NZD:USD Buy Rate NZD 10.00/1.8811 = 5.316038 rounded to 5.32 USD
3.	Reconciliation Amount Reconciliation Amount = Base Amount x Sell Rate USD 5.32 x 1.5307 = AUD 8.143324, rounded to AUD 8.14

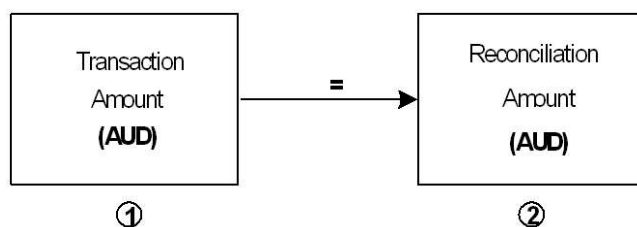
Currency Conversion for Fee Collection Messages Qualifying for Intracurrency Settlement

Details about the conversion of currency for Fee Collection messages qualifying for intracurrency settlement are as follows.

When the sender and receiver of a Fee Collection transaction participate in a common intracurrency settlement agreement and the transaction qualifies for the intracurrency agreement based on customer specified criteria, the sender must submit the Fee Collection transaction amount in the currency of the intracurrency agreement.

When the customer submits Fee Collection transaction amounts in the intracurrency reconciliation currency, no conversion is required to determine the acquirer and issuer reconciliation amounts. The Cardholder Billing Amount is not provided in Fee Collection messages.

Figure 12.9—Sender Submits Fee Collection in Intracurrency



Step	Action
1.	Transaction Amount—The Fee Collection transaction amount in Australia dollars
2.	Reconciliation Amount—The Transaction amount in intracurrency currency is the Reconciliation Amount for both sender and receiver.

Currency Conversion for Reversals

Details about the currency conversion of reversal transactions—including how the conversion rate type is determined and the elements in which customers must provide the original GCMS processing date—are as follows.

The currency conversion rate types (buy, mid, and sell) used for processing reversal transactions are determined using the same rules outlined earlier in this chapter for presentments, chargebacks, and fee collection messages. However, GCMS uses “historical” currency conversion rates when processing first presentment reversals. Using the same currency conversion rates for the reversal as were used for the original message allows the settlement value of the reversal to approximate more closely the settlement value of the original message.

Acquirers submitting first presentment reversal messages are required to provide the original GCMS processing date in:

- PDS 0025 (Message Reversal Indicator), subfield 2 (Central Site Processing Date of Original Message) (if reversing an individual message), or
- PDS 0026 (File Reversal Indicator), subfield 2 (Central Site Processing Date of Original File) (if reversing an entire file)

If this original GCMS processing date is within 60 days of the current GCMS processing date, GCMS will use the historical currency conversion rates from that date when calculating the settlement value of the reversal. If the original GCMS processing date is more than 60 days from the current GCMS processing date, GCMS will use the currency conversion rates from the 60th day—the oldest currency conversion rates in the historical rate file—when calculating the settlement value of the reversal.

For chargeback and fee collection reversals, GCMS uses the “current” processing day’s currency conversion rates when calculating the settlement value of the reversal.

Cardholder Currency Billing Options

Issuers can designate one default and up to four secondary cardholder billing currencies for each issuer account range.

Issuers enable secondary cardholder billing currencies by designating the transaction currencies for which they want a secondary cardholder billing currency applied. When a transaction occurs in one of these designated transaction currencies, the cardholder is billed in the secondary cardholder billing currency defined for that transaction currency. The secondary cardholder billing currency may be the same as the transaction currency or a different currency.

Cardholder Billing Option 1

Issuers with a large number of cardholders transacting business in a currency that differs from the default cardholder billing currency may benefit from using this billing option.

Issuers can choose to bill cardholders in the transaction currency instead of the default cardholder billing currency. The following example demonstrates the applicability of this option:

Assume that a multi-national issuer has a large base of corporate credit cards issued from an account range with a common default currency to cardholders located in several countries. To allow cardholders in each of these countries to be billed in the currency of their country, the issuer can designate the currencies of each country as secondary cardholder billing currencies. The issuer could designate the following cardholder billing currencies for the specified issuer account range.

Default cardholder billing currency	Hong Kong Dollars
Secondary cardholder billing currency 1	New Zealand Dollars
Secondary cardholder billing currency 2	Barbados Dollars
Secondary cardholder billing currency 3	Won
Secondary cardholder billing currency 4	Yen

For the designated issuer account range, if a transaction is acquired in...	GCMS will determine DE 6 (Amount, Cardholder Billing) and DE 51 (Currency Code, Cardholder Billing) in...
New Zealand dollars	New Zealand dollars
Barbados dollars	Barbados dollars
Won	Won
Yen	Yen
Any other currency	Hong Kong dollars

Cardholder Billing Option 2

Issuers with cardholders transacting business in a currency that differs from the issuer's default cardholder billing currency and desiring to be billed in a currency that differs from the transaction currency can accomplish this using option 2.

For this cardholder billing option, when a transaction occurs in a designated currency, the cardholder is billed in a different specified currency.

To enable this option, the issuer designates that transactions occurring in a specific currency should be calculated in the defined secondary cardholder billing currency, which is different from the transaction currency. The following continuation from the option 1 example demonstrates the applicability of option 2:

Assume that the multinational issuer has a large portfolio of cardholders located in several countries. As explained under option 1, the issuer wants its cardholders in these various countries to be billed in the currency of their country.

The issuer finds that its cardholders often travel to certain countries and make purchases on their credit cards. The issuer wants to have the cardholders billed in the currency of their country of residence. To accomplish this, the issuer can designate that when a transaction occurs in the currency of the country to which the cardholders often travel, GCMS will select the currency of the cardholders' country of residence as the secondary cardholder billing currency.

For the issuer account range from which the cardholders' credit cards are issued, the issuer has defined the default cardholder billing currency as Hong Kong dollars. The issuer could designate the following secondary cardholder billing currencies for the specified transaction currencies.

Transaction Currency	Designated Cardholder Billing Currency
Australian dollars	New Zealand dollars
Bahamian dollars	Barbados dollars
New Taiwan dollars	Won
Yuan Renminbi	Yen
For the designated issuer account range, if a transaction is acquired in...	
GCMS will determine DE 6 (Amount, Cardholder Billing) and DE 51 (Currency Code, Cardholder Billing) in...	
Australian dollars	New Zealand dollars
Bahamian dollars	Barbados dollars
New Taiwan dollars	Won
Yuan Renminbi	Yen
Any other currency	Hong Kong dollars

Requirements of Issuers Seeking Cardholder Billing Options

Issuers should determine whether they want to use the cardholder billing options.

Currency Conversion

Customer Options for Receiving Currency Conversion Rates

No action is necessary on the part of the issuer if they choose not to use the cardholder billing options. The issuer cardholder billing currency defined at the member ID level is the default cardholder billing currency for each issuer account range under that member ID.

Issuers that want to use the cardholder billing options should contact the Customer Operations Services team to select their cardholder billing options.

Customer Options for Receiving Currency Conversion Rates

Customers can receive the currency conversion rates used by MasterCard via the following methods.

- Currency Update/1644-640 messages in customer inbound IPM files (buy, sell, and mid rate options are all available)
- The T057 Currency Conversion Rate File, which contains wholesale buy, sell, and mid rates, and fixed cross rates that may be against a non-USD reference currency.

Currency Conversion Receipt Alternatives

Receipt Option	Guaranteed Rates	Buy Rate	Mid Rate	Sell Rate	Fixed Cross Rate
Currency Update/1644-640 messages	Yes	√	√	√	
T057 Currency Conversion Rate File	Yes	√	√	√	√

MasterCard initially sets up customers to receive currency conversion rate messages in all six clearing cycles.

A seventh clearing cycle exists exclusively for Mexico domestic switching transactions. For more information on the seven clearing cycles, refer to the [Clearing Times](#) section.

Customers that want to change their options related to currency conversion rate messages should notify the Customer Operations Services team or regional Help Desk.

Currency Update/1644-640 Messages

The Currency Update/1644-640 messages provide buy, sell, and mid currency conversion rates. These rates are published rates (as opposed to cross-rates).

Customers may request Currency Update/1644-640 messages from MasterCard as part of their inbound clearing files. This option is available at the processor level with the ability to specify the clearing cycle in which the processor should receive the messages.

NOTE

GCMS sends the Currency Update/1644-640 messages once per processor endpoint to the lowest (first) occurring member ID in the logical file. GCMS does not provide a set of these messages for each member ID associated with the same processor. Only one set will be provided in a delivery file. For example, if the customer elects to have clearing cycles 3 and 4 delivered as one file after the fourth clearing, only one set of rate messages will be sent, not one each from 3 and 4.

The following are delivery options for the Currency Update/1644-640 messages:

- Do not deliver Currency Update/1644-640 messages
- Deliver mid rate Currency Update/1644-640 messages
- Deliver buy and sell rate Currency Update/1644-640 messages only
- Deliver buy, sell, and mid rate Currency Update/1644-640 messages

The customer or processor will receive the Currency Update/1644-640 messages in the delivery cycles for which the customer or processor has elected to receive the rates. The clearing system will not generate Currency Update/1644-640 messages for customers when there is no financial activity for that customer for a processing day.

T057 Currency Conversion Rate File

The Currency Conversion Rate File provides customers with an alternative source of wholesale buy, sell, and mid rates, and any applicable fixed rates, in effect for a given processing day.

Customers may choose to receive the Currency Conversion Rate File via:

- MIP (production bulk file T057, test bulk file T058)
- CONNECT:Direct or XCOM
- MasterCard File Express

Currency Conversion Rate Effective Day and Time

The currency conversion rates used by GCMS are guaranteed for each GCMS processing day.

Effective Day and Time for Currency Conversion Rates

Currency Conversion

Customer Options for Receiving Currency Conversion Rates

Rates Effective for GCMS Processing Day	FX Rate File Received Calendar Day	Rates Effective for Calendar Day/ Time			
		From		To	
Monday	Saturday	Saturday	08:00	Monday	08:00
Tuesday	Monday	Monday	08:00	Tuesday	08:00
Wednesday	Tuesday	Tuesday	08:00	Wednesday	08:00
Thursday	Wednesday	Wednesday	08:00	Thursday	08:00
Friday	Thursday	Thursday	08:00	Friday	08:00
Saturday	Friday	Friday	08:00	Saturday	08:00

NOTE

Calendar days and times are expressed in St. Louis time in the table above.

Customers interested in receiving the currency conversion rate file should contact the Customer Operations Services team for additional information.

The Currency Conversion Rate File Detail Record provides the Rate Class in field 5. The values for Rate Class are defined in the following table.

Valid Value	Description	Comments
M = Wholesale rate or fixed rate against the U.S. dollar	Wholesale buy, mid, and sell rates or fixed rates against the U.S. dollar	The wholesale rates will reside in the Currency Conversion Rate File Detail Record as follows: Field 7 will contain the BUY Currency Conversion Rate Field 8 will contain the MID Currency Conversion Rate Field 9 will contain the SELL Currency Conversion Rate
F = Fixed Cross Rate	A single fixed cross rate	A single rate will reside in all three rate type fields.

Currency Conversion Rate File Format

The currency conversion rate file header, detail, and trailer record layouts are shown in the following tables.

Currency Conversion Rate File Header Record

Field Number and Name	Position	Length	Format	Comments and Values
1 Header Description	1	1	an	Constant—H
2 Date	2–9	8	n	File creation date. YYYYMMDD

Currency Conversion

Customer Options for Receiving Currency Conversion Rates

Field Number and Name	Position	Length	Format	Comments and Values
3 Time	10–15	6	n	The time the file was created. Coordinated Universal time (UTC); six digits in military format HHMMSS. For example, 3:30:30 p.m. would show as 153030.
4 Rate File Format Version	16	1	an	This field identifies the file format version. The initial version will be 1 and will be incremented each time the file format changes.
5 Filler	17–125	109	an	Spaces

Currency Conversion Rate File Detail Record

Field Number and Name	Position	Length	Format	Comments and Values
1 Detail Description	1	1	an	Constant—D
2 Source Currency Code	2–4	3	n	ISO currency code for the currency for which rates are being provided
3 Reference Currency Code	5–7	3	n	International Organization for Standardization (ISO) code for the reference currency against which rates are quoted NOTE: This field will continue to always contain a value of U.S. dollars (840) for wholesale rates or fixed rates against U.S. dollar (Rate Class = M). However, for fixed cross rates (Rate Class = F), this field may contain any valid currency code.
4 Source Currency Exponent	8	1	n	Exponent of the currency code in field 2, positions 2–4
5 Rate Class	9	1	an	M = Wholesale rates or fixed rates against the U.S. dollar F = Fixed Cross Rate
6 Rate Format Indicator	10	1	an	Constant—D = Direct (only rate format currently supported)
7 BUY Currency Conversion Rate	11–25	15	n	Eight numbers to the left of the decimal, seven numbers to the right of the decimal
8 MID Currency Conversion Rate	26–40	15	n	Eight numbers to the left of the decimal, seven numbers to the right of the decimal

Currency Conversion

Customer Options for Receiving Currency Conversion Rates

Field Number and Name	Position	Length	Format	Comments and Values
9 SELL Currency Conversion Rate	41–55	15	n	Eight numbers to the left of the decimal, seven numbers to the right of the decimal
10 Reserved Field	56–70	15	n	Nine-filled
11 Filler	71–125	55	an	Spaces

Currency Conversion Rate File Trailer Record

Field Number and Name	Position	Length	Format	Comments and Values
1 Trailer Description	1	1	an	Constant—T
2 Total Detail Record Count	2–7	6	n	Total number of detail records. This count does not include the header or trailer records.
3 Hash Total	8–24	17	n	Hash total of all MID Currency Conversion Rate fields presented in the detail records. Ten numbers to the left of the decimal, seven numbers to the right of the decimal.
4 Filler	25–125	101	an	Spaces

Chapter 13 Reconciliation

This chapter describes the GCMS messages and reports and how they can be used in the reconciliation process.

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Options for Reconciliation of Clearing and Settlement Data

The Global Clearing Management System (GCMS) provides several options to assist customers with reconciling their clearing and settlement data.

- Reconciliation messages provide detail and summary information of the customer's clearing and settlement financial activity totals.
- Reconciliation reports provide detail and summary information of the customer's clearing and settlement financial activity totals.
- Early Reconciliation allows customers to receive errors and acknowledgement reconciliation messages earlier than clearing cycle cutoff.
- Reconciliation Utility allows customers to submit the contents of amount fields in individual customer outgoing and incoming Integrated Product Messages (IPM).

Each option is available for customers depending on the type of financial transaction activity received.

	Available for:	
	Clearing financial transactions	Settlement financial transactions
Reconciliation Messages	Yes	Yes
Reconciliation Reports	Yes	
Early Reconciliation	Yes	
Reconciliation Utility	Yes	Yes

For more information about the Reconciliation Utility, refer to the *IPM Pre-edit and Utilities—Mainframe* guide.

IPM Reconciliation Messages for Clearing and Settlement Data

Reconciliation Messages Generated by the Clearing System

Reconciliation messages are optional for customers and are generated for each clearing cycle in which there was applicable transaction data.

The following reconciliation messages are available to customers:

- IPM File Currency Summary/1644-680 message
- IPM Financial Position Detail/1644-685 message
- IPM Settlement Position Detail/1644-688 message

Reconciliation

IPM Reconciliation Messages for Clearing and Settlement Data

The clearing system generates these messages as an acknowledgement message, a notification message, or both, depending on the type of data being accumulated and the options elected by the customer.

The messages include a four-position DE 25 (Message Reason Code), which identifies it as either an acknowledgement or a notification reconciliation message.

IF DE 25 contains a value of...	THEN this message is a...
6861	Acknowledgement Reconciliation message
6862	Notification Reconciliation message

DEFINITION

Acknowledgement is a type of IPM reconciliation message confirming the customer's outbound activity that the Global Clearing Management System processed.

DEFINITION

Notification is a type of IPM reconciliation message confirming the customer's inbound activity that the Global Clearing Management System processed.

Financial Messages Considered in Reconciliation

Only some of the IPM messages available for customer use have a financial impact on reconciliation.

For example, retrieval request messages are not considered financial activity and therefore are not included in the reconciliation message amount totals.

Financial activity messages that contribute to reconciliation message amount totals are listed below:

- 1240-200 First Presentments
- 1442-450 First Chargebacks (Full)
- 1442-453 First Chargebacks (Partial)
- 1240-205 Second Presentments (Full)
- 1240-282 Second Presentments (Partial)
- 1442-451 Arbitration Chargebacks (Full)
- 1442-454 Arbitration Chargebacks (Partial)
- 1740-700 Fee Collection (Retrieval Fee Billing)
- 1740-700, 1740-780, 1740-781, 1740-782, 1740-783 Fee Collection (Other)—all cycles

Acknowledgement Messages Created by GCMS

Customers may optionally choose to receive acknowledgement messages based on the activity received from the customer.

If MasterCard receives clearing files from the customer, GCMS creates clearing acknowledgement messages for each customer's logical files, regardless of whether the files contain financial clearing data.

If the files that MasterCard receives from the customer contain financial activity, GCMS may create clearing acknowledgement messages, settlement acknowledgement messages, or both for each customer's logical files. If no financial activity is received, no settlement acknowledgement messages are created.

IF MasterCard...	AND the files...	THEN the clearing system...
Receives clearing files from the customer	Do not contain financial clearing data (for example, if all messages between the file header and file trailer messages are retrieval requests)	Creates clearing acknowledgement reconciliation messages containing zeros in the amount and count fields, and U.S. dollars in the corresponding currency code fields. This advises the customer that the clearing system received and processed the non-financial logical file. Does not create settlement acknowledgement messages.
	Contain financial clearing data	Creates clearing and settlement acknowledgement reconciliation messages for the financial data.
Does not receive any clearing files from the customer		Will not generate any acknowledgement messages.

Notification Messages

MasterCard generates notification messages only when there is notification data to transmit.

Location of Reconciliation Totals

Based on the reconciliation categories that the customer chooses, GCMS will include the totals in the following private data subelements (PDSs) of the 1644-680 File Currency Summary, 1644-685 Financial Position Detail, or 1644-688 Settlement Position Detail messages.

Refer to the three columns to the right to determine when the PDSs are mandatory or conditional within the 1644-680, 1644-685 and 1644-688 messages.

Reconciliation

IPM Reconciliation Messages for Clearing and Settlement Data

PDS	Will include reconciliation totals for...	In...	Presence of this PDS in ¹		
			1644-680 message	1644-685 message	1644-688 message
0380	Debits, transaction amount	Transaction currency	M	C	N/A
0381	Credits, transaction amount	Transaction currency	M	C	N/A
0384	Amount, net transaction	Transaction currency	M	C	N/A
0390	Debits, transaction amount	Reconciliation currency	N/A	M	M
0391	Credits, transaction amount	Reconciliation currency	N/A	M	M
0392	Debits, fee amounts	Reconciliation currency	N/A	M	M
0393	Credits, fee amounts	Reconciliation currency	N/A	M	M
0394	Amount, net transaction	Reconciliation currency	N/A	M	M
0395	Amount, net fee	Reconciliation currency	N/A	M	M
0396	Amount, net total	Reconciliation currency	N/A	M	M
0400	Debits, transaction number	This is a record count of all bilateral, and Collection Only transactions settled by MasterCard.	M	M	N/A
0401	Credits, transaction number	This is a record count of all bilateral, and Collection Only transactions settled by MasterCard.	M	M	N/A
0402	Total, transaction number	This is a record count of all bilateral, and Collection Only transactions settled by MasterCard.	M	M	N/A

List of Optional Reconciliation Categories

Refer to the following table for the list of optional reconciliation categories.

Customers may select or change these reconciliation categories using the *GCMS Parameter Worksheet* (Form 600).

The following definitions are used in the table:

1. C = Conditional—The data element is present in the message if the conditions described in the accompanying text are applicable. M = Mandatory—The data element is always present in the message.

- **Transactions Cleared and Settled by MasterCard:** Financial activity from customer to customer, from customer to MasterCard, and from MasterCard to customer for which the MasterCard settlement system completes settlement.
- **Bilateral transactions:** Transactions submitted for clearing that MasterCard does not settle because customers settle them via an interface outside of the MasterCard settlement system. These transactions are reported only in transaction currency; they are not reported in reconciliation currency, because they are not settled through MasterCard.
- **Collection Only transactions:** On-Us or intraprocessor transactions that customers cleared and settled outside of the MasterCard clearing system. Customers send these transactions to GCMS for reporting purposes only. (Customers will never receive notification reconciliation messages with Collection Only totals because GCMS does not forward the Collection Only messages; therefore, only acknowledgement reconciliation messages are created.) These transactions are reported only in transaction currency; they are not reported in reconciliation currency, because they are not settled through MasterCard.
- In addition, full business service selection does not occur on Collection Only. Therefore, the Collection Only transactions are reported within the lowest level Card Program Identifier, Business Service Type, and Business Service ID in common for both customers.

Customers that want to receive Reconciliation totals for MasterCard settled, bilateral settlement, and Collection Only activity should request both the **transaction currency** option and the **settlement indicator** option for IPM Financial Position Detail Reconciliation messages to differentiate amount totals for each of these types of transactions.

Reconciliation Message Categories

Reconciliation

IPM Reconciliation Messages for Clearing and Settlement Data

				Available for: ²		
	Reconciliation Message Category	Provides Totals of Reconciliation Amounts by:	Additional Information about this Reconciliation Category	1644-685 Fin Pos Dtl	1644-688 Smt Pos Dtl	
				Ack	Not	Ack/Not
1	PDS 0300 (Reconciled, File ID)	PDS 0105 (Sending File ID)	The file originator must create a unique File ID for each File Header/1644-697 message in and across transmissions. The file originator accomplishes this by using unique values in the File ID in each File Header/1644-697 message and corresponding File Trailer/1644-695 message. This value appears in PDS 0300 of the reconciliation message. The value provided in the customer acknowledgement messages identifies the File ID in PDS 0105 submitted by the customer. ³ The value provided in the customer notification messages identifies the clearing cycle and the delivery cycle within the File ID in PDS 0105 sent to the customer. These values can be used for reconciliation to the Settlement Advisement totals.	R	R	D
2	PDS 0165 (Settlement Indicator)	- Transactions cleared and settled by MasterCard - Bilateral transactions - Collection Only transactions	Each reconciliation message contains totals only for a single settlement indicator, not a combined total for transactions settled by MasterCard, Bilateral transactions, and Collection Only transactions. GCMS reports Bilateral and Collection Only transactions only in transaction currency because they are not settled through MasterCard. GCMS reports only transactions settled through MasterCard in reconciliation currency, and additionally may report them in transaction currency or transaction counts depending on the reconciliation message type.	R	R	N/A

2. D = Default—If the customer elects to receive reconciliation messages, this category will be provided automatically. O = Optional—The category is not required but may be included at the customer's option. R = Recommended—Unless the customer specifies otherwise, this category will be provided.

3. Customers sending a full file reversal using the same file ID, within the same clearing, may receive reconciliation messages with amount totals that net to zero as a result of the original file and the reversal file processing in the same clearing.

Reconciliation
IPM Reconciliation Messages for Clearing and Settlement Data

				Available for: ²		
Reconciliation Message Category	Provides Totals of Reconciliation Amounts by:	Additional Information about this Reconciliation Category	1644-685 Fin Pos Dtl		1644-688 Smt Pos Dtl	
			Ack	Not	Ack/Not	
3	PDS 0378 (Original/Reversal Totals Indicator) - Original transactions - Reversal transactions	Customers receiving this category will receive amount totals for original transaction activity and reversal transaction activity, each in separate reconciliation messages.	R	R	N/A	
4	PDS 0374 (Reconciled Processing Code)	Processing Code	R	R	N/A	
		Processing Code describes the effect of a transaction on a customer account and the type of account affected. Customers that receive this reconciliation category will receive amount totals for all processing codes for which there is activity. Customers cannot specify amount totals for only certain processing codes. Currently supported processing codes are:				
		00 = Purchase (goods and services) transaction				
		01 = ATM transaction				
		09 = Purchase with cash back transaction				
		12 = Cash disbursement transaction				
		17 = Convenience check (Collection Only specific)				
		18 = Unique transaction				
		19 = Fee collection (credit originator)				
		20 = Credit transaction				
		28 = Payment transaction				
		29 = Fee collection (debit originator)				

Reconciliation

IPM Reconciliation Messages for Clearing and Settlement Data

			Available for: ²		
Reconciliation Message Category	Provides Totals of Reconciliation Amounts by:	Additional Information about this Reconciliation Category	1644-685 Fin Pos Dtl		1644-688 Smt Pos Dtl
			Ack	Not	Ack/Not
		30 = Balance Inquiry ⁴			
		50 = Payment/balance transfer (Collection Only specific)			
		91 = PIN Unblock ⁴			
		92 = PIN Change ⁴			
5	DE 49 (Currency Code, Transaction Currency)	Transaction currency	Customers that receive this reconciliation category will receive amount totals for each unique combination of reconciliation and transaction currency pair.	O	O
6	PDS 0370 (Reconciled Account Range)	Issuing account ranges	Customers may receive amount totals only for their own issuing account ranges up to 11 positions, as established at MasterCard. Customers selecting this category also must select the "Member Activity" category to receive complete reconciliation information for their:	O	O
		• Issuing account ranges • Acquiring activity (at the member ID level), and • Fee collection activity (at the member ID level).			

4. Although these transactions are traditionally considered to be non-financial with respect to the processing code, they are classified as financial transactions when they are originated containing an Access Fee collected by the ATM provider.

Reconciliation
IPM Reconciliation Messages for Clearing and Settlement Data

Reconciliation Message Category	Provides Totals of Reconciliation Amounts by:	Additional Information about this Reconciliation Category	Available for: ²		
			1644-685 Fin Pos Dtl		1644-688 Smt Pos Dtl
			Ack	Not	Ack/Not
		When this category is selected, the issuer will receive messages for each account range established for its member ID that had activity in the applicable file, clearing cycle, or both. Additional information on this reconciliation category is located in the following section titled Account Range Reconciliation Category.			
7	PDS 0302 (Reconciled, Member Activity) • Acquiring activity • Issuing activity • Fee collection activity	If the customer selects the “Account Range” reconciliation category, the customer also must select this category so that the clearing system can provide the customer with complete reconciliation information. If the customer selects the “Account Range” or “Acquirer BIN” settlement reconciliation categories, the customer activity will automatically be included as a settlement reconciliation category.	O	O	C

Reconciliation

IPM Reconciliation Messages for Clearing and Settlement Data

				Available for: ²		
Reconciliation Message Category		Provides Totals of Reconciliation Amounts by:	Additional Information about this Reconciliation Category	1644-685 Fin Pos Dtl	1644-688 Smt Pos Dtl	
				Ack	Not	Ack/Not
8	PDS 0358 (Reconciled Business Activity)	All of the following: • Card Program Identifier • Business service level • Business service ID • Interchange rate designator • Business Date • Business Cycle • Card Acceptor Classification Override Indicator • Product Class Override Indicator • Corporate Incentive Rates Apply Indicator • Special Conditions Indicator • MasterCard Assigned ID Override Indicator	Customers that receive this reconciliation category will receive amount totals for all business activity categories for which there is activity. Customers cannot specify to receive amount totals for only certain Business Activity categories. The clearing system takes this data from the Business Activity element of the original transaction. For customers processing transactions such as product class overrides or special conditions, if "Business Activity" is one of the reconciliation message categories being received, amount totals are based on the product class and special conditions being received.	O	O	N/A

Reconciliation
IPM Reconciliation Messages for Clearing and Settlement Data

				Available for: ²		
Reconciliation Message Category	Provides Totals of Reconciliation Amounts by:	Additional Information about this Reconciliation Category	1644-685 Fin Pos Dtl		1644-688 Smt Pos Dtl	
			Ack	Not	Ack/Not	
9 PDS 0359 (Reconciled, Settlement Activity)	- Settlement service level - Settlement Service ID - Transfer agent - Transfer agent account - Foreign exchange rate class - Reconciliation date and cycle - Settlement date and cycle	Customers that elect to receive the settlement reconciliation messages will always receive Settlement Position Detail/1644-688 messages grouped by this category. Customers will receive settlement position detail totals based on the information that GCMS populates in PDS 0159 (Settlement Activity) of each transaction settled by MasterCard.	N/A	N/A	D	
10 PDS 0372 (Reconciled Transaction Function)	Transaction functions that represent financial activity	Currently, the clearing system supports the financial transaction functions noted in the table titled Currently Supported Transaction Functions. The clearing system takes this data from the Message Type Indicator (MTI) and Function Code of the original transaction. Additional information on this reconciliation category is located in the following section titled Transaction Function Reconciliation Category.	R	R	N/A	

Reconciliation

IPM Reconciliation Messages for Clearing and Settlement Data

				Available for: ²		
Reconciliation Message Category	Provides Totals of Reconciliation Amounts by:	Additional Information about this Reconciliation Category	1644-685 Fin Pos Dtl		1644-688 Smt Pos Dtl	
			Ack	Not	Ack/Not	
11 PDS 0375 (Member Reconciliation Indicator 1) ⁵	Customers that select this as an acknowledgement reconciliation option, and populate PDS 0375 in outgoing messages, will receive totals based on the contents of PDS 0375 in Acknowledgement Financial Position Detail/1644 messages.	Customers can populate PDS 0375 in their customer outgoing messages with any proprietary value up to 50 positions in length. When using this option, all financial records that do not contain PDS 0375 upon submission, will be accumulated and returned in acknowledgement reconciliation messages in which PDS 0375 contains the value "undefined." Business service arrangements that qualify for the Extended Decimal Precision service will have PDS 0375 populated with the value "undefined." Additional information on this reconciliation category is located in the following section titled Member Reconciliation Indicator 1.	O	N/A	N/A	
12 PDS 0367 (Reconciled Card Program Identifier)	Card Program Identifier	Customers that select this as a settlement reconciliation option will receive totals based on the contents of PDS 0367 in Acknowledgement Settlement Position/1644 message. GCMS will populate PDS 0367 based on PDS 0158 (Business Activity), subfield 1 (Card Program Identifier).	N/A	N/A	O	
13 PDS 0368 (Reconciled Transaction Function Group Code)	Totals are provided for each unique Transaction Function group.	Customers that select this as a settlement reconciliation option will receive totals based on the contents of PDS 0368 in Acknowledgement Settlement Position/1644 message.	N/A	N/A	O	

5. Note: For customers using this Financial Reconciliation option, the totals within a business service arrangement subject to the Extended Decimal Precision Service will be accumulated and returned in acknowledgement reconciliation messages where PDS 0375 contains the value "undefined." Use of PDS 0375 in other business services arrangements is not affected. Refer to [Extended Decimal Precision Service](#) for more information.

			Available for: ²		
Reconciliation Message Category	Provides Totals of Reconciliation Amounts by:	Additional Information about this Reconciliation Category	1644-685 Fin Pos Dtl		1644-688 Smt Pos Dtl
			Ack	Not	Ack/Not
14 PDS 0369 (Reconciled Acquirer's BIN)	Acquirer's BINs	Customers may receive amount totals only for their own acquirer BINs as established by MasterCard. Customers that select this as a settlement reconciliation category will receive complete reconciliation information for their: • Acquirer BINs • Issuing activity (at the member ID level), and • Fee collection activity (at the member ID level) When this category is selected, the acquirer will receive messages for each BIN range established for its member ID that had activity in the applicable file, clearing file, or both. The initial population of BIN uses the customer's BIN.	N/A	N/A	O

Account Range Reconciliation Category

The initial population of account ranges uses the customer's issuer account range. These are built as shown in the following table.

Account Range Building

GCMS, IPM Pre-edit, IPM Utilities, and IPM MPE will construct Member ID and issuer account range as follows:

Member ID 009999 or 00000009999

NOTE: The IPM MPE contains the 11-position representation. The IPM format supports a variable representation from six positions to 11 positions.

Account Range Low 555555000000000000 (zero-filled)

Account Range High 555555999999999999 (nine-filled) (issuer only or both)

Reconciliation

IPM Reconciliation Messages for Clearing and Settlement Data

The account ranges initially allow specification by 11-position ranges; however, this field supports 19 positions for future use. The positions 12–19 in the Issuing Account Range reconciliation category element are zero-filled for the beginning account range and nine-filled for the ending account range.

Transaction Function Reconciliation Category

The transaction functions currently supported for reconciliation messages are as follows.

NOTE

If the customer chooses to receive reconciliation messages for transaction functions, MasterCard will provide reconciliation detail only for the transaction functions for which financial detail activity has occurred.

Currently Supported Transaction Functions

Message Type Identifier	Function Code	Transaction Function
1240	200	First Presentment
1240	205	Second Presentment (full)
1240	282	Second Presentment (partial)
1442	450	First Chargeback (full)
1442	451	Arbitration Chargeback (full)
1442	453	First Chargeback (partial)
1442	454	Arbitration Chargeback (partial)
1644	603	Retrieval Requests ⁶
1740	700	Fee Collection (member-generated)
1740	780	Fee Collection Return
1740	781	Fee Collection Resubmission
1740	782	Fee Collection Arbitration Return
1740	783	Fee Collection (clearing system-generated)
1740	790	Fee Collection (Funds Transfer applies only in the IPM Pre-edit system to UK Domestic Maestro transactions.)

6. Customers selecting this option and submitting only 1644-603 (Retrieval Requests; non-financial messages) will receive reconciliation messages with zero counts and amounts.

Member Reconciliation Indicator 1 Reconciliation Category

The following table provides details about PDS 0375 (Member Reconciliation Indicator 1).

Member Reconciliation Indicator 1

IF the customer chooses the reconciliation category...	THEN...
Member Reconciliation Indicator 1	- For each of the proprietary values present in clearing activity that includes the optional PDS 0375. Example: A customer includes the value 1234 in PDS 0375 for several First Presentment messages and 5678 in PDS 0375 for several other First Presentment messages. In this case, the IPM reconciliation messages will include totals of the clearing activity for all of the messages that have the value 1234 in PDS 0375 and separate totals for all the messages that have the value 5678 in PDS 0375. - For all financial activity when PDS 0375 is not provided. Example: A customer has chosen this reconciliation category but does not include PDS 0375 in several of the First Presentment clearing messages submitted. The clearing system will create an acknowledgement message with a Member Reconciliation Indicator 1 value of "undefined." This process will ensure that the acknowledgement reconciliation provided represents 100 percent of the accepted financial activity of the customer for that file. - Will not receive reconciliation totals based on PDS 0375 (Member Reconciliation Indicator 1) for reporting within any business service arrangement subject to the Extended Decimal Precision Service, as the decimal portion of the interchange is not settled at the individual transaction level. For customers using this Financial Reconciliation Option, the totals within a business service arrangement subject to the Extended Decimal Precision Service will be accumulated and returned in acknowledgement reconciliation messages where PDS 0375 contains the value "undefined." Use of PDS 0375 in other business service arrangements is not affected.

Functionality in the Reconciliation Messages

The reconciliation messages provide customers with detailed reconciliation data in reconciliation currency and, optionally, transaction currency. Customers do not receive totals in U.S. dollars unless the transaction currency or reconciliation currency is U.S. dollars.

- The File Currency Summary message always will contain totals in transaction currency.
- The Financial Position Detail message always will contain totals in the customer's reconciliation currency.

Reconciliation

IPM Reconciliation Messages for Clearing and Settlement Data

For...	GCMS provides amount totals in...
Collection Only transactions	Transaction currency only.
Bilateral transactions	Transaction currency only.
All other transactions	The customer's reconciliation currency and, if the customer selects it, also in transaction currency.

When the reconciliation amounts are for bilateral totals, Collection Only totals, or both, the message elements related to reconciliation currency amounts will be present in the reconciliation message, but zero-filled. However, elements related to transaction counts always contain totals for those settled by MasterCard, bilateral, and Collection Only count when there is activity for those transaction types.

The IPM format does not require customers to provide expected reconciliation totals. Customers optionally may provide hash totals for counts and amounts in PDS 0301 and PDS 0306 in their outbound File Trailer/1644-695 messages to activate file integrity checks. However, the clearing system does not use this data in PDS 0301 and PDS 0306 as part of the reconciliation process.

Reconciliation messages accumulate only accepted financial activity. Financial activity currently includes the transaction functions shown in the table Currently Supported Transaction Functions.

The reconciliation messages do not provide amount or count totals for the following non-financial message types:

- File Headers
- File Trailers
- Retrieval Requests
- Financial Detail Addenda

NOTE

For more information about transaction functions, as identified by MTI and Function Code (DE 24), that qualify as financial activity, refer to the *IPM Clearing Formats* manual.

NOTE

The reconciliation messages report only accepted (not rejected) transaction message totals.

File Currency Summary/1644-680 Message

This message provides a summary by transaction currency of the customer's clearing financial activity totals. Customers that choose to receive this type of message will receive one message for each transaction currency that occurs, by logical file.

Both credit and debit totals are provided by transaction currency. GCMS determines the original amount and identifies it as a credit or a debit via the processing code. GCMS then calculates the credit and debit sums for a given currency and places those sums in the appropriate amount elements in the File Currency Summary message.

Financial Position Detail/1644-685 Message

Customers may choose to receive the Financial Position Detail message. GCMS generates this message for both Acknowledgement and Notification activity. Customers electing to receive these messages receive both types after each clearing cycle cutoff.

Customers submitting the early reconciliation file option will receive acknowledgement messages after the clearing system completes the processing of the physical file. These totals will not be repeated after the clearing cycle cutoff.

The Financial Position Detail/1644-685 message provides details of the customer's clearing financial activity by reconciliation categories.

There are multiple reconciliation categories, and all are optional. Customers may select:

- Up to nine categories for reconciliation messages reflecting customer inbound data (referred to as Notification data)
- Up to ten categories for reconciliation messages reflecting customer outbound data (referred to as Acknowledgement data)

The clearing system automatically provides all message amount totals for the Financial Position Detail/1644-685 in the customer's reconciliation currency. If a customer selects the Transaction Currency reconciliation category, the message will contain amount totals for each unique pair of transaction currency and reconciliation currency for which there was clearing activity.

Choosing Clearing Reconciliation Categories

For clearing reconciliation messages, customers may choose reconciliation categories separately for acknowledgement messages and notification messages.

Customers that want to receive Reconciliation totals for MasterCard settled, bilateral settlement, and Collection Only activity should request both the **transaction currency** option and the **settlement indicator** option for IPM Financial Position Detail Reconciliation messages to differentiate amount totals for each of these types of transactions.

Customers may select category options using the *GCMS Parameter Worksheet* (Form 600).

Reconciliation

IPM Reconciliation Messages for Clearing and Settlement Data

The clearing system generates a Financial Position Detail/1644-685 message for each unique combination of values for the selected reconciliation categories. For example, a customer could select the reconciliation categories for acknowledgement and notification messages as shown in the following table titled Example of Member Reconciliation Messages.

Example of Member Reconciliation Messages

Acknowledgement or Notification	Reconciliation Category
Notification	Customer Activity
Notification	Account Range: 54XXXXXXXXXXXXXXXXXX – 54XXXXXXXXXXXXXXXXXX Note: Initially, account ranges will allow specification by 11-position ranges; however, this field supports 19 positions for future use. See previous table titled Account Range Building for additional information about building account ranges.
Notification	Settlement Indicator (values B, C, and M)
Notification	Original/Reversal Transactions
Notification	Processing Code
Acknowledgement	Customer Activity
Acknowledgement	File ID
Acknowledgement	Settlement Indicator (values B, C, and M)
Acknowledgement	Original/Reversal Transactions
Acknowledgement	Processing Code

For each combination of category, the clearing system generates a unique notification or acknowledgement Financial Position Detail/1644-685 message. For example, one Financial Position Detail/1644-685 reconciliation message would contain totals for the combination of one account range plus settlement indicator, another for a second account range plus settlement indicator, and so forth.

Within the reconciliation categories for account range, customer activity, settlement indicator, and processing code are multiple possible values. This can result in additional reconciliation category combinations, generating additional Financial Position Detail/1644-685 messages. This applies to all reconciliation categories.

For example, suppose that customer 001234 has selected the following reconciliation categories for acknowledgement and notification messages and has clearing data as shown.

Reconciliation
IPM Reconciliation Messages for Clearing and Settlement Data

Acknowledgement or Notification	Reconciliation Category Selected	Clearing Data Received/Sent
Notification	Business Activity	MCC and DMC U.S.-U.S. IRDs: 70 (Merit III) for MCC 78 (Merit I) for DMC
Notification	Settlement Indicator (values B, C, and M)	M (MasterCard Settled)—both MCC and DMC
Notification	Original/Reversal Transactions	O (original)—MCC R (reversal)—DMC
Notification	Processing Code (for example, purchase or unique)	Purchase—both MCC and DMC, USD 100 each
Acknowledgement	File ID	00205290300123400001
Acknowledgement	Settlement Indicator (values B, C, and M)	M (MasterCard Settled)—both MCC and DMC
Acknowledgement	Original/Reversal Transactions	O (original)—both MCC and DMC
Acknowledgement	Processing Code (such as purchase and unique)	Purchase—both MCC and DMC, USD 50 each Unique—MCC, USD 25

For each combination of categories, GCMS generates a unique notification or acknowledgement Financial Position Detail/1644-685 message.

In addition, within the reconciliation categories for business activity, settlement indicator, original/reversal, and processing code are multiple possible values. These values can result in additional reconciliation category combinations, generating additional Financial Position Detail/1644-685 messages.

Using the selected reconciliation categories and specified values shown in the previous table, GCMS generates the following Financial Position Detail/1644-685 messages.

Acknowledgement or Notification Received	Clearing Data Totals Reported
Notification Message 1	USD 100: credit , IRD 70 , MasterCard settled, original, purchase transaction
Notification Message 2	USD 100: debit , IRD 78 , MasterCard settled, reversal, purchase transaction

Reconciliation

IPM Reconciliation Messages for Clearing and Settlement Data

Acknowledgement or Notification Received	Clearing Data Totals Reported
Acknowledgement Message 1	USD 100: file ID, MasterCard settled, original, purchase transactions
Acknowledgement Message 2	USD 25: file ID, MasterCard settled, original, unique transaction

In the above example, when the customer does not select the business activity reconciliation category, GCMS will combine the reconciliation totals for consumer credit transactions and point-of-sale (POS) consumer debit transactions. GCMS also combines the interchange fee amount totals for those transactions. Conversely, when the business activity reconciliation category is selected, GCMS specifies the interchange fee amount totals with the associated credit or POS debit transaction amount totals in the reconciliation messages.

Customers may receive IPM acknowledgement and notification reconciliation messages for POS debit and credit activity within the same logical file. Customers selecting the Early Reconciliation file option also may see acknowledgement messages for both POS debit and credit activity in the same Early Reconciliation file from GCMS.

Settlement Position Detail/1644-688 Message

Customers may choose to receive the Settlement Position Detail/1644-688 message. GCMS generates this message for both Acknowledgement and Notification activity. Customers electing to receive these messages will receive both types after each clearing cycle cutoff.

The Settlement Position Detail/1644-688 message provides details of the customer's settlement financial activity by reconciliation categories giving the customer the ability to reconcile settlement positions and tie back to the Settlement Advisement received from the Settlement Management System (S.A.M.).

There are multiple settlement reconciliation categories. If a customer chooses to receive Settlement Position Detail/1644-688 messages, the two default categories must be selected. In addition to the default categories, customers may select up to five optional categories for reconciliation messages reflecting customer inbound (notification) and outbound (acknowledgement) data.

The clearing system provides all message amount totals for the Settlement Position Detail/1644-688 in the customer's reconciliation currency. If a customer selects the Transaction Currency reconciliation category, the message will contain reconciliation amount totals for each unique pair of transaction currency and reconciliation currency for which there was settlement activity.

If the customer chooses this message option, a Settlement Position Detail message will be generated only for transactions settled by MasterCard (PDS 0165 = M) after each clearing cycle.

Refer to the *IPM Clearing Formats* manual for a complete message layout for the Settlement Position Detail/1644-688 message.

NOTE

The Settlement Position Detail/1644-688 Message will be delivered along with the customers' normal activity at the end of each clearing cycle (Bulk Type T112) and will not be distributed within the IPM Early Reconciliation File (Bulk Type T113).

Choosing Settlement Reconciliation Categories

For settlement reconciliation messages, customers choose reconciliation categories that apply to both acknowledgement messages and notification messages.

The clearing system generates a Settlement Position Detail/1644-688 message for each unique combination of values for the selected reconciliation categories. For example, a customer could select the reconciliation categories for messages as shown in the following table titled Example of Member Settlement Reconciliation Messages.

Example of Member Settlement Reconciliation Messages

Reconciliation Category
Account Range: 54XXXXXXXXXXXXXXXXXX – 54XXXXXXXXXXXXXXXXXX
NOTE: Initially, account ranges will allow specification by 11-position ranges, however this field supports 19 positions for future use. See previous table titled Account Range Building for additional information about building account ranges.
Reconciled, File (PDS 0300) default category
Reconciled, Settlement Activity (PDS 0359) default category

For each combination of category, the clearing system generates a unique notification or acknowledgement Settlement Position Detail/1644-688 message. For example, one Settlement Position Detail/1644-688 reconciliation message would contain totals for the combination of one account range, one file ID, and settlement activity, another for a second account range, file ID, and settlement activity, and so forth.

Customers may receive IPM acknowledgement and notification settlement reconciliation messages for POS debit and credit activity within the same logical file.

GCMS Reconciliation Reports

The GCMS reports supplement the reconciliation messages and will facilitate customers' internal reconciliation and balancing related to MasterCard.

Reconciliation

IPM Reconciliation Messages for Clearing and Settlement Data

Customers can request these reports in print image format. The print image format is a standard 133-character print format that contains a one-position carriage control.

Customers can use the reports for both financial data reporting and for customer statistical data capture for analysis within customer management information systems (MIS).

The clearing system separates the clearing reports for accepted transactions by acknowledgement and notification clearing data. The clearing system generates these reports upon completion of the applicable clearing cycle. Once these reports are generated, the clearing system sends them to the customers that have requested them. These reports are optional.

Customers requesting the reports will receive them for each clearing cycle. The clearing system will transmit these reports using the following bulk types:

- T140—Clearing Cycle Acknowledgement Report (production)
- T150—Clearing Cycle Acknowledgement Report (test)
- T140—Clearing Cycle Notification Report (production)
- T150—Clearing Cycle Notification Report (test)

NOTE

Customers that request these reports will receive them after each clearing cycle, regardless of the customer's file delivery options. For example, if data from clearing cycles 3 and 4 are merged for data delivery, GCMS will produce a report after clearing cycle 3 and a separate report after clearing cycle 4.

Although reconciliation messages may vary depending on customer reconciliation category selections, the reports do not vary and always provide totals for all 11 of the reconciliation categories shown in the following table titled Reconciliation Report Categories.

Customers will have the option to receive GCMS reconciliation reports for accepted clearing data and rejected clearing data.

Reconciliation Report Categories

	Category	Examples of Items in the Category
1	Card Program Identifier (Acceptance Brand)	MasterCard, private label
2	Business Service Level	Customer-to-customer, intracountry, intercountry, intraregional, interregional
3	Business Service ID	Business Service ID number
4	Interchange Rate Designator	The ID assigned to the specific interchange program within the business agreement identified

Reconciliation
IPM Reconciliation Messages for Clearing and Settlement Data

	Category	Examples of Items in the Category
5	Transaction Function	First presentment, first chargeback, second presentment
6	Processing Code	Purchase, ATM, Unique, Payment Transaction
7	Original/Reversal Transactions	Original transactions separated from reversal transactions
8	Settlement Indicator	Settled by MasterCard, Bilateral, Collection Only
9	Reconciliation Currency/Code	Reconciliation Currency alpha and numeric codes. These totals will reflect only MasterCard settled transactions. Bilateral and Collection Only totals are not provided in reconciliation currency
10	Financial and Non-Financial Transactions	Financial transactions separated from non-financial transactions. NOTE: Non-financial transactions include retrieval requests and financial detail addenda
11	Logical File ID	Customer outbound logical file ID or customer inbound logical file ID

The reconciliation reports are available for distribution to the customers upon request. Customers can contact the Customer Operations Services team or their Regional Office to request these reports, detailed in the GCMS Reconciliation Reports table and in the report samples that follow.

If the customer chooses the option to receive reconciliation reports, detail IPM clearing reports and a summary report will be generated for each of the six clearing cycles. These reports supplement the IPM reconciliation messages and will facilitate reconciliation and balancing for the customers.

A seventh clearing cycle exists exclusively for Mexico domestic switching transactions. For more information on the seven clearing cycles, refer to the [Clearing Times](#) section.

GCMS Reconciliation Reports

Report Name	Description	Report No.	Categorized by:
Clearing Cycle Acknowledgement Report	For transactions sent from the customer's processing site to MasterCard	IP727010-AA	• Transactions settled by MasterCard • Bilateral Transactions • Collection Only Transactions • Non-Financial Transactions
Clearing Cycle Notification Report	For transactions sent to the customer's processing site	IP727020-AA	• Transactions settled by MasterCard • Bilateral Transactions • Non-Financial Transactions

Reconciliation

IPM Reconciliation Messages for Clearing and Settlement Data

Report Name	Description	Report No.	Categorized by:
Clearing Cycle Summary Report	A summary of the clearing cycle activity based on completion of each clearing cycle. The clearing system generates one report per clearing cycle per member ID.	IP728010-AA	N/A
IPM Messages Created On Behalf of a Member	For customers that receive acknowledgements for Fee Collection/1740 messages that they did not generate, this report assists customers in the reconciliation process.	IP142110-AA	N/A
Acquirer Funded Reward Presentments Created On Behalf of a Member	Aids acquirers in reconciling promotions that will be merchant-funded, providing acquirers with a recap of the merchant-funded promotions.	IP170010-AA	N/A
On-behalf Service Fee Collection Report	Reconciliation summary report offered to acquirers in the Europe region to allow reconciliation and settlement of their authorization and clearing transactions.	IP142520-AA	N/A

IPM Clearing Reports—Clearing Cycle Acknowledgement and Clearing Cycle Notification Reports

These reports are billable at USD 0.01 per line and are billed through the MasterCard Consolidated Billing System (MCBS). The billing event numbers are as follows.

Report Number	Description	Billing Event Number
IP727010-AA	Reconciliation Acknowledgement Report	2RP2216
IP727020-AA	Reconciliation Notification Report	2RP2217

Customers may select report options using the *GCMS Parameter Worksheet* (Form 600).

IPM Clearing Reports—Clearing Cycle Summary

The Clearing Cycle Summary—which is optional and is generated once per clearing cycle by the clearing system—provides customers with an additional reconciliation tool by providing specific clearing totals summarized by clearing cycle.

This report includes reconciliation totals at the following levels:

- Card Program Identifier (Acceptance Brand)
- Business Service Level
- Member ID (sender or receiver)
- Logical file ID to MasterCard, or logical file ID from MasterCard
- Totals in the appropriate reconciliation currency, and that reconciliation currency code

The clearing system transmits the Clearing Cycle Summary reports using bulk type T140 (for production) and T150 (for test).

This report is billable at USD 0.01 per line and is billed through the MasterCard Consolidated Billing System (MCBS). The billing event number is as follows.

Report Number	Description	Billing Event Number
IP728010-AA	Clearing Cycle Summary	2RP2218

Customers may select report options using the *GCMS Parameter Worksheet* (Form 600).

NOTE

For each of the report samples that follows, field descriptions applicable to all of the report pages follow the Summary page.

Clearing Cycle Acknowledgement Report Samples

The following samples of the Clearing Cycle Acknowledgement Report show accepted totals.

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IPM Reconciliation Messages for Clearing and Settlement Data

Clearing Cycle Acknowledgement Report (IP727010-AA), page 1: MasterCard Settled Transactions

RUN DATE: MM/DD/YY
PAGE NO: 1

IP727010-AA		MASTERCARD WORLDWIDE	
ACCEPTANCE BRAND: MCC		CLEARING CYCLE XXX - ACKNOWLEDGEMENT	
BUSINESS SERVICE LEVEL: INTRACOUNTRY		YYYY-MM-DD	
BUSINESS SERVICE ID: 999001			
FILE ID: XXX/YYMDD/XXXXXXXXXX/99999			
MEMBER ID: XXXXXXXXXXXX			
MASTERCARD SETTLED			
TRANS. FUNC. PROC. CODE	IRD	COUNTS	RECON AMOUNT
-----	-----	-----	-----
FIRST PRES. PURCHASE ORIG 75	XXXXXXX	0.00 CR	36-AUD
-----	-----	-----	-----
FIRST PRES. TOTAL	XXXXXXX	0.00 CR	36-AUD
INTRACOUNTRY			
MASTERCARD SETTLED			
BUSINESS SERVICE ID SUBTOTAL			
		0.00 CR	36-AUD
TRANS. FUNC. PROC. CODE	IRD	COUNTS	RECON AMOUNT
-----	-----	-----	-----
FIRST PRES. PURCHASE ORIG 75	XXXXXXX	0.00 CR	124-CAD
-----	-----	-----	-----
FIRST PRES. CREDIT ORIG 75	XXXXXXX	0.00 DR	124-CAD
-----	-----	-----	-----
FIRST PRES. TOTAL	XXXXXXX	0.00 CR	124-CAD
INTRACOUNTRY			
MASTERCARD SETTLED			
BUSINESS SERVICE ID SUBTOTAL			
		0.00 CR	124-CAD
TRANS. FUNC. PROC. CODE	IRD	COUNTS	RECON AMOUNT
-----	-----	-----	-----
FIRST PRES. PURCHASE ORIG 75	XXXXXXX	0.00 CR	208-DKK
-----	-----	-----	-----
FIRST PRES. CREDIT ORIG 75	XXXXXXX	0.00 DR	208-DKK
-----	-----	-----	-----
FIRST PRES. TOTAL	XXXXXXX	0.00 CR	208-DKK

Clearing Cycle Acknowledgement Report (IP727010-AA), page 2: MasterCard Settled Transactions

RUN DATE: MM/DD/YY
PAGE NO: 2

IP727010-AA									
ACCEPTANCE BRAND: MCC									
BUSINESS SERVICE LEVEL: INTRACOUNTRY									
BUSINESS SERVICE ID: 999001									
FILE ID: XXX/YMMDD/XXXXXXXXXX/99999									
MEMBER ID: XXXXXXXXXXXX									
MASTERCARD SETTLED									
MASTERCARD WORLDWIDE									
CLEARING CYCLE XXX - ACKNOWLEDGEMENT									
YYYY-MM-DD									
TRANS. FUNC.	PROC.CODE	IRD	COUNTS	RECON AMOUNT	RECON CURR CODE	TRANS FEE	FEE CURR CODE		

FIRST PRES.	TOTAL		XXXXXXXXXX	0.00 CR 208-DKK		0.00 DR 208-DKK			

INTRACOUNTRY									
MASTERCARD SETTLED									
BUSINESS SERVICE ID SUBTOTAL									
XXXXXXXXXX									
0.00 CR 208-DKK									

TRANS. FUNC.									
PROC.CODE									
IRD									
COUNTS									
RECON AMOUNT									
RECON CURR CODE									
TRANS FEE									
FEE CURR CODE									

FIRST PRES.	PURCHASE	ORIG	75	XXXXXXXXXX		0.00 CR 344-HKD			

FIRST PRES.	CREDIT	ORIG	75	XXXXXXXXXX		0.00 DR 344-HKD			

FIRST PRES.	TOTAL		XXXXXXXXXX	0.00 CR 344-HKD		0.00 DR 344-HKD			

INTRACOUNTRY									
MASTERCARD SETTLED									
BUSINESS SERVICE ID SUBTOTAL									
XXXXXXXXXX									
0.00 CR 344-HKD									

TRANS. FUNC.									
PROC.CODE									
IRD									
COUNTS									
RECON AMOUNT									
RECON CURR CODE									
TRANS FEE									
FEE CURR CODE									

FIRST PRES.	PURCHASE	ORIG	75	XXXXXXXXXX		0.00 DR 392-JPY			

FIRST PRES.	TOTAL		XXXXXXXXXX	0.00 CR 392-JPY		0.00 DR 392-JPY			

Reconciliation

IPM Reconciliation Messages for Clearing and Settlement Data

Clearing Cycle Acknowledgement Report (IP727010-AA), page 3: MasterCard Settled Transactions

RUN DATE: MM/DD/YY
PAGE NO: 3

IP727010-AA				MASTERCARD WORLDWIDE			
ACCEPTANCE BRAND: MCC				CLEARING CYCLE XXX - ACKNOWLEDGEMENT			
BUSINESS SERVICE LEVEL: INTRACOUNTRY				YYYY-MM-DD			
BUSINESS SERVICE ID: 999001							
FILE ID: XXX/YYMMD/XXXXXXXXXX/9999							
MEMBER ID: XXXXXXXXXXXX							
MASTERCARD SETTLED							
TRANS. FUNC.	PROC.CODE	IRD	COUNTS	RECON AMOUNT	RECON CURR CODE	TRANS FEE	FEE CURR CODE
-----	-----	-----	-----	-----	-----	-----	-----
INTRACOUNTRY							
MASTERCARD SETTLED							
BUSINESS SERVICE ID SUBTOTAL		XXXXXXXXXX		0.00 CR 392-JPY		0.00 DR 392-JPY	
TRANS. FUNC.	PROC.CODE	IRD	COUNTS	RECON AMOUNT	RECON CURR CODE	TRANS FEE	FEE CURR CODE
-----	-----	-----	-----	-----	-----	-----	-----
FIRST PRES. PURCHASE	ORIG 75	XXXXXXXXXX		0.00 CR 578-NOK		0.00 DR 578-NOK	
-----	-----	-----	-----	-----	-----	-----	-----
FIRST PRES. TOTAL		XXXXXXXXXX		0.00 CR 578-NOK		0.00 DR 578-NOK	
INTRACOUNTRY							
MASTERCARD SETTLED							
BUSINESS SERVICE ID SUBTOTAL		XXXXXXXXXX		0.00 CR 578-NOK		0.00 DR 578-NOK	
TRANS. FUNC.	PROC.CODE	IRD	COUNTS	RECON AMOUNT	RECON CURR CODE	TRANS FEE	FEE CURR CODE
-----	-----	-----	-----	-----	-----	-----	-----
FIRST PRES. PURCHASE	ORIG 75	XXXXXXXXXX		0.00 CR 752-SEK		0.00 DR 752-SEK	
-----	-----	-----	-----	-----	-----	-----	-----
FIRST PRES. TOTAL		XXXXXXXXXX		0.00 CR 752-SEK		0.00 DR 752-SEK	
INTRACOUNTRY							
MASTERCARD SETTLED							
BUSINESS SERVICE ID SUBTOTAL		XXXXXXXXXX		0.00 CR 752-SEK		0.00 DR 752-SEK	

Clearing Cycle Acknowledgement Report (IP727010-AA), page 4: MasterCard Settled Transactions

RUN DATE: MM/DD/YY
PAGE NO: 4

```
IP727010-AA
ACCEPTANCE BRAND: MCC
BUSINESS SERVICE LEVEL: INTRACOUNTRY
BUSINESS SERVICE ID: 999001
FILE ID: XXX/YYMMD/XXXXXXXXXX/99999
MEMBER ID: XXXXXXXXXXXX

MASTERCARD SETTLED
CLEARING CYCLE 001 - ACKNOWLEDGEMENT
YYYY-MM-DD

TRANS. FUNC. PROC.CODE   IRD   COUNTS   RECON   RECON   TRANS   FEE
-----
FIRST PRES. PURCHASE    ORIG 75 XXXXXXXX 0.00 CR 756-CHF 0.00 DR 756-CHF
CREDIT              ORIG 75 XXXXXXXX 0.00 DR 756-CHF 0.00 CR 756-CHF
-----
FIRST PRES. TOTAL      XXXXXXXX 0.00 CR 756-CHF 0.00 DR 756-CHF
-----

INTRACOUNTRY
MASTERCARD SETTLED
BUSINESS SERVICE ID SUBTOTAL XXXXXXXX 0.00 CR 756-CHF 0.00 DR 756-CHF
-----

TRANS. FUNC. PROC.CODE   IRD   COUNTS   RECON   RECON   TRANS   FEE
-----
FIRST PRES. PURCHASE    ORIG 75 XXXXXXXX 0.00 CR 826-GBP 0.00 DR 826-GBP
CREDIT              ORIG 75 XXXXXXXX 0.00 DR 826-GBP 0.00 CR 826-GBP
-----
FIRST PRES. TOTAL      XXXXXXXX 0.00 CR 826-GBP 0.00 DR 826-GBP
-----

INTRACOUNTRY
MASTERCARD SETTLED
BUSINESS SERVICE ID SUBTOTAL XXXXXXXX 0.00 CR 826-GBP 0.00 DR 826-GBP
-----

TRANS. FUNC. PROC.CODE   IRD   COUNTS   RECON   RECON   TRANS   FEE
-----
FIRST PRES. PURCHASE    ORIG 75 XXXXXXXX 0.00 CR 840-USD 0.00 DR 840-USD
CREDIT              ORIG 75 XXXXXXXX 0.00 CR 840-USD 0.00 DR 840-USD
-----
FIRST PRES. TOTAL      XXXXXXXX 0.00 CR 840-USD 0.00 DR 840-USD
-----
```

Reconciliation

IPM Reconciliation Messages for Clearing and Settlement Data

Clearing Cycle Acknowledgement Report (IP727010-AA), page 5: MasterCard Settled Transactions

RUN DATE: MM/DD/YY
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IP727010-AA				MASTERCARD WORLDWIDE			
ACCEPTANCE BRAND: MCC				CLEARING CYCLE XXX - ACKNOWLEDGEMENT			
BUSINESS SERVICE LEVEL: INTRACOUNTRY				YYYY-MM-DD			
BUSINESS SERVICE ID: 999001							
FILE ID: XXX/YYMDD/XXXXXXXXXX/99999							
MEMBER ID: XXXXXXXXXXXX							
MASTERCARD SETTLED							
TRANS. FUNC.	PROC. CODE	IRD	COUNTS	RECON AMOUNT	RECON CURR CODE	TRANS FEE	FEE CURR CODE
----	----	----	----	----	----	----	----
FIRST PRES.	TOTAL		XXXXXXXXXX	0.00 CR	840-USD	0.00 DR	840-USD
INTRACOUNTRY							
MASTERCARD SETTLED							
BUSINESS SERVICE ID SUBTOTAL				0.00 CR	840-USD	0.00 DR	840-USD
TRANS. FUNC.	PROC. CODE	IRD	COUNTS	RECON AMOUNT	RECON CURR CODE	TRANS FEE	FEE CURR CODE
----	----	----	----	----	----	----	----
FIRST PRES.	PURCHASE	75	XXXXXXXXXX	0.00 CR	978-EUR	0.00 DR	978-EUR
	CREDIT	75	XXXXXXXXXX	0.00 DR	978-EUR	0.00 CR	978-EUR
----	----	----	----	----	----	----	----
FIRST PRES.	TOTAL		XXXXXXXXXX	0.00 CR	978-EUR	0.00 DR	978-EUR
INTRACOUNTRY							
MASTERCARD SETTLED							
BUSINESS SERVICE ID SUBTOTAL				0.00 CR	978-EUR	0.00 DR	978-EUR

Clearing Cycle Acknowledgement Report (IP727010-AA), page 6: MasterCard Settled Transactions

RUN DATE: MM/DD/YY
PAGE NO: 6

IP727010-AA									
ACCEPTANCE BRAND: MCC									
BUSINESS SERVICE LEVEL: INTRACOUNTRY									
BUSINESS SERVICE ID: 999002									
FILE ID: XXX/YMMDD/XXXXXXXXXX/99999									
MEMBER ID: XXXXXXXXXXXX									
MASTERCARD SETTLED									
MASTERCARD WORLDWIDE CLEARING CYCLE XXX - ACKNOWLEDGEMENT YYYY-MM-DD									
TRANS. FUNC.	PROC. CODE	IRD	COUNTS	RECON AMOUNT	RECON CURR CODE	TRANS FEE	FEE CURR CODE		
FIRST PRES.	CASH DISB.	ORIG 75	XXXXXXXXXX	0.00 CR	36-AUD	0.00 CR	36-AUD		
FIRST PRES.	TOTAL		XXXXXXXXXX	0.00 CR	36-AUD	0.00 CR	36-AUD		
INTRACOUNTRY									
MASTERCARD SETTLED									
BUSINESS SERVICE ID SUBTOTAL									
0.00 CR 36-AUD 0.00 CR 36-AUD									
TRANS. FUNC.	PROC. CODE	IRD	COUNTS	RECON AMOUNT	RECON CURR CODE	TRANS FEE	FEE CURR CODE		
FIRST PRES.	CASH DISB.	ORIG 75	XXXXXXXXXX	0.00 CR	208-DKK	0.00 CR	208-DKK		
FIRST PRES.	TOTAL		XXXXXXXXXX	0.00 CR	208-DKK	0.00 CR	208-DKK		
INTRACOUNTRY									
MASTERCARD SETTLED									
BUSINESS SERVICE ID SUBTOTAL									
0.00 CR 208-DKK 0.00 CR 208-DKK									
TRANS. FUNC.	PROC. CODE	IRD	COUNTS	RECON AMOUNT	RECON CURR CODE	TRANS FEE	FEE CURR CODE		
FIRST PRES.	CASH DISB.	ORIG 75	XXXXXXXXXX	0.00 CR	344-HKD	0.00 CR	344-HKD		
FIRST PRES.	TOTAL		XXXXXXXXXX	0.00 CR	344-HKD	0.00 CR	344-HKD		

IPM Reconciliation Messages for Clearing and Settlement Data

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Clearing Cycle Acknowledgement Report (IP727010-AA), page 8: MasterCard Settled Transactions

RUN DATE: MM/DD/YY
PAGE NO: 8

IP727010-AA				MASTERCARD WORLDWIDE			
ACCEPTANCE BRAND: MCC				CLEARING CYCLE XXX - ACKNOWLEDGEMENT			
BUSINESS SERVICE LEVEL: INTRACOUNTRY				YYYY-MM-DD			
BUSINESS SERVICE ID: 999002							
FILE ID: XXX/YYMDD/XXXXXXXXXX/99999							
MEMBER ID: XXXXXXXXXXXX							
MASTERCARD SETTLED							
TRANS. FUNC. PROC. CODE	IRD	COUNTS		RECON AMOUNT	RECON CURR CODE	TRANS FEE	FEE CURR CODE
-----	-----	-----	-----	-----	-----	-----	-----
FIRST PRES. CASH DISB. ORIG	75	XXXXXXXXXX		0.00 CR	840-USD	0.00 CR	840-USD
-----	-----	-----	-----	-----	-----	-----	-----
FIRST PRES. TOTAL		XXXXXXXXXX		0.00 CR	840-USD	0.00 CR	840-USD
INTRACOUNTRY							
MASTERCARD SETTLED							
BUSINESS SERVICE ID SUBTOTAL		XXXXXXXXXX		0.00 CR	840-USD	0.00 CR	840-USD
TRANS. FUNC. PROC. CODE	IRD	COUNTS		RECON AMOUNT	RECON CURR CODE	TRANS FEE	FEE CURR CODE
-----	-----	-----	-----	-----	-----	-----	-----
FIRST PRES. CASH DISB. ORIG	75	XXXXXXXXXX		0.00 CR	978-EUR	0.00 CR	978-EUR
-----	-----	-----	-----	-----	-----	-----	-----
FIRST PRES. TOTAL		XXXXXXXXXX		0.00 CR	978-EUR	0.00 CR	978-EUR
INTRACOUNTRY							
MASTERCARD SETTLED							
BUSINESS SERVICE ID SUBTOTAL		XXXXXXXXXX		0.00 CR	978-EUR	0.00 CR	978-EUR

Reconciliation

IPM Reconciliation Messages for Clearing and Settlement Data

Clearing Cycle Acknowledgement Report (IP727010-AA), page 9: Collection Only Transactions

RUN DATE: MM/DD/YY
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MASTERCARD WORLDWIDE
CLEARING CYCLE XXX ACKNOWLEDGEMENT
YYYY-MM-DD

IP727010-AA

ACCEPTANCE BRAND : MCC
BUSINESS SERVICE LEVEL : INTRACOUNTRY
MEMBER ID: XXXXXXXXXXXX
CURRENCY CODE : 36-AUD

BUSINESS SERVICE ID	FILE ID	ORIG/ RVSL
999001	XXX/YTMDD/XXXXXXXXXX/99999	ORIG
999002	XXX/YTMDD/XXXXXXXXXX/99999	ORIG
GRAND TOTAL		

RECON. AMOUNT	TRANSACTION FEE
0.00 CR	0.00 DR
0.00 CR	0.00 CR
0.00 CR	0.00 CR

ACCEPTANCE BRAND : MCC
BUSINESS SERVICE LEVEL : INTRACOUNTRY
MEMBER ID: XXXXXXXXXXXX
CURRENCY CODE : 124-CAD

BUSINESS SERVICE ID	FILE ID	ORIG/ RVSL
999001	XXX/YTMDD/XXXXXXXXXX/99999	ORIG
GRAND TOTAL		

RECON. AMOUNT	TRANSACTION FEE
428.37 CR	0.00 DR
428.37 CR	0.00 DR

ACCEPTANCE BRAND : MCC
BUSINESS SERVICE LEVEL : INTRACOUNTRY
MEMBER ID: XXXXXXXXXXXX
CURRENCY CODE : 208-DKK

BUSINESS SERVICE ID	FILE ID	ORIG/ RVSL
999001	XXX/YTMDD/XXXXXXXXXX/99999	ORIG
999002	XXX/YTMDD/XXXXXXXXXX/99999	ORIG
GRAND TOTAL		

RECON. AMOUNT	TRANSACTION FEE
0.00 CR	0.00 DR
0.00 CR	0.00 CR
0.00 CR	0.00 CR

Clearing Cycle Acknowledgement Report (IP727010-AA), page 10: Collection Only Transactions

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MASTERCARD WORLDWIDE
CLEARING CYCLE XXX - ACKNOWLEDGEMENT
YYYY-MM-DD

IP727010-AA

ACCEPTANCE BRAND : MCC
BUSINESS SERVICE LEVEL : INTRACOUNTRY
MEMBER ID: XXXXXXXXXXXX
CURRENCY CODE : 344-HKD

BUSINESS SERVICE ID	FILE ID	ORIG/ RVSL
999001	XXX/YMMDD/XXXXXXXXXXXX/99999	ORIG
999002	XXX/YMMDD/XXXXXXXXXXXX/99999	ORIG
GRAND TOTAL		

RECON. AMOUNT	TRANSACTION FEE
0.00 CR	0.00 DR
0.00 CR	0.00 CR
0.00 CR	0.00 CR

ACCEPTANCE BRAND : MCC
BUSINESS SERVICE LEVEL : INTRACOUNTRY
MEMBER ID: XXXXXXXXXXXX
CURRENCY CODE : 392-JPY

BUSINESS SERVICE ID	FILE ID	ORIG/ RVSL
999001	XXX/YMMDD/XXXXXXXXXXXX/99999	ORIG
999002	XXX/YMMDD/XXXXXXXXXXXX/99999	ORIG
GRAND TOTAL		

RECON. AMOUNT	TRANSACTION FEE
0.00 CR	0.00 DR
0.00 CR	0.00 CR
0.00 CR	0.00 CR

Reconciliation

IPM Reconciliation Messages for Clearing and Settlement Data

Clearing Cycle Acknowledgement Report (IP727010-AA), page 11: MasterCard Settled Transactions

RUN DATE: MM/DD/YY
PAGE NO: 11

MASTERCARD WORLDWIDE CLEARING CYCLE XXX - ACKNOWLEDGEMENT YYYY-MM-DD			
IP727010-AA	ACCEPTANCE BRAND : MCC BUSINESS SERVICE LEVEL : INTRACOUNTRY MEMBER ID : XXXXXXXXXX CURRENCY CODE : 578-NOK	BUSINESS SERVICE ID	FILE ID ORIG/ RVSL
999001	XXX/YMMDD/XXXXXXXXXX/99999	ORIG	TRANSACTION FEE
		0.00 CR	0.00 DR
		0.00 CR	0.00 DR
	GRAND TOTAL		
IP727010-AA	ACCEPTANCE BRAND : MCC BUSINESS SERVICE LEVEL : INTRACOUNTRY MEMBER ID : XXXXXXXXXX CURRENCY CODE : 752-SEK	BUSINESS SERVICE ID	FILE ID ORIG/ RVSL
999001	XXX/YMMDD/XXXXXXXXXX/99999	ORIG	TRANSACTION FEE
		0.00 CR	0.00 DR
		0.00 CR	0.00 DR
	GRAND TOTAL		
IP727010-AA	ACCEPTANCE BRAND : MCC BUSINESS SERVICE LEVEL : INTRACOUNTRY MEMBER ID : XXXXXXXXXX CURRENCY CODE : 756-CHF	BUSINESS SERVICE ID	FILE ID ORIG/ RVSL
999001	XXX/YMMDD/XXXXXXXXXX/99999	ORIG	TRANSACTION FEE
		0.00 CR	0.00 DR
		0.00 CR	0.00 DR
	GRAND TOTAL		

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Clearing Cycle Acknowledgement Report (IP727010-AA), page 12: MasterCard Settled Transactions

RUN DATE: MM/DD/YY
PAGE NO: 12

MASTERCARD WORLDWIDE
CLEARING CYCLE XXX - ACKNOWLEDGEMENT
YYYY-MM-DD

IP727010-AA

ACCEPTANCE BRAND : MCC
BUSINESS SERVICE LEVEL : INTRACOUNTRY
MEMBER ID: XXXXXXXXXXXX
CURRENCY CODE : 826-GEP

BUSINESS SERVICE ID	FILE ID	ORIG/ RVSL
999001	002/050121/XXXXXXXXXXXX/99999	ORIG
999002	002/050121/XXXXXXXXXXXX/99999	ORIG
GRAND TOTAL		

RECON. AMOUNT	TRANSACTION FEE
0.00 CR	0.00 DR
0.00 CR	0.00 CR
0.00 CR	0.00 CR

ACCEPTANCE BRAND : MCC
BUSINESS SERVICE LEVEL : INTRACOUNTRY
MEMBER ID: XXXXXXXXXXXX
CURRENCY CODE : 840-USD

BUSINESS SERVICE ID	FILE ID	ORIG/ RVSL
999001	002/050121/XXXXXXXXXXXX/99999	ORIG
999002	002/050121/XXXXXXXXXXXX/99999	ORIG
GRAND TOTAL		

RECON. AMOUNT	TRANSACTION FEE
0.00 CR	0.00 DR
0.00 CR	0.00 CR
0.00 CR	0.00 CR

Reconciliation

IPM Reconciliation Messages for Clearing and Settlement Data

Clearing Cycle Acknowledgement Report (IP727010-AA), page 13: Non-financial Transactions

RUN DATE: MM/DD/YY
PAGE NO: 13

IP727010-AA		MASTERCARD WORLDWIDE		CLEARING CYCLE XXX - ACKNOWLEDGEMENT	
		YYYY-MM-DD		YYYY-MM-DD	
ACCEPTANCE BRAND : MCC					
BUSINESS SERVICE LEVEL : INTRACOUNTRY					
MEMBER ID: XXXXXXXXXX					
CURRENCY CODE : 978-EUR					
BUSINESS					
SERVICE	ID	FILE ID	ORIG/ RVSL	RECON. AMOUNT	TRANSACTION FEE
999001	XXX/YYMDD/XXXXXXXXXX/99999	ORIG		0.00 CR	0.00 DR
999002	XXX/YYMDD/XXXXXXXXXX/99999	ORIG		0.00 CR	0.00 CR
GRAND TOTAL				0.00 CR	0.00 DR

Report IP727010-AA Field Descriptions

Field	Description
Run Date	The date on which this report was produced.
Page	The page number within the report.
Acceptance Brand (Card Program Identifier)	The code for the MasterCard or proprietary service marks under whose umbrella transactions are processed. As an example, MCC (MasterCard Card) is a card program.
Business Service Level	Identifies the interchange relationship for the business arrangement. Examples are intracountry, intraregional, and interregional.
Business Service ID	A unique code that identifies the specific interchange agreement assigned to the transaction
File ID	The logical file ID to which the data in this report pertains.
Member ID	The identifier that the association assigns to a customer (also referred to as ICA number).
Settlement Indicator	Identifies the settlement disposition of the reported transactions. Values are MasterCard Settled, Collection Only (no settlement), and Bilateral (no settlement).
Trans. Func. (Transaction Function)	The IPM Message Type Identifier and Function Code combination that defines the transaction. Examples of transaction functions are first presentment, first chargeback, and second presentment.
Proc. Code (Processing Code)	Describes the effect of a transaction on a customer account and the type of account affected. Examples are purchase, credit, and ATM cash withdrawal. All transactions are defined as either an original or a reversal.
IRD	The interchange rate designator defines the interchange program for which the transactions were presented.
Counts	The number of transactions accumulated for the applicable processing code.
Recon. Amount (Reconciliation Amount)	The total net amount (with fees applied) of the transactions in reconciliation currency for the applicable processing code. NOTE: Collection Only and Bilateral transactions are not settled by MasterCard; therefore, the field contains a zero.
Recon. Currency Code	The numeric and alpha ISO currency code associated with the reconciliation currency. (Always 840-USD for Collection Only and Bilateral.)

Reconciliation

IPM Reconciliation Messages for Clearing and Settlement Data

Field	Description
Trans. Fee (Transaction Fee)	The total of the transaction fees applicable to the transactions for the processing code NOTE: Collection Only and Bilateral transactions are not settled by MasterCard; therefore, the field contains a zero.
Fee Curr. Code (Fee Currency Code)	The numeric and alpha ISO currency code associated with the fee currency (Always 840-USD for Collection Only and Bilateral.)
Total	The total count and net amount (with fees applied) of the transactions and reconciliation currency for the applicable transaction function.
Subtotal	The subtotal of the MasterCard Settled, Collection Only, or Bilateral transaction amounts for the specified Business Service level. NOTE: Collection Only and Bilateral transactions are not settled by MasterCard; therefore, the field contains a zero.

Clearing Cycle Notification Report Samples

The following samples of the Clearing Cycle Notification Report show accepted totals.

Clearing Cycle Notification Report (IP727020-AA), page 1: MasterCard Settled Transactions

IP727020-AA										MASTERCARD WORLDWIDE										RUN DATE: MM/DD/YY 1																																																											
ACCEPTANCE BRAND: MCC										CLEARING CYCLE XXX NOTIFICATION										PAGE NO: 1																																																											
BUSINESS SERVICE LEVEL: INTRACOUNTRY										YYY-MM-DD																																																																					
BUSINESS SERVICE ID: 999001																																																																															
FILE ID: XXX/YTMMDD/XXXXXXXXXXXX/99999																																																																															
MEMBER ID: XXXXXXXXXXXX																																																																															
MASTERCARD SETTLED																																																																															
TRANS. FUNC.										PROC. CODE										IRD										COUNTS										RECON AMOUNT										RECON CURR CODE										TRANS FEE										FEE CURR CODE									
FIRST PRES.										PURCHASE										ORIG 75										XXXXXXXXXX										0.00 DR										826-GBP										0.00 CR										826-GBP									
										CREDIT										ORIG 75										XXXXXXXXXX										0.00 CR										826-GBP										0.00 DR										826-GBP									
FIRST PRES.										TOTAL																				XXXXXXXXXX										0.00 DR										826-GBP										0.00 CR										826-GBP									
INTRACOUNTRY																																																																															
MASTERCARD SETTLED																																																																															
BUSINESS SERVICE ID										SUBTOTAL																				0.00 DR										826-GBP										0.00 CR										826-GBP																			

RUN DATE: MM/DD/YY
PAGE NO: 1

MASTERCARD WORLDWIDE
CLEARING CYCLE XXX NOTIFICATION
YYYY-MM-DD

Reconciliation

IPM Reconciliation Messages for Clearing and Settlement Data

Clearing Cycle Notification Report (IP727020-AA), page 2: MasterCard Settled Transactions

IP727020-AA
ACCEPTANCE BRAND: MCC
BUSINESS SERVICE LEVEL: INTRACOUNTRY
BUSINESS SERVICE ID: 999002
FILE ID: XXX/YYMMDD/XXXXXXXXXX/99999
MEMBER ID: XXXXXXXXXXXX

MASTERCARD SETTLED

TRANS. FUNC. PROC. CODE	IRD	COUNTS	RECON AMOUNT	RECON CURR CODE	TRANS FEE	FEE CURR CODE
FIRST PRES. CASH DISB. ORIG	75	XXXXXXXXXX	0.00 DR	826-GBP	0.00 DR	826-GBP
FIRST PRES. TOTAL		XXXXXXXXXX	0.00 DR	826-GBP	0.00 DR	826-GBP
INTRACOUNTRY MASTERCARD SETTLED BUSINESS SERVICE ID SUBTOTAL		XXXXXXXXXX	0.00 DR	826-GBP	0.00 DR	826-GBP

MASTERCARD WORLDWIDE
CLEARING CYCLE XXX - NOTIFICATION
YYYY-MM-DD

RUN DATE: MM/DD/YY
PAGE NO: 2

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Clearing Cycle Notification Report (IP727020-AA), page 3: MasterCard Settled Transactions

IP727020-AA		MASTERCARD WORLDWIDE		RUN DATE: MM/DD/YY	
		CLEARING CYCLE XXX - NOTIFICATION		PAGE NO: 3	
		YYY-MM-DD			
ACCEPTANCE BRAND : MCC					
BUSINESS SERVICE LEVEL : INTRACOUNTRY					
MEMBER ID: XXXXXXXXXXXX					
CURRENCY CODE : 826-GBP					
BUSINESS SERVICE ID	FILE ID	ORIG/RVSL	RECON. AMOUNT	TRANSACTION FEE	
999001	XXX/YMMDD/XXXXXXXXXX/99999	ORIG	0.00 DR	0.00 CR	
999002	XXX/YMMDD/XXXXXXXXXX/99999	ORIG	0.00 DR	0.00 DR	
GRAND TOTAL			0.00 DR	0.00 DR	
			YYY-MM-DD		

Reconciliation

IPM Reconciliation Messages for Clearing and Settlement Data

NOTE

This report is not available for customers submitting only Collection Only transaction data.

Report IP727020-AA Field Descriptions

Field	Description
Run Date	The date on which this report was produced.
Page	The page number within the report.
Acceptance Brand (Card Program Identifier)	The code for the MasterCard or proprietary service marks under whose umbrella transactions are processed. As an example, MCC (MasterCard Card) is a card program.
Business Service Level	Identifies the interchange relationship for the business arrangement. Examples are intracountry, intraregional, and interregional.
Business Service ID	A unique code that identifies the specific interchange agreement assigned to the transaction.
File ID	The logical file ID to which the data in this report pertains.
Member ID	The identifier that the association assigns to a customer (also referred to as ICA number).
Settlement Indicator	Identifies the settlement disposition of the reported transactions. Values are M—MasterCard Settled and B—Bilateral (no settlement).
Trans. Func. (Transaction Function)	The IPM Message Type Identifier and Function Code combination that defines the transaction. Examples of transaction functions are first presentment, first chargeback, and second presentment.
Proc. Code (Processing Code)	Describes the effect of a transaction on a customer account and the type of account affected. Examples are purchase, payment credit, and ATM cash withdrawal. All transactions are defined as either an original or a reversal.
IRD	The interchange rate designator defines the interchange program for which the transactions were presented.
Counts	The number of transactions accumulated for the applicable processing code.
Recon. Amount (Reconciliation Amount)	The total net amount (with fees applied) of the transactions in reconciliation currency for the applicable processing code. NOTE: MasterCard does not settle Collection Only and Bilateral transactions; therefore, the field contains a zero.

Field	Description
Recon. Currency Code (Reconciliation Currency Code)	The numeric and alpha ISO currency code associated with the reconciliation currency (Always 840-USD for Collection Only and Bilateral.)
Trans. Fee (Transaction Fee)	The total of the transaction fees applicable to the transactions for the processing code. NOTE: Bilateral transactions are not settled by MasterCard; therefore, the field contains a zero.
Fee Curr. Code (Fee Currency Code)	The numeric and alpha ISO currency code associated with the fee currency. (Always 840-USD for Bilateral.)
Total	The total count and net amount (with fees applied) of the transactions in reconciliation currency for the applicable transaction function.
Subtotal	The subtotal of the MasterCard Settled, Collection Only, or Bilateral transaction amounts for the specified Business Service level. NOTE: MasterCard does not settle Collection Only and Bilateral transactions; therefore, the field contains a zero.

Clearing Cycle Summary Reconciliation Report (IP728010-AA)

The Clearing Cycle Summary Reconciliation Report—which is optional and is generated once per clearing cycle by the clearing system—provides customers with an additional reconciliation tool by providing specific clearing totals summarized by clearing cycle.

This report includes reconciliation totals at the following levels:

- Acceptance Brand
- Business Service Level and ID
- Member ID (sender or receiver)
- Logical file ID to MasterCard or logical file ID from MasterCard
- Totals in the appropriate reconciliation currency, and that reconciliation currency code

Reconciliation

IPM Reconciliation Messages for Clearing and Settlement Data

Clearing Cycle Summary Report (IP728010-AA), page 1

IP728010-AA	MASTER CARD WORLDWIDE	RECON.
ACCEPANCE BRAND: DMC	CLEARING CYCLE XXX	CURR.
BUSINESS SERVICE LEVEL: INTRAREGIONAL	YYYY-MM-DD	CODE
MEMBER ID: XXXXXXXXXXXX		
CURRENCY CODE : 356 - INR		
BUSINESS SERVICE ID	FILE ID	NET RECON
	TO MASTERCARD	CURRENCY AMOUNT
999001	XXXX/YYMMDD/XXXXXXXXXX/99999	23,983.05 DR
TOTAL		23,983.05 DR
		356-INR
		356-INR

RUN DATE: MM/DD/YY
RUN TIME: HH.MM.SS
PAGE NO: 1

Clearing Cycle Summary Report (IP728010-AA), page 2

IP728010-AA		MASTERCARD WORLDWIDE		RUN DATE: MM/DD/YY	
ACCEPTANCE BRAND: MCC		CLEARING CYCLE XXX		RUN TIME: HH.MM.SS	
BUSINESS SERVICE LEVEL: INTERREGIONAL		YYY-MM-DD		PAGE NO: 2	
MEMBER ID: XXXXXXXXXXXX					
CURRENCY CODE : 360 - IDR					
BUSINESS SERVICE ID	FILE ID TO MASTERCARD	FILE ID FROM MASTERCARD	NET RECON CURRENCY AMOUNT	RECON. CURR. CODE	
999101	XXX/YTMDD/XXXXXXXXXXXX/99999		12,548 CR	360-IDR	
TOTAL			12,548 CR	360-IDR	
BUSINESS SERVICE LEVEL: INTERREGIONAL					
CURRENCY CODE : 376 - ILS					
BUSINESS SERVICE ID	FILE ID TO MASTERCARD	FILE ID FROM MASTERCARD	NET RECON CURRENCY AMOUNT	RECON. CURR. CODE	
999101	XXX/YTMDD/XXXXXXXXXXXX/99999		125.48 CR	376-ILS	
TOTAL			125.48 CR	376-ILS	
BUSINESS SERVICE LEVEL: INTERREGIONAL					
CURRENCY CODE : 388 - JMD					
BUSINESS SERVICE ID	FILE ID TO MASTERCARD	FILE ID FROM MASTERCARD	NET RECON CURRENCY AMOUNT	RECON. CURR. CODE	
999101	XXX/YTMDD/XXXXXXXXXXXX/99999		125.48 CR	388-JMD	
TOTAL			125.48 CR	388-JMD	

Reconciliation

IPM Reconciliation Messages for Clearing and Settlement Data

Clearing Cycle Summary Report (IP728010-AA), page 3

RUN DATE: MM/DD/YY
 RUN TIME: HH.MM.SS
 PAGE NO: 3

IP728010-AA		MASTERCARD WORLDWIDE		RECON.	
ACCEPTANCE BRAND: MCC		CLEARING CYCLE XXX		CURR.	
BUSINESS SERVICE LEVEL: INTERREGIONAL		YYYY-MM-DD		CODE	
MEMBER ID: XXXXXXXXXX					
CURRENCY CODE : 392 - JPY					
BUSINESS SERVICE ID	FILE ID TO MASTERCARD	FILE ID FROM MASTERCARD	NET RECON CURRENCY AMOUNT		
999101	XXX/YYMMDD/XXXXXXXXXXXX/99999		12,548 CR	392-JPY	
TOTAL			12,548 CR	392-JPY	
BUSINESS SERVICE LEVEL: INTERREGIONAL					
CURRENCY CODE : 398 - KZT					
BUSINESS SERVICE ID	FILE ID TO MASTERCARD	FILE ID FROM MASTERCARD	NET RECON CURRENCY AMOUNT		
999101	XXX/YYMMDD/XXXXXXXXXXXX/99999		125.48 CR	398-KZT	
TOTAL			125.48 CR	398-KZT	
BUSINESS SERVICE LEVEL: INTERREGIONAL					
CURRENCY CODE : 400 - JOD					
BUSINESS SERVICE ID	FILE ID TO MASTERCARD	FILE ID FROM MASTERCARD	NET RECON CURRENCY AMOUNT		
999101	XXX/YYMMDD/XXXXXXXXXXXX/99999		12.548 CR	400-JOD	
TOTAL			12.548 CR	400-JOD	

Clearing Cycle Summary Report (IP728010-AA), page 4

RUN DATE: MM/DD/YY
RUN TIME: HH.MM.SS
PAGE NO: 4

IP728010-AA		MASTERCARD WORLDWIDE CLEARING CYCLE XXX YYYY-MM-DD			
ACCEPTANCE BRAND: MCC		FILE ID	FROM MASTERCARD	NET RECON CURRENCY AMOUNT	RECON. CURR. CODE
BUSINESS SERVICE LEVEL: INTERREGIONAL		TO MASTERCARD			
MEMBER ID: XXXXXXXXXXXX					
CURRENCY CODE : 404 - KES					
BUSINESS SERVICE ID	FILE ID TO MASTERCARD				
999101	XXX/YYMMDD/XXXXXXXXXXXX/99999			125.48 CR	404-KES
TOTAL				125.48 CR	404-KES
BUSINESS SERVICE LEVEL: INTERREGIONAL					
CURRENCY CODE : 408 - KPW					
BUSINESS SERVICE ID	FILE ID TO MASTERCARD				
999101	XXX/YYMMDD/XXXXXXXXXXXX/99999			125.48 CR	408-KPW
TOTAL				125.48 CR	408-KPW
BUSINESS SERVICE LEVEL: INTERREGIONAL					
CURRENCY CODE : 410 - KRW					
BUSINESS SERVICE ID	FILE ID TO MASTERCARD				
999101	XXX/YYMMDD/XXXXXXXXXXXX/99999			12,548 CR	410-KRW
TOTAL				12,548 CR	410-KRW

Reconciliation

IPM Reconciliation Messages for Clearing and Settlement Data

Clearing Cycle Summary Report (IP728010-AA), page 5

IP728010-AA		MASTERCARD WORLDWIDE		RUN DATE: MM/DD/YY	
ACCEPTANCE BRAND: MCC		CLEARING CYCLE XXX		RUN TIME: HH.MM.SS	
BUSINESS SERVICE LEVEL: INTERREGIONAL		YYY-MM-DD		PAGE NO: 5	
MEMBER ID: XXXXXXXXXXXX					
CURRENCY CODE : 414 - KWD					
BUSINESS SERVICE ID	FILE ID TO MASTERCARD	FILE ID FROM MASTERCARD	NET RECON CURRENCY AMOUNT	RECON. CURR. CODE	
999101	XXX/YTMDD/XXXXXXXXXXXX/99999		12.548 CR	414-KWD	
TOTAL			12.548 CR	414-KWD	
BUSINESS SERVICE LEVEL: INTERREGIONAL					
CURRENCY CODE : 417 - KGS					
BUSINESS SERVICE ID	FILE ID TO MASTERCARD	FILE ID FROM MASTERCARD	NET RECON CURRENCY AMOUNT	RECON. CURR. CODE	
999101	XXX/YTMDD/XXXXXXXXXXXX/99999		125.48 CR	417-KGS	
TOTAL			125.48 CR	417-KGS	
BUSINESS SERVICE LEVEL: INTERREGIONAL					
CURRENCY CODE : 512 - OMR					
BUSINESS SERVICE ID	FILE ID TO MASTERCARD	FILE ID FROM MASTERCARD	NET RECON CURRENCY AMOUNT	RECON. CURR. CODE	
999101	XXX/YTMDD/XXXXXXXXXXXX/99999		12.548 CR	512-OMR	
TOTAL			12.548 CR	512-OMR	

Clearing Cycle Summary Report (IP728010-AA), page 6

IP728010-AA		MASTERCARD WORLDWIDE		RUN DATE: MM/DD/YY	
ACCEPTANCE BRAND: MCC		CLEARING CYCLE XXX		RUN TIME: HH.MM.SS	
BUSINESS SERVICE LEVEL: INTERREGIONAL		YYY-MM-DD		PAGE NO: 6	
MEMBER ID: XXXXXXXXXXXX					
CURRENCY CODE : 516 - NAD					
BUSINESS SERVICE ID	FILE ID TO MASTERCARD	FILE ID FROM MASTERCARD	NET RECON CURRENCY AMOUNT	RECON. CURR. CODE	
999101	XXX/YTMDD/XXXXXXXXXXXX/99999		125.48 CR	516-NAD	
TOTAL			125.48 CR	516-NAD	
BUSINESS SERVICE LEVEL: INTERREGIONAL					
CURRENCY CODE : 524 - NPR					
BUSINESS SERVICE ID	FILE ID TO MASTERCARD	FILE ID FROM MASTERCARD	NET RECON CURRENCY AMOUNT	RECON. CURR. CODE	
999101	XXX/YTMDD/XXXXXXXXXXXX/99999		125.48 CR	524-NPR	
TOTAL			125.48 CR	524-NPR	
BUSINESS SERVICE LEVEL: INTERREGIONAL					
CURRENCY CODE : 532 - ANG					
BUSINESS SERVICE ID	FILE ID TO MASTERCARD	FILE ID FROM MASTERCARD	NET RECON CURRENCY AMOUNT	RECON. CURR. CODE	
999101	XXX/YTMDD/XXXXXXXXXXXX/99999		125.48 CR	532-ANG	
TOTAL			125.48 CR	532-ANG	

Reconciliation

IPM Reconciliation Messages for Clearing and Settlement Data

Clearing Cycle Summary Report (IP728010-AA), page 7

IP728010-AA ACCEPTANCE BRAND: MCC BUSINESS SERVICE LEVEL: INTERREGIONAL MEMBER ID: XXXXXXXXXXXX CURRENCY CODE : 533 - AWG				MASTERCARD WORLDWIDE CLEARING CYCLE XXX YYYY-MM-DD				RUN DATE: MM/DD/YY RUN TIME: HH.MM.SS PAGE NO: 7	
BUSINESS SERVICE ID	FILE ID TO MASTERCARD	FILE ID FROM MASTERCARD	NET RECON CURRENCY AMOUNT	RECON. CURR. CODE					
999101	XXX/YTMDD/XXXXXXXXXXXX/99999		125.48 CR	533-AWG					
TOTAL			125.48 CR	533-AWG					
BUSINESS SERVICE LEVEL: INTERREGIONAL CURRENCY CODE : 548 - VUV									
BUSINESS SERVICE ID	FILE ID TO MASTERCARD	FILE ID FROM MASTERCARD	NET RECON CURRENCY AMOUNT	RECON. CURR. CODE					
999101	XXX/YTMDD/XXXXXXXXXXXX/99999		12,548 CR	548-VUV					
TOTAL			12,548 CR	548-VUV					
BUSINESS SERVICE LEVEL: INTERREGIONAL CURRENCY CODE : 554 - NZD									
BUSINESS SERVICE ID	FILE ID TO MASTERCARD	FILE ID FROM MASTERCARD	NET RECON CURRENCY AMOUNT	RECON. CURR. CODE					
999101	XXX/YTMDD/XXXXXXXXXXXX/99999		125.48 CR	554-NZD					
TOTAL			125.48 CR	554-NZD					

Clearing Cycle Summary Report (IP728010-AA), page 8

IP728010-AA		MASTERCARD WORLDWIDE		RUN DATE: MM/DD/YY	
ACCEPTANCE BRAND: MCC		CLEARING CYCLE XXX		RUN TIME: HH.MM.SS	
BUSINESS SERVICE LEVEL: INTERREGIONAL		YYY-MM-DD		PAGE NO: 8	
MEMBER ID: XXXXXXXXXXXX					
CURRENCY CODE : 558 - NIO					
BUSINESS SERVICE ID	FILE ID TO MASTERCARD	FILE ID FROM MASTERCARD	NET RECON CURRENCY AMOUNT	RECON. CURR. CODE	
999101	XXX/YTMDD/XXXXXXXXXXXX/99999		125.48 CR	558-NIO	
TOTAL			125.48 CR	558-NIO	
BUSINESS SERVICE LEVEL: INTERREGIONAL					
CURRENCY CODE : 566 - NGN					
BUSINESS SERVICE ID	FILE ID TO MASTERCARD	FILE ID FROM MASTERCARD	NET RECON CURRENCY AMOUNT	RECON. CURR. CODE	
999101	XXX/YTMDD/XXXXXXXXXXXX/99999		125.48 CR	566-NGN	
TOTAL			125.48 CR	566-NGN	
BUSINESS SERVICE LEVEL: INTERREGIONAL					
CURRENCY CODE : 590 - PGK					
BUSINESS SERVICE ID	FILE ID TO MASTERCARD	FILE ID FROM MASTERCARD	NET RECON CURRENCY AMOUNT	RECON. CURR. CODE	
999101	XXX/YTMDD/XXXXXXXXXXXX/99999		125.48 CR	590-PGK	
TOTAL			125.48 CR	590-PGK	

Reconciliation

IPM Reconciliation Messages for Clearing and Settlement Data

Clearing Cycle Summary Report (IP728010-AA), page 9

RUN DATE: MM/DD/YY
 RUN TIME: HH.MM.SS
 PAGE NO: 9

IP728010-AA		MASTERCARD WORLDWIDE		RECON.	
ACCEPTANCE BRAND: MCC		CLEARING CYCLE XXXX		CURR.	
BUSINESS SERVICE LEVEL: INTERREGIONAL		YYYY-MM-DD		CODE	
MEMBER ID: XXXXXXXXXXXX					
CURRENCY CODE : 598 - PYG					
BUSINESS SERVICE ID	FILE ID TO MASTERCARD	FILE ID FROM MASTERCARD	NET RECON CURRENCY AMOUNT		
999101	XXX/YYMMDD/XXXXXXXXXXXX/99999		12,548 CR	598-PYG	
TOTAL			12,548 CR	598-PYG	
BUSINESS SERVICE LEVEL: INTERREGIONAL					
CURRENCY CODE : 600 - PEN					
BUSINESS SERVICE ID	FILE ID TO MASTERCARD	FILE ID FROM MASTERCARD	NET RECON CURRENCY AMOUNT		
999101	XXX/YYMMDD/XXXXXXXXXXXX/99999		125.48 CR	600-PEN	
TOTAL			125.48 CR	600-PEN	
BUSINESS SERVICE LEVEL: INTERREGIONAL					
CURRENCY CODE : 624 - QAR					
BUSINESS SERVICE ID	FILE ID TO MASTERCARD	FILE ID FROM MASTERCARD	NET RECON CURRENCY AMOUNT		
999101	XXX/YYMMDD/XXXXXXXXXXXX/99999		125.48 CR	624-QAR	
TOTAL			125.48 CR	624-QAR	

Clearing Cycle Summary Report (IP728010-AA), page 10

IP728010-AA ACCEPTANCE BRAND: MCC BUSINESS SERVICE LEVEL: INTERREGIONAL MEMBER ID: XXXXXXXXXXXX CURRENCY CODE : 634 - ROL	MASTERCARD WORLDWIDE CLEARING CYCLE XXX YYYY-MM-DD	RUN DATE: MM/DD/YY RUN TIME: HH.MM.SS PAGE NO: 10
BUSINESS SERVICE ID 999101 TOTAL	FILE ID TO MASTERCARD XXX/YTMDD/XXXXXXXXXXXX/99999	RECON. CURR. CODE 634-ROL 634-ROL
	FILE ID FROM MASTERCARD	NET RECON CURRENCY AMOUNT 12,548 CR 12,548 CR
BUSINESS SERVICE LEVEL: INTERREGIONAL CURRENCY CODE : 642 - RUB		
BUSINESS SERVICE ID 999101 TOTAL	FILE ID TO MASTERCARD XXX/YTMDD/XXXXXXXXXXXX/99999	RECON. CURR. CODE 642-RUB 642-RUB
	FILE ID FROM MASTERCARD	NET RECON CURRENCY AMOUNT 125.48 CR 125.48 CR
BUSINESS SERVICE LEVEL: INTERREGIONAL CURRENCY CODE : 643 - RWF		
BUSINESS SERVICE ID 999101 TOTAL	FILE ID TO MASTERCARD XXX/YTMDD/XXXXXXXXXXXX/99999	RECON. CURR. CODE 643-RWF 643-RWF
	FILE ID FROM MASTERCARD	NET RECON CURRENCY AMOUNT 12,548 CR 12,548 CR

Reconciliation

IPM Reconciliation Messages for Clearing and Settlement Data

Clearing Cycle Summary Report (IP728010-AA), page 11

IP728010-AA		MASTERCARD WORLDWIDE		RUN DATE: MM/DD/YY	
ACCEPTANCE BRAND: MCC		CLEARING CYCLE XXX		RUN TIME: HH.MM.SS	
BUSINESS SERVICE LEVEL: INTERREGIONAL		YYY-MM-DD		PAGE NO: 11	
MEMBER ID: XXXXXXXXXX					
CURRENCY CODE : 646 - SHP					
BUSINESS SERVICE ID	FILE ID TO MASTERCARD	FILE ID FROM MASTERCARD	NET RECON CURRENCY AMOUNT	RECON. CURR. CODE	
999101	XXX/YYMMDD/XXXXXXXXXXXX/99999		125.48 CR	646-SHP	
TOTAL			125.48 CR	646-SHP	
BUSINESS SERVICE LEVEL: INTERREGIONAL					
CURRENCY CODE : 654 - STD					
BUSINESS SERVICE ID	FILE ID TO MASTERCARD	FILE ID FROM MASTERCARD	NET RECON CURRENCY AMOUNT	RECON. CURR. CODE	
999101	XXX/YYMMDD/XXXXXXXXXXXX/99999		125.48 CR	654-STD	
TOTAL			125.48 CR	654-STD	

Clearing Cycle Summary Report (IP728010-AA), page 12

IP728010-AA				RUN DATE: MM/DD/YY			
ACCEPTANCE BRAND: DMC				RUN TIME: HH.MM.SS			
BUSINESS SERVICE LEVEL: INTRAREGIONAL				PAGE NO: 12			
MEMBER ID: XXXXXXXXXXXX							
CURRENCY CODE : 356 - INR							
				MASTERCARD WORLDWIDE			
				CLEARING CYCLE XXX SUMMARY			
				YYYY-MM-DD			
CYCLE	FILE ID	FILE ID	RECON.	NET RECON	CURR.		
ACTIVITY	TO MASTERCARD	FROM MASTERCARD	CURR.	CURRENCY AMOUNT	CODE		
CYCLE XX		XXX/YYMMDD/XXXXXXXXXX/99999	356-INR	23,983.05 DR	356-INR		
TOTAL				23,983.05 DR	356-INR		

Reconciliation

IPM Reconciliation Messages for Clearing and Settlement Data

Clearing Cycle Summary Report (IP728010-AA), page 13

IP728010-AA		MASTERCARD WORLDWIDE		RUN DATE: MM/DD/YY	
ACCEPTANCE BRAND: MCC		CLEARING CYCLE XXX SUMMARY		RUN TIME: HH.MM.YY	
BUSINESS SERVICE LEVEL: INTERREGIONAL		YYY-MM-DD		PAGE NO: 13	
MEMBER ID: XXXXXXXXXXXX					
CURRENCY CODE : 360 - IDR					
CYCLE	FILE ID	FILE ID	NET RECON	RECON.	
ACTIVITY	TO MASTERCARD	FROM MASTERCARD	CURRENCY AMOUNT	CURR.	
				CODE	
CYCLE XX	XXX/YYMMDD/XXXXXXXXXXXX/99999		12,548 CR	360-IDR	
TOTAL			12,548 CR	360-IDR	
BUSINESS SERVICE LEVEL: INTERREGIONAL					
CURRENCY CODE : 376 - ILS					
CYCLE	FILE ID	FILE ID	NET RECON	RECON.	
ACTIVITY	TO MASTERCARD	FROM MASTERCARD	CURRENCY AMOUNT	CURR.	
				CODE	
CYCLE XX	XXX/YYMMDD/XXXXXXXXXXXX/99999		125.48 CR	376-ILS	
TOTAL			125.48 CR	376-ILS	
BUSINESS SERVICE LEVEL: INTERREGIONAL					
CURRENCY CODE : 388 - JMD					
CYCLE	FILE ID	FILE ID	NET RECON	RECON.	
ACTIVITY	TO MASTERCARD	FROM MASTERCARD	CURRENCY AMOUNT	CURR.	
				CODE	
CYCLE XX	XXX/YYMMDD/XXXXXXXXXXXX/99999		125.48 CR	388-JMD	
TOTAL			125.48 CR	388-JMD	

Clearing Cycle Summary Report (IP728010-AA), page 14

IP728010-AA		MASTERCARD WORLDWIDE		RUN DATE: MM/DD/YY	
ACCEPTANCE BRAND: MCC		CLEARING CYCLE XXX SUMMARY		RUN TIME: HH.MM.SS	
BUSINESS SERVICE LEVEL: INTERREGIONAL		YYY-MM-DD		PAGE NO: 14	
MEMBER ID: XXXXXXXXXXXX					
CURRENCY CODE : 392 - JPY					
CYCLE	FILE ID	FILE ID	NET RECON	RECON.	
ACTIVITY	TO MASTERCARD	FROM MASTERCARD	CURRENCY AMOUNT	CURR.	
				CODE	
CYCLE XX	XXX/YMMDD/XXXXXXXXXXXX/99999		12,548 CR	392-JPY	
TOTAL			12,548 CR	392-JPY	
BUSINESS SERVICE LEVEL: INTERREGIONAL					
CURRENCY CODE : 398 - KZT					
CYCLE	FILE ID	FILE ID	NET RECON	RECON.	
ACTIVITY	TO MASTERCARD	FROM MASTERCARD	CURRENCY AMOUNT	CURR.	
				CODE	
CYCLE XX	XXX/YMMDD/XXXXXXXXXXXX/99999		125.48 CR	398-KZT	
TOTAL			125.48 CR	398-KZT	
BUSINESS SERVICE LEVEL: INTERREGIONAL					
CURRENCY CODE : 400 - JOD					
CYCLE	FILE ID	FILE ID	NET RECON	RECON.	
ACTIVITY	TO MASTERCARD	FROM MASTERCARD	CURRENCY AMOUNT	CURR.	
				CODE	
CYCLE XX	XXX/YMMDD/XXXXXXXXXXXX/99999		12.548 CR	400-JOD	
TOTAL			12.548 CR	400-JOD	

Reconciliation

IPM Reconciliation Messages for Clearing and Settlement Data

Clearing Cycle Summary Report (IP728010-AA), page 15

RUN DATE: MM/DD/YY
 RUN TIME: HH.MM.SS
 PAGE NO: 15

IP728010-AA				MASTERCARD WORLDWIDE			
ACCEPTANCE BRAND: MCC				CLEARING CYCLE XXX SUMMARY			
BUSINESS SERVICE LEVEL: INTERREGIONAL				YYYY-MM-DD			
MEMBER ID: XXXXXXXXXXXX							
CURRENCY CODE : 404 - KES							
CYCLE ACTIVITY	FILE ID TO MASTERCARD	FILE ID FROM MASTERCARD	NET RECON CURRENCY AMOUNT	RECON. CURR. CODE			
CYCLE XX	XXX/YYMMDD/XXXXXXXXXXXX/99999		125.48 CR	404-KES			
TOTAL			125.48 CR	404-KES			
BUSINESS SERVICE LEVEL: INTERREGIONAL							
CURRENCY CODE : 408 - KPW							
CYCLE ACTIVITY	FILE ID TO MASTERCARD	FILE ID FROM MASTERCARD	NET RECON CURRENCY AMOUNT	RECON. CURR. CODE			
CYCLE XX	XXX/YYMMDD/XXXXXXXXXXXX/99999		125.48 CR	408-KPW			
TOTAL			125.48 CR	408-KPW			
BUSINESS SERVICE LEVEL: INTERREGIONAL							
CURRENCY CODE : 410 - KRW							
CYCLE ACTIVITY	FILE ID TO MASTERCARD	FILE ID FROM MASTERCARD	NET RECON CURRENCY AMOUNT	RECON. CURR. CODE			
CYCLE XX	XXX/YYMMDD/XXXXXXXXXXXX/99999		12,548 CR	410-KRW			
TOTAL			12,548 CR	410-KRW			

Clearing Cycle Summary Report (IP728010-AA), page 16

RUN DATE: MM/DD/YY
RUN TIME: HH.MM.SS
PAGE NO: 16

IP728010-AA				MASTERCARD WORLDWIDE			
ACCEPTANCE BRAND: MCC				CLEARING CYCLE XXX SUMMARY			
BUSINESS SERVICE LEVEL: INTERREGIONAL				YYYY-MM-DD			
MEMBER ID: XXXXXXXXXX							
CURRENCY CODE : 414 - KWD							
CYCLE	FILE ID	FILE ID	RECON.				
ACTIVITY	TO MASTERCARD	FROM MASTERCARD	CURR.				
CYCLE XX	XXX/YYMMDD/XXXXXXXXXXXX/99999		CODE				
TOTAL			414-KWD				
BUSINESS SERVICE LEVEL: INTERREGIONAL							
CURRENCY CODE : 417 - KGS							
CYCLE	FILE ID	FILE ID	RECON.				
ACTIVITY	TO MASTERCARD	FROM MASTERCARD	CURR.				
CYCLE XX	XXX/YYMMDD/XXXXXXXXXXXX/99999		CODE				
TOTAL			417-KGS				
BUSINESS SERVICE LEVEL: INTERREGIONAL							
CURRENCY CODE : 512 - OMR							
CYCLE	FILE ID	FILE ID	RECON.				
ACTIVITY	TO MASTERCARD	FROM MASTERCARD	CURR.				
CYCLE XX	XXX/YYMMDD/XXXXXXXXXXXX/99999		CODE				
TOTAL			512-OMR				

IP728010-AA				MASTERCARD WORLDWIDE			
ACCEPTANCE BRAND: MCC				CLEARING CYCLE XXX SUMMARY			
BUSINESS SERVICE LEVEL: INTERREGIONAL				YYYY-MM-DD			
MEMBER ID: XXXXXXXXXX							
CURRENCY CODE : 414 - KWD							
CYCLE	FILE ID	FILE ID	RECON.				
ACTIVITY	TO MASTERCARD	FROM MASTERCARD	CURR.				
CYCLE XX	XXX/YYMMDD/XXXXXXXXXXXX/99999		CODE				
TOTAL			414-KWD				
BUSINESS SERVICE LEVEL: INTERREGIONAL							
CURRENCY CODE : 417 - KGS							
CYCLE	FILE ID	FILE ID	RECON.				
ACTIVITY	TO MASTERCARD	FROM MASTERCARD	CURR.				
CYCLE XX	XXX/YYMMDD/XXXXXXXXXXXX/99999		CODE				
TOTAL			417-KGS				
BUSINESS SERVICE LEVEL: INTERREGIONAL							
CURRENCY CODE : 512 - OMR							
CYCLE	FILE ID	FILE ID	RECON.				
ACTIVITY	TO MASTERCARD	FROM MASTERCARD	CURR.				
CYCLE XX	XXX/YYMMDD/XXXXXXXXXXXX/99999		CODE				
TOTAL			512-OMR				

Reconciliation

IPM Reconciliation Messages for Clearing and Settlement Data

Clearing Cycle Summary Report (IP728010-AA), page 17

IP728010-AA		MASTERCARD WORLDWIDE		RUN DATE: MM/DD/YY	
ACCEPTANCE BRAND: MCC		CLEARING CYCLE XXX SUMMARY		RUN TIME: HH.MM.SS	
BUSINESS SERVICE LEVEL: INTERREGIONAL		YYY-MM-DD		PAGE NO: 17	
MEMBER ID: XXXXXXXXXXXX					
CURRENCY CODE : 516 - NAD					
CYCLE	FILE ID	FILE ID	NET RECON	RECON.	
ACTIVITY	TO MASTERCARD	FROM MASTERCARD	CURRENCY AMOUNT	CURR.	
				CODE	
CYCLE XX	XXX/YTMDD/XXXXXXXXXXXX/99999		125.48 CR	516-NAD	
TOTAL			125.48 CR	516-NAD	
BUSINESS SERVICE LEVEL: INTERREGIONAL					
CURRENCY CODE : 524 - NPR					
CYCLE	FILE ID	FILE ID	NET RECON	RECON.	
ACTIVITY	TO MASTERCARD	FROM MASTERCARD	CURRENCY AMOUNT	CURR.	
				CODE	
CYCLE XX	XXX/YTMDD/XXXXXXXXXXXX/99999		125.48 CR	524-NPR	
TOTAL			125.48 CR	524-NPR	
BUSINESS SERVICE LEVEL: INTERREGIONAL					
CURRENCY CODE : 532 - ANG					
CYCLE	FILE ID	FILE ID	NET RECON	RECON.	
ACTIVITY	TO MASTERCARD	FROM MASTERCARD	CURRENCY AMOUNT	CURR.	
				CODE	
CYCLE XX	XXX/YTMDD/XXXXXXXXXXXX/99999		125.48 CR	532-ANG	
TOTAL			125.48 CR	532-ANG	

Clearing Cycle Summary Report (IP728010-AA), page 18

IP728010-AA ACCEPTANCE BRAND: MCC BUSINESS SERVICE LEVEL: INTERREGIONAL MEMBER ID: XXXXXXXXXXXX CURRENCY CODE : 533 - AWG	MASTERCARD WORLDWIDE CLEARING CYCLE XXX SUMMARY YYYY-MM-DD	RUN DATE: MM/DD/YY RUN TIME: HH.MM.SS PAGE NO: 18

CYCLE ACTIVITY CYCLE XX TOTAL BUSINESS SERVICE LEVEL: INTERREGIONAL CURRENCY CODE : 548 - VUV	FILE ID FROM MASTERCARD XXX/YTMDD/XXXXXXXXXXXX/99999	RECON. CURR. CODE NET RECON CURRENCY AMOUNT 125.48 CR 125.48 CR 533-AWG 533-AWG
CYCLE ACTIVITY CYCLE XX TOTAL BUSINESS SERVICE LEVEL: INTERREGIONAL CURRENCY CODE : 548 - VUV	FILE ID FROM MASTERCARD XXX/YTMDD/XXXXXXXXXXXX/99999	RECON. CURR. CODE NET RECON CURRENCY AMOUNT 12,548 CR 12,548 CR 548-VUV 548-VUV
CYCLE ACTIVITY CYCLE XX TOTAL BUSINESS SERVICE LEVEL: INTERREGIONAL CURRENCY CODE : 554 - NZD	FILE ID FROM MASTERCARD XXX/YTMDD/XXXXXXXXXXXX/99999	RECON. CURR. CODE NET RECON CURRENCY AMOUNT 125.48 CR 125.48 CR 554-NZD 554-NZD

Reconciliation

IPM Reconciliation Messages for Clearing and Settlement Data

Clearing Cycle Summary Report (IP728010-AA), page 19

IP728010-AA ACCEPTANCE BRAND: MCC BUSINESS SERVICE LEVEL: INTERREGIONAL MEMBER ID: XXXXXXXXXXXX CURRENCY CODE : 558 - NIO				MASTERCARD WORLDWIDE CLEARING CYCLE XXX SUMMARY YYYY-MM-DD				RUN DATE: MM/DD/YY RUN TIME: HH.MM.SS PAGE NO: 19	
CYCLE ACTIVITY	FILE ID TO MASTERCARD	FILE ID FROM MASTERCARD	NET RECON CURRENCY AMOUNT	RECON. CURR. CODE					
CYCLE XX	XXX/YTMDD/XXXXXXXXXX/99999		125.48 CR	558-NIO					
TOTAL			125.48 CR	558-NIO					
BUSINESS SERVICE LEVEL: INTERREGIONAL CURRENCY CODE : 566 - NGN									
CYCLE ACTIVITY	FILE ID TO MASTERCARD	FILE ID FROM MASTERCARD	NET RECON CURRENCY AMOUNT	RECON. CURR. CODE					
CYCLE XX	XXX/YTMDD/XXXXXXXXXX/99999		125.48 CR	566-NGN					
TOTAL			125.48 CR	566-NGN					
BUSINESS SERVICE LEVEL: INTERREGIONAL CURRENCY CODE : 590 - PGK									
CYCLE ACTIVITY	FILE ID TO MASTERCARD	FILE ID FROM MASTERCARD	NET RECON CURRENCY AMOUNT	RECON. CURR. CODE					
CYCLE XX	XXX/YTMDD/XXXXXXXXXX/99999		125.48 CR	590-PGK					
TOTAL			125.48 CR	590-PGK					

Clearing Cycle Summary Report (IP728010-AA), page 20

IP728010-AA		MASTERCARD WORLDWIDE		RUN DATE: MM/DD/YY	
ACCEPTANCE BRAND: MCC		CLEARING CYCLE XXX SUMMARY		RUN TIME: HH.MM.SS	
BUSINESS SERVICE LEVEL: INTERREGIONAL		YYY-MM-DD		PAGE NO: 20	
MEMBER ID: XXXXXXXXXXXX					
CURRENCY CODE : 598 - PYG					
CYCLE	FILE ID	FILE ID	NET RECON	RECON.	
ACTIVITY	TO MASTERCARD	FROM MASTERCARD	CURRENCY AMOUNT	CURR.	
CYCLE XX	XXX/YTMDD/XXXXXXXXXXXX/99999		12,548 CR	CODE	598-PYG
TOTAL			12,548 CR		598-PYG
BUSINESS SERVICE LEVEL: INTERREGIONAL					
CURRENCY CODE : 600 - PEN					
CYCLE	FILE ID	FILE ID	NET RECON	RECON.	
ACTIVITY	TO MASTERCARD	FROM MASTERCARD	CURRENCY AMOUNT	CURR.	
CYCLE XX	XXX/YTMDD/XXXXXXXXXXXX/99999		125.48 CR	CODE	600-PEN
TOTAL			125.48 CR		600-PEN
BUSINESS SERVICE LEVEL: INTERREGIONAL					
CURRENCY CODE : 624 - QAR					
CYCLE	FILE ID	FILE ID	NET RECON	RECON.	
ACTIVITY	TO MASTERCARD	FROM MASTERCARD	CURRENCY AMOUNT	CURR.	
CYCLE XX	XXX/YTMDD/XXXXXXXXXXXX/99999		125.48 CR	CODE	624-QAR
TOTAL			125.48 CR		624-QAR

Reconciliation

IPM Reconciliation Messages for Clearing and Settlement Data

Clearing Cycle Summary Report (IP728010-AA), page 21

IP728010-AA		MASTERCARD WORLDWIDE		RUN DATE: MM/DD/YY	
ACCEPTANCE BRAND: MCC		CLEARING CYCLE XXX SUMMARY		RUN TIME: HH.MM.SS	
BUSINESS SERVICE LEVEL: INTERREGIONAL		YYY-MM-DD		PAGE NO: 21	
MEMBER ID: XXXXXXXXXXXX					
CURRENCY CODE : 634 - ROL					
CYCLE	FILE ID	FILE ID	NET RECON	RECON.	
ACTIVITY	TO MASTERCARD	FROM MASTERCARD	CURRENCY AMOUNT	CURR.	
				CODE	
CYCLE XX	XXX/YTMDD/XXXXXXXXXXXX/99999		12,548 CR	634-ROL	
TOTAL			12,548 CR	634-ROL	
BUSINESS SERVICE LEVEL: INTERREGIONAL					
CURRENCY CODE : 642 - RUB					
CYCLE	FILE ID	FILE ID	NET RECON	RECON.	
ACTIVITY	TO MASTERCARD	FROM MASTERCARD	CURRENCY AMOUNT	CURR.	
				CODE	
CYCLE XX	XXX/YTMDD/XXXXXXXXXXXX/99999		125.48 CR	642-RUB	
TOTAL			125.48 CR	642-RUB	
BUSINESS SERVICE LEVEL: INTERREGIONAL					
CURRENCY CODE : 643 - RWF					
CYCLE	FILE ID	FILE ID	NET RECON	RECON.	
ACTIVITY	TO MASTERCARD	FROM MASTERCARD	CURRENCY AMOUNT	CURR.	
				CODE	
CYCLE XX	XXX/YTMDD/XXXXXXXXXXXX/99999		12,548 CR	643-RWF	
TOTAL			12,548 CR	643-RWF	

Clearing Cycle Summary Report (IP728010-AA), page 22

IP728010-AA ACCEPTANCE BRAND: MCC BUSINESS SERVICE LEVEL: INTERREGIONAL MEMBER ID: XXXXXXXXXX CURRENCY CODE : 646 - SHP	MASTERCARD WORLDWIDE CLEARING CYCLE XXX SUMMARY YYYY-MM-DD	RUN DATE: MM/DD/YY RUN TIME: HH.MM.SS PAGE NO: 22																	
<table border="0" style="width: 100%;"> <tr> <td style="width: 30%;">CYCLE XX</td> <td style="width: 20%;">FILE ID TO MASTERCARD</td> <td style="width: 20%;">FILE ID FROM MASTERCARD</td> <td style="width: 20%;">NET RECON CURRENCY AMOUNT</td> <td style="width: 10%;">RECON. CURR. CODE</td> </tr> <tr> <td></td> <td>XXX/YYMMDD/XXXXXXXXXXXX/99999</td> <td></td> <td style="text-align: right;">125.48 CR</td> <td style="text-align: center;">646-SHP</td> </tr> <tr> <td colspan="3">TOTAL</td> <td style="text-align: right;">125.48 CR</td> <td style="text-align: center;">646-SHP</td> </tr> </table>			CYCLE XX	FILE ID TO MASTERCARD	FILE ID FROM MASTERCARD	NET RECON CURRENCY AMOUNT	RECON. CURR. CODE		XXX/YYMMDD/XXXXXXXXXXXX/99999		125.48 CR	646-SHP	TOTAL			125.48 CR	646-SHP		
CYCLE XX	FILE ID TO MASTERCARD	FILE ID FROM MASTERCARD	NET RECON CURRENCY AMOUNT	RECON. CURR. CODE															
	XXX/YYMMDD/XXXXXXXXXXXX/99999		125.48 CR	646-SHP															
TOTAL			125.48 CR	646-SHP															
BUSINESS SERVICE LEVEL: INTERREGIONAL CURRENCY CODE : 654 - STD																			
<table border="0" style="width: 100%;"> <tr> <td style="width: 30%;">CYCLE XX</td> <td style="width: 20%;">FILE ID TO MASTERCARD</td> <td style="width: 20%;">FILE ID FROM MASTERCARD</td> <td style="width: 20%;">NET RECON CURRENCY AMOUNT</td> <td style="width: 10%;">RECON. CURR. CODE</td> </tr> <tr> <td></td> <td>XXX/YYMMDD/XXXXXXXXXXXX/99999</td> <td></td> <td style="text-align: right;">125.48 CR</td> <td style="text-align: center;">654-STD</td> </tr> <tr> <td colspan="3">TOTAL</td> <td style="text-align: right;">125.48 CR</td> <td style="text-align: center;">654-STD</td> </tr> </table>					CYCLE XX	FILE ID TO MASTERCARD	FILE ID FROM MASTERCARD	NET RECON CURRENCY AMOUNT	RECON. CURR. CODE		XXX/YYMMDD/XXXXXXXXXXXX/99999		125.48 CR	654-STD	TOTAL			125.48 CR	654-STD
CYCLE XX	FILE ID TO MASTERCARD	FILE ID FROM MASTERCARD	NET RECON CURRENCY AMOUNT	RECON. CURR. CODE															
	XXX/YYMMDD/XXXXXXXXXXXX/99999		125.48 CR	654-STD															
TOTAL			125.48 CR	654-STD															

Reconciliation

IPM Reconciliation Messages for Clearing and Settlement Data

Clearing Cycle Summary Report (IP728010-AA), page 23

MEMBER ID: 00000001001
CLEARING DAY TOTAL AS OF CLEARING CYCLE X
RECONCILIATION
CURRENCY CODE

MASTERCARD WORLDWIDE
CLEARING DAY TOTAL
YYYY-MM-DD

RUN DATE: MM/DD/YY
RUN TIME: HH.MM.SS
PAGE NO: 23

356-INR	23,983.05 DR	125.48 CR
360-IDR	12,548 CR	125.48 CR
376-ILS	125.48 CR	125.48 CR
388-JMD	125.48 CR	125.48 CR
392-JPY	12,548 CR	125.48 CR
398-KZT	125.48 CR	125.48 CR
400-UOD	12,548 CR	125.48 CR
404-KES	125.48 CR	125.48 CR
408-KPW	125.48 CR	12,548 CR
410-KRW	12,548 CR	125.48 CR
414-KWD	12,548 CR	125.48 CR
417-KGS	125.48 CR	125.48 CR
512-OMR	12,548 CR	125.48 CR
516-NAD	125.48 CR	125.48 CR
524-NPR	125.48 CR	125.48 CR
532-ANG	125.48 CR	125.48 CR
533-AMG	125.48 CR	12,548 CR
548-VUV	12,548 CR	125.48 CR
554-NZD	125.48 CR	125.48 CR
558-NIO	125.48 CR	125.48 CR
566-NGN	125.48 CR	125.48 CR
590-PGK	125.48 CR	12,548 CR
598-PYG	12,548 CR	125.48 CR
600-PEN	125.48 CR	125.48 CR
624-QAR	125.48 CR	12,548 CR
634-ROL	12,548 CR	125.48 CR
642-RUB	125.48 CR	12,548 CR
643-RWF	125.48 CR	125.48 CR
646-SHP	125.48 CR	125.48 CR
654-STD	125.48 CR	

END OF REPORT

NOTE

This report is not available for customers submitting only Collection Only transaction data.

Report IP728010-AA Field Descriptions

Field	Description
Run Date	The date on which this report was produced.
Page	The page number within the report.
Acceptance Brand (Card Program Identifier)	The code for the MasterCard or proprietary service marks under whose umbrella transactions are processed. As an example, MCC (MasterCard Card) is a card program.
Business Service Level	Identifies the interchange relationship for the business arrangement. Examples are intracountry, intraregional, and regional.
Business Service ID	A unique code that identifies the specific interchange agreement assigned to the transaction.
Member ID	The identifier that the association assigns to a customer (also referred to as ICA number).
Cycle Activity	The clearing cycle in which the file was processed by GCMS.
File ID To MasterCard	The logical file ID of the file sent by the customer to MasterCard to which the net amounts apply.
File ID From MasterCard	The logical file ID of the file sent by MasterCard to the customer to which the net amounts apply.
Net Reconciliation Currency Amount	The total net amount (with fees applied) of the transactions in reconciliation currency for the applicable logical file ID.
Reconciliation Currency Code	The numeric and alpha ISO currency code associated with the reconciliation currency.
Clearing Day Total As Of Clearing (001–006)	The grand total net amount (with fees applied) for the specified clearing day as of clearing cycle NNN.

IPM Messages Created On Behalf of a Member Report (IP142110-AA)

Customers that receive IPM Acknowledgement Reconciliation messages receive acknowledgements for Fee Collection/1740 messages that they did not generate.

MasterCard creates this report to assist customers in their reconciliation process. The report is generated in each clearing cycle and distributed as part of bulk type T140 (Production) and T150 (Test) only if the customer had activity.

Reconciliation

IPM Reconciliation Messages for Clearing and Settlement Data

Clearing system report IP142110-AA (IPM Clearing Messages Created On Behalf of a Member) has two additional receipt options:

- Text file available in raw data, variable length version. The bulk types are TN70 (Production) and TN72 (Test) for outbound file delivery.
- or
- XML data file available in variable length version. The bulk types are TN66 (Production) and TN68 (Test) for outbound file delivery.

The data files are created and distributed after each clearing cycle. The data files do not include summary totals. If no data is available, the customer will receive a header and trailer only, with record count 0.

When multiple member IDs are packaged in a single file to the same endpoint, the data is sequenced by member ID. A header and trailer will be provided for each member ID (as shown for three customers in the following example).

XML or Raw Data File for Endpoint A

Header for customer 1

Detail for customer 1

... [detail information 1]

... [detail information 2]

Trailer for customer 1

Header for customer 2

Detail for customer 2

... [detail information 2]

... [detail information 2]

Trailer for customer 2

Header for customer 3

Detail for customer 3

... [detail information 3]

... [detail information 3]

Trailer for customer 3

Both of the data files contain the same fields that are currently on the IP142110-AA report. In addition, the data files contain the following fields. (These fields will not be added to the IP142110-AA print report.)

Name	Description
Central Site Processing Date of Original Message	Contains the value in PDS 0025 (Message Reversal Indicator), subfield 2 (Central Site Processing Date of Original Message). If PDS 0025, subfield 2 is present because the transaction is being reversed, the original message date is displayed.
File ID	For the IP142110-AA report and data files, the File ID is the MasterCard Source File ID. The File ID is found in PDS 0105 (File ID).

Table 13.1— XML Data File Distribution

The XML file version of the report contains the data shown in the following layout.

Record Type	Field Name	Field Format	Field Value	Justification
Header	Record Type	PIC X(1)	H	Left
	Distribution ID	PIC X(16)	IP142110-AA	Left
	Member ID	PIC 9(11)		Right
	Endpoint	PIC X(07)		Left

Reconciliation

IPM Reconciliation Messages for Clearing and Settlement Data

Record Type	Field Name	Field Format	Field Value	Justification
Data	Record Type	PIC X(1)	D	Left
	Transaction Originator Institution ID Code	PIC 9(11)		Right
	MTI	PIC 9(04)		Right
	Function Code	PIC 9(03)		Right
	Message Reason Code	PIC 9(04)		Right
	File ID	PIC 9(25)		Right
	CR DR Indicator	PIC X(02)		Left
	Central Site Processing Date of Original Message	PIC X(06)		Left
	Transaction Type	PIC X(02)		Left
	Processing Code	PIC 9(02)		Right
	Transaction Amount	PIC 9(12)		Right
	Transaction Currency Code	PIC 9(03)		Right
	Currency Exponent	PIC X(01)		Left
	Reconciliation Amount	PIC 9(12)		Right
	Reconciliation Currency Code	PIC 9(03)		Right
	Currency Exponent	PIC X(01)		Left
	Transaction Destination Institution ID Code	PIC 9(11)		Right
	Forwarding Institution ID Code	PIC 9(11)		Right
	Fee Collection Control Number	PIC 9(20)		Right
	Card Program Identifier	PIC X(03)		Left
	Receiving Institution ID Code	PIC 9(11)		Right
	MasterCom Control Number	PIC X(07)		Left
	Primary Account Number	PIC X(19)	¹	Left

Reconciliation
IPM Reconciliation Messages for Clearing and Settlement Data

Record Type	Field Name	Field Format	Field Value	Justification
Trailer	Record Type	PIC X(01)	T	Left
	Distribution ID	PIC X(16)	IP142110-AA	Left
	Member ID	PIC 9(11)		Right
	Endpoint	PIC X(07)		Left
	Count	PIC 9(12)	Count of XML data detail records ²	Right

¹ 16-digit PANs will be left-justified with trailing spaces. If PAN is unavailable, the field will contain "PAN NA".² Count does not include Header/Trailer records.

Table 13.2—Raw Data Distribution

The Raw Data version of the report contains the data shown in the following layout.

Record Type	Field Name	Field Format	Field Value	Justification
Header	Record Type	PIC X(01)	H	Left
	Distribution ID	PIC X(16)	IP142110-AA	Left
	Member ID	PIC 9(11)		Right
	Endpoint	PIC X(07)		Left

Reconciliation

IPM Reconciliation Messages for Clearing and Settlement Data

Record Type	Field Name	Field Format	Field Value	Justification
Data	Record Type	PIC X(01)	D	Left
	Transaction Originator Institution ID Code	PIC 9(11)		Right
	MTI	PIC 9(04)		Right
	Function Code	PIC 9(03)		Right
	Message Reason Code	PIC 9(04)		Right
	File ID	PIC 9(25)		Right
	CR DR Indicator	PIC X(02)		Left
	Central Site Processing Date of Original Message	PIC X(06)		Left
	Transaction Type	PIC X(02)		Left
	Processing Code	PIC 9(02)		Right
	Transaction Amount	PIC 9(12)		Right
	Transaction Currency Code	PIC 9(03)		Right
	Currency Exponent	PIC X(01)		Left
	Reconciliation Amount	PIC 9(12)		Right
	Reconciliation Currency Code	PIC 9(03)		Right
	Reconciliation currency exponent	PIC X(01)		Left
	Transaction Destination Institution ID Code	PIC 9(11)		Right
	Forwarding Institution ID Code	PIC 9(11)		Right
	Fee Collection Control Number	PIC 9(20)		Right
	Card Program Identifier	PIC X(03)		Left
	Receiving Institution ID Code	PIC 9(11)		Right
	MasterCom Control Number	PIC X(07)		Left
	Primary Account Number	PIC X(19)	¹	Left

Reconciliation

IPM Reconciliation Messages for Clearing and Settlement Data

Record Type	Field Name	Field Format	Field Value	Justification
Trailer	Record Type	PIC X(01)	T	Left
	Distribution ID	PIC X(16)	IP142110-AA	Left
	Member ID	PIC 9(11)		Right
	Endpoint	PIC X(07)		Left
	Count	PIC 9(12)	Count of raw data detail records ²	Right

¹ Sixteen-digit PANs will be left-justified with trailing spaces. If PAN is unavailable, the field will contain "PAN NA".² Count does not include Header/Trailer records.

Reconciliation

IPM Reconciliation Messages for Clearing and Settlement Data

IPM Messages Created On Behalf of a Member Report (IP142110-AA)

```

IP142110-AA                                RUN DATE: 09/05/08 1
                                           PAGE NO:
MEMBER ID: XXXXXXXXXXXX
MTI/FUNC CD/RSN CD : 1740/700/7800
TRANS TYPE: RR - RETRIEVAL REQUEST
PROC TRANS AMOUNT - CUR RECON AMOUNT - CUR TRANS DEST ICA FORW INST ICA/ FEE COLL CNTL No/ CARD PGM IDENT/
=====
CODE =====
19      8.00 CR - 840      8.00 CR - 840      XXXXXXXXXXXX XXXXXXXXXXXX 0000000000000000001 MCC
19      3.00 CR - 840      3.00 CR - 840      XXXXXXXXXXXX XXXXXXXXXXXX 0000000000000000002 MCC
19      3.00 CR - 840      3.00 CR - 840      XXXXXXXXXXXX XXXXXXXXXXXX 0000000000000000003 MCC
TRANS TYPE COUNT          S U M M A R Y TOTAL          3
TRANSACTION AMOUNTS      CURRENCY CODE 840 TOTAL 14.00 CR
RECONCILIATION AMOUNTS  CURRENCY CODE 840 TOTAL 14.00 CR
MEMBER TRANS COUNT      O V E R A L L S U M M A R Y TOTAL 3
TRANSACTION AMOUNTS      CURRENCY CODE 840 TOTAL 14.00 CR
RECONCILIATION AMOUNTS  CURRENCY CODE 840 TOTAL 14.00 CR
  
```

Report IP142110-AA Field Descriptions

Field	Description
Run Date	The date on which this report was produced.
Page No	The page number within the report.
Member ID	The identifier that the association assigns to a customer (also referred to as ICA number). DE 94 (Transaction Originator Institution ID Code).
MTI/Function Code/Reason Code	Message Type Identifier, DE 24 (Function Code) and DE 25 (Message Reason Code).
Transaction Type	Identifies the type of transaction: • RR = Retrieval Request • CA = Case Filing/Member Mediation • CO = Collection Letter • FT = Funds Transfer • UK = UK ATM On-behalf Service • IV = Mexico IVA Fees
Processing Code	DE 3 (Processing Code), subfield 1 (Cardholder Transaction Type).
Transaction Amount	DE 4 (Amount, Transaction).
CR DR Indicator	Indicates the amount as a credit or debit.
Currency	The numeric ISO currency code associated with the transaction currency. DE 49 (Currency Code, Transaction).
Reconciliation Amount	DE 5 (Amount, Reconciliation).
CR DR Indicator	Indicates the amount as a credit or debit.
Credit Debit Indicator	Indicates the amount credit or debit for the customer.
Currency	The numeric ISO currency code associated with the reconciliation currency. DE 50 (Currency Code, Reconciliation).
Transaction Destination ICA	DE 93 (Transaction Destination Institution ID Code).
Forwarding Institution ICA/Receiving Institution ICA	DE 33 (Forwarding Institution ID Code)/DE 100 (Receiving Institution ID Code).
Fee Collection Control Number/MasterCom Control Number	PDS 0137 (Fee Collection Control Number)/PDS 0241 (MasterCom Control Number).

Reconciliation

IPM Reconciliation Messages for Clearing and Settlement Data

Field	Description
Card Program Identifier/Primary Account Number	PDS 0158 (Business Activity), subfield 1 (Card Program Identifier)/DE 2 (Primary Account Number [PAN]).
Transaction Amounts	The net total amount of the transaction in transaction currency for the applicable logical ID file.
Reconciliation Amounts	The net total amount of the transaction in transaction currency for the applicable logical ID file.
Currency Code	The numeric ISO currency code associated with the reconciliation currency. DE 50 (Currency Code, Reconciliation).

On-behalf Service Fee Collection Report (IP142520-AA)

This GCMS reconciliation summary report—On-behalf Service Fee Collection Report—is offered to acquirers in the Europe region to allow reconciliation and settlement of their authorization and clearing transactions. Customers can sign up for this report.

Acquirers will have the option to receive the consolidated clearing report, On-behalf Service Fee Collection Report (IP142520-AA):

- In three clearing cycles per day (cycle 1, 3, and 5) and distributed as part of bulk type T140 (Production) and T150 (Test)
- On the next clearing cycle if there is an issue with the generation of the report on one of the three cycles listed above
- By total transaction counts and amounts

In addition to the On-behalf Service Fee Collection Report, one of the following formats can also be requested:

- Text file—available in raw data, variable length version. The bulk types are TN70 (Production) and TN72 (Test) for outbound file delivery.
- XML Data file—available in variable length version. The bulk types are TN66 (Production) and TN68 (Test) for outbound file delivery.

Customers should indicate their format preference by contacting the MasterCard Implementation Services team or registering through the *GCMS Parameter Worksheet* (Form 600).

On-behalf Service Fee Collection Report (IP142520-AA)

IP142520-AA		MASTERCARD WORLDWIDE		RUN DATE: 06/17/08	
SUMMARY REPORT ON-BEHALF SERVICE SYSTEM-GENERATED		ATM NON-FINANCIAL FEE COLLECTION MESSAGES		PAGE NO: NNNNNN	
MEMBER ID: NNNNNNNNN		FILE ID: 904Y7MD000000001119NNNN		CLEARING CYCLE: NN	
SETTLE SERVICE: XXXXXXXXXX		RECONCILIATION CURRENCY: XXX			
ACCEPTANCE BRAND	TRANSACTION TYPE	ACTION DATE	TOTAL COUNTS	SERVICE FEE AMOUNT	
CIR (CIRRUS)	7621 - ATM BALANCE INQ. FEE	YY-MM-DD	2,222,222,229	222222222222229 XX	
	7625 - PIN CHG/UNBLOCK FEE	YY-MM-DD	2,222,222,229	222222222222229 XX	
	7629 - ATM FIN. DECLINE FEE	YY-MM-DD	2,222,222,229	222222222222229 XX	
		YY-MM-DD	2,222,222,229	222222222222229 XX	
		YY-MM-DD	2,222,222,229	222222222222229 XX	
CIR TOTAL		222,222,222,229		2222222222222229 XX	
ACCEPTANCE BRAND	TRANSACTION TYPE	ACTION DATE	TOTAL COUNTS	SERVICE FEE AMOUNT	
DMC (DEBIT)	7621 - ATM BALANCE INQ. FEE	YY-MM-DD	2,222,222,229	222222222222229 XX	
	7625 - PIN CHG/UNBLOCK	YY-MM-DD	2,222,222,229	222222222222229 XX	
	7629 - ATM FIN. DECLINE FEE	YY-MM-DD	2,222,222,229	222222222222229 XX	
		YY-MM-DD	2,222,222,229	222222222222229 XX	
		YY-MM-DD	2,222,222,229	222222222222229 XX	
DMC TOTAL		222,222,222,229		2222222222222229 XX	
ACCEPTANCE BRAND	TRANSACTION TYPE	ACTION DATE	TOTAL COUNTS	SERVICE FEE AMOUNT	
MCC (CREDIT)	7621 - ATM BALANCE INQ. FEE	YY-MM-DD	2,222,222,229	222222222222229 XX	
	7625 - ATM PIN CHG/UNBLOCK	YY-MM-DD	2,222,222,229	222222222222229 XX	
	7629 - ATM FIN. DECLINE FEE	YY-MM-DD	2,222,222,229	222222222222229 XX	
		YY-MM-DD	2,222,222,229	222222222222229 XX	
		YY-MM-DD	2,222,222,229	222222222222229 XX	
MCC TOTAL		222,222,222,229		2222222222222229 XX	
ACCEPTANCE BRAND	TRANSACTION TYPE	ACTION DATE	TOTAL COUNTS	SERVICE FEE AMOUNT	
MSI (MAESTRO)	7621 - ATM BALANCE INQ. FEE	YY-MM-DD	2,222,222,229	222222222222229 XX	
	7625 - PIN CHG/UNBLOCK FEE	YY-MM-DD	2,222,222,229	222222222222229 XX	
	7629 - ATM FIN. DECLINE FEE	YY-MM-DD	2,222,222,229	222222222222229 XX	
		YY-MM-DD	2,222,222,229	222222222222229 XX	
		YY-MM-DD	2,222,222,229	222222222222229 XX	
MSI TOTAL		222,222,222,229		2222222222222229 XX	
GRAND TOTAL		222,222,222,229		2222222222222229 XX	

Miscellaneous Override Financial Adjustments Report (IP148320-AA)

The Miscellaneous Override Financial Adjustments report is available to customers each processing day and is distributed as part of bulk file type T140.

The report provides detail about the MasterCard Fee Collection/1740 messages containing message reason code 7808 in the Clearing Cycle Notification Report (IP727020-AA) that are generated at the account range level.

Reconciliation

IPM Reconciliation Messages for Clearing and Settlement Data

Issuers and processors can elect to receive the Miscellaneous Override Financial Adjustments Report. Customers should indicate their format preference by contacting the MasterCard Implementation Services team or registering through the *GCMS Parameter Worksheet* (Form 600).

Clearing system report Miscellaneous Override Financial Adjustments report (IP148320-AA) has two additional receipt options:

- Text file is available in raw data, variable length version. The bulk type is TN70 (Production).
- XML data file is available in variable length version. The bulk type is TN66 (Production).

The data files are created and distributed after each processing day. The data files do not include summary totals. If no data is available, the customer receives a header and trailer only, with record count 0.

When multiple member IDs are packaged in a single file to the same endpoint, the data is sequenced by member ID. A header and trailer is provided for each customer ID (as shown for three customers in the following example).

XML or Raw Data File for Endpoint A

Header for customer 1

Detail for customer 1

... [detail information 1]

... [detail information 2]

Trailer for customer 1

Header for customer 2

Detail for customer 2

... [detail information 2]

... [detail information 2]

Trailer for customer 2

Header for customer 3

Detail for customer 3

... [detail information 3]

... [detail information 3]

Trailer for customer 3

The Miscellaneous Override Financial Adjustments Report (IP148320-AA) includes Settlement Service and Submitted Fee Collection Amount.

The XML file version of the report will contain the data shown in the following layout.

Table 13.3—XML Data File Distribution

Record Type	Field Name	Field Format	Field Value	Justification
Header	Record Type	PIC X(01)	H	Left
	Distribution ID	PIC X(16)	IP148320-AA	Left
	Member ID	PIC 9(11)		Right
	Endpoint	PIC X(07)		Left
Detail	Record Type	PIC X(01)	D	Left
	Member ID	PIC X(11)		Left
	FEE-ADJ-SETTLE-SERVICE	PIC X(10)		Left
	FEE-ADJ-ACCT-RANGE	PIC X(38)		Left
	FEE-ADJ-CURR-CD	PIC X(03)		Left
	FEE-ADJ-CURR-EXP	PIC X(01)		Left
	FEE-TRX-CURR-CD	PIC X(03)		Left
	FEE-TRX-CURR-EXP	PIC X(01)		Left
	FEE-ADJ-ALIGN-EXP	PIC X(01)		Left
	FEE-ADJ-AMOUNT-DR	PIC 9(18)		Right
	FEE-ADJ-AMOUNT-CR	PIC 9(18)		Right
	FEE-ADJ-AMOUNT-NET	PIC 9(18)		Right
	FEE-ADJ-NET-DR-CR	PIC X(02)		Left
	FEE-TRX-AMOUNT-DR	PIC 9(18)		Right
	FEE-TRX-AMOUNT-CR	PIC 9(18)		Right
	FEE-TRX-AMOUNT-NET	PIC 9(18)		Right
	FEE-TRX-NET-DR-CR	PIC X(02)		Left

Reconciliation

IPM Reconciliation Messages for Clearing and Settlement Data

Record Type	Field Name	Field Format	Field Value	Justification
Trailer	Record Type	PIC X(01)	T	Left
	Distribution ID	PIC X(16)	IP148320-AA	Left
	Member ID	PIC X(11)		Left
	Endpoint	PIC X(07)		Left
	Count	PIC 9(12)	Count of XML data detail records	Right

The Raw Data version of the report will contain the data shown in the following layout.

Table 13.4—Raw Data File Distribution

Record Type	Field Name	Field Format	Field Value	Justification
Header	Record Type	PIC X(01)	H	Left
	Distribution ID	PIC X(16)	IP148320-AA	Right
	Endpoint	PIC X(07)		Left
Detail	Record Type	PIC X(01)	D	Left
	Member ID	PIC X(11)		Left
	FEE-ADJ-SETTLE-SERVICE	PIC X(10)		Left
	FEE-ADJ-ACCT-RANGE	PIC X(38)		Left
	FEE-ADJ-CURR-CD	PIC X(03)		Left
	FEE-ADJ-CURR-EXP	PIC X(01)		Left
	FEE-ADJ-ALIGN-EXP	PIC X(01)		Left
	FEE-TRX-CURR-CD	PIC X(03)		Left
	FEE-TRX-CURR-EXP	PIC X(01)		Left
	FEE-ADJ-AMOUNT-NET	PIC 9(18)		Right
	FEE-ADJ-DR-CR	PIC X(02)		Left
	FEE-TRX-AMOUNT-DR	PIC 9(18)		Right
	FEE-TRX-AMOUNT-CR	PIC 9(18)		Right
	FEE-TRX-AMOUNT-NET	PIC 9(18)		Right
	FEE-TRX-NET-DR-CR	PIC X(02)		Left

Reconciliation
IPM Reconciliation Messages for Clearing and Settlement Data

Record Type	Field Name	Field Format	Field Value	Justification
Trailer	Record Type	PIC X(01)	T	Left
	Distribution ID	PIC X(16)	IP148320-AA	Left
	Member ID	PIC X(11)		Left
	Endpoint	PIC X(07)		Left
	Count	PIC 9(12)	Count of raw data detail records	Right

Reconciliation

IPM Reconciliation Messages for Clearing and Settlement Data

Miscellaneous Override Financial Adjustments Report (IP148320-AA)

```

IP148320-AA                                RUN DATE: CCYY/MM/DD
                                           PAGE: 00000001

                                           MASTERCARD WORLDWIDE
                                           MISCELLANEOUS OVERRIDE FINANCIAL ADJUSTMENTS

MTI/FUNCTION CODE/MESSAGE REASON CODE: XXXX/XXX/XXXX
MEMBER ID: NNNNNNNNNN

SETTLEMENT SERVICE
=====
USD00000001
=====
ACCOUNT PANCE
=====
1234560000000000000000 - 12345699999999999999
1234560000000000000000 - 12345699999999999999
1234560000000000000000 - 12345699999999999999
1234560000000000000000 - 12345699999999999999
RUD00000001
=====
NET SETTLEMENT
=====
AMOUNT/DIRECTION/CURRENCY
=====
222,222,222,22N.NNNNN CR 840-USD
222,222,222,22N.NNNNN CR 840-USD
222,222,222,22N.NNNNN CR 123-LOC
222,222,222,22N.NNNNN CR 123-LOC
222,222,222,22N.NNNNN CR 978-EUR
222,222,222,22N.NNNNN CR 978-EUR
222,222,222,22N.NNNNN CR 978-EUR
222,222,222,22N.NNNNN CR 978-EUR
SUBMITTED FEE COLLECTION
=====
AMOUNT/DIRECTION/CURRENCY
=====
222,222,222,22N.NNNNN CR 840-USD
222,222,222,22N.NNNNN CR 840-USD
222,222,222,22N.NNNNN CR 123-LOC
222,222,222,22N.NNNNN CR 123-LOC
222,222,222,22N.NNNNN CR 978-EUR
222,222,222,22N.NNNNN CR 978-EUR
222,222,222,22N.NNNNN CR 978-EUR
222,222,222,22N.NNNNN CR 978-EUR

SUMMARY FOR MEMBER ID NNNNNNNNNN

SETTLEMENT SERVICE
=====
USD00000001
=====
SETTLEMENT
=====
AMOUNT DEBITS
=====
222,222,222,22N.NNNNN
222,222,222,22N.NNNNN
222,222,222,22N.NNNNN
RUD00000001
=====
SETTLEMENT
=====
AMOUNT CREDITS
=====
222,222,222,22N.NNNNN
222,222,222,22N.NNNNN
222,222,222,22N.NNNNN
222,222,222,22N.NNNNN
NET SETTLEMENT
=====
AMOUNT/DIRECTION/CURRENCY
=====
222,222,222,22N.NNNNN CR 840-USD
222,222,222,22N.NNNNN CR 123-LOC
222,222,222,22N.NNNNN CR 978-EUR
222,222,222,22N.NNNNN CR 978-EUR

*** END OF REPORT ***

```

Acquirer-funded Reward Presentments Created On Behalf of a Member Report (IP170010-AA)

This report aids acquirers in reconciling promotions that will be merchant-funded, providing acquirers with a recap of the merchant-funded promotions.

Acquirers have the option to receive the consolidated clearing report, Acquirer-funded Reward Presentments Created on Behalf of a Member Report (IP170010-AA):

- In each clearing cycle and distributed as part of bulk type T140 (Production) and T150 (Test) only if the customer had activity
- By transaction origination, customer reconciliation indicator (reward program ID), card acceptor, and transaction currency

Totals are provided by transaction currency and reconciliation currency.

In addition to the Acquirer-funded Reward Presentments Created on Behalf of a Member Report, one of the following formats can also be requested:

- Text file—available in raw data, variable length version. The bulk types are TN70 (Production) and TN72 (Test) for outbound file delivery.
- XML Data file—available in variable length version. The bulk types are TN66 (Production) and TN68 (Test) for outbound file delivery.

Consolidated “On-Request” XML Data File Distribution

Customers who request a “raw data file” version of a report will receive the data using the following layouts.

Record Type	Field Name	Field Format	Field Value
Header	Filler	PIC X(01)	“H”
	Distribution File	PIC X(16)	IP170010-AA—when Funds Transfer Fee Collection
	Member ID	PIC X(11)	
	Endpoint	PIC X(07)	
Data	Filler	PIC X(01)	“D”
	Raw Data	PIC X (varies by layout)	Contains raw data for the distribution file
Trailer	Filler	PIC X(01)	“T”

Reconciliation

IPM Reconciliation Messages for Clearing and Settlement Data

Record Type	Field Name	Field Format	Field Value
	Distribution File	PIC X(16)	IP170010-AA—when Funds Transfer Fee Collection
	Member ID	PIC X(11)	
	Endpoint	PIC X(07)	IP702010-AA—when Merchant Partner Program
	Count	PIC X(12)	Count of raw data records

RAW DATA LAYOUT		
Distribution File	Raw Data Format	Field
IP170010-AA	FILLER	PIC X(01) VALUE "D"
	TRAN-ORIG	PIC X(11)
	FILE-ID	PIC X(25)
	CARD-ACCEPTOR	PIC X(15)
	REWARD-PGM	PIC X(11)
	MTI	PIC X(04)
	FUNC-CD	PIC X(03)
	PROC-CD	PIC X(02)
	TRAN-AMT	PIC 9(12)
	TRAN-CR-DR-IND	PIC X(02)
	TRAN-CUR	PIC X(03)
	RECON-AMT	PIC 9(12)
	RECON-CR-DR-IND	PIC X(02)
	FEE-IN-RECON-CUR	PIC 9(12)
	FEE-IN-RECON-CR-DR-IND	PIC X(02)
	FEE-IN-CALC-CUR	PIC 9(12)
	FEE-CALC-CUR	PIC X(03)
	FEE-IN-CALC-CR-DR-IND	PIC X(02)
	RECON-CUR	PIC X(03)
	TRAN-DEST	PIC X(11)
	CARD-PGM-ID	PIC X(03)
IP1702010-AA	FILLER	PIC X(01) VALUE "D"

RAW DATA LAYOUT		
Distribution File	Raw Data Format	Field
	MTI	PIC X(04)
	FUNC-CD	PIC X(03)
	PRIM-ACCT-NO	PIC X(19)
	PROC-CD	PIC X(02)
	TRANS-DATE	PIC X(06)
	ACQ-REF-NO	PIC X(23)
	IRD	PIC X(02)
	FUNDS-DIRECTION	PIC X(02)
	AMOUNT-RECON-FEE	PIC X(12)
	CURRENCY-RECON-FEE	PIC X(03)
	EXPONENT-RECON-FEE	PIC X(01)
	AMOUNT-TRANS-FEE	PIC 9(12)
	CURRENCY-TRANS-FEE	PIC X(03)
	EXPONENT-TRANS-FEE	PIC X(01)

NOTE

Customers that request an “XML data file” version of a report will receive the same data as above but in XML format.

For customers that elect to receive the text file, when no data is present, the file will consist of a header and trailer record with zero (0) for the record count.

Using Both IPM Messages and Reports to Collect Information

Customers can use both the IPM reconciliation messages and the GCMS reports to derive information about customer and other activity, at different total levels.

For example:

Reconciliation

IPM Reconciliation Messages for Clearing and Settlement Data

- The customer may choose to receive the IPM reconciliation message totals at the account range level. GCMS reconciliation reports provide totals at the customer level but not at the account range level. Choosing the message totals at the account range level provides the customer with a more detailed breakdown by customer activity than GCMS reports will provide.
- GCMS **reports** provide count totals for non-financial transactions, in addition to financial transactions. The IPM **reconciliation messages** do not provide non-financial transaction detail. Thus, customers may request the IPM clearing reports to obtain non-financial transaction count information to supplement the financial count and totals information in the IPM reconciliation messages.
- GCMS **reports** provide amount totals in the customer's reconciliation currency. The IPM **reconciliation messages** provide amount totals in the customer's reconciliation currency and optionally in the transaction currency. Customers receiving both the GCMS reports and the IPM reconciliation messages can thus receive their amount totals in these currencies: transaction, reconciliation.
- The rejected transaction **reports** can provide customers with rejected transaction information that accounts for the difference between the customer clearing data totals and the accepted clearing data totals as reported by MasterCard. For example, suppose that customer A submits financial transactions totaling USD 3,000.00. Customer A receives acknowledgement reconciliation messages, which show processing of USD 2,500.00 financial activity. Customer A can refer not only to the rejected transaction reports but also to the customer inbound error messages to verify the source of the USD 500.00 difference.

NOTE

All of the reports referenced in the list above are available per clearing cycle and are not available within the IPM Early Reconciliation File. Reconciliation messages are delivered according to the customer's elected file delivery schedule.

Accumulating Reconciliation Totals

Details about the accumulation of reconciliation messages done by customers and processors are as follows.

NOTE

Customers and processors will need to accumulate reconciliation messages to derive a grand total, by processor, for any of the reconciliation categories for the customers for which they process.

For example, suppose that customer or processor 001111 processes for customer ID 002222, customer ID 003333, and customer ID 004444 and that MasterCard has set up the customers' selected categories for notification messages as follows:

- Member ID 002222: Set up to receive reconciliation totals by processing code and settlement indicator
- Member ID 004444: Set up to receive reconciliation totals by processing code and settlement indicator

Although it is unlikely that a customer or processor would establish such a diverse set of categories for each customer ID, this example illustrates the process for accumulating any set of reconciliation totals.

Member ID	Processor 001111 Receives Record...	Processing Code	Settlement Indicator	Originals/ Reversals	Transaction Function
002222	1	Purchase—USD 100.00	Settled by MasterCard		
Subtotal of Purchase Processing Code for Member ID 2222		USD 100.00			
	2	ATM—USD 50.00	Settled by MasterCard		
Subtotal of ATM Processing Code for Member ID 2222		USD 50.00			
004444	9	Purchase—USD 100.00	Settled by MasterCard		
Subtotal of Purchase Processing Code for Member ID 4444		USD 100.00			
	10	ATM—USD 50.00	Settled by MasterCard		
Subtotal of ATM Processing Code for Customer ID 4444		USD 50.00			
Grand Total of Purchase Processing Code for Customer ID 001111		USD 200.00			

To derive a total at the customer or processor level for any of the above reconciliation categories, the customer or processor will need to accumulate and total each applicable customer ID's reconciliation category.

For example, to derive the notification totals by processing code of purchase for processor 001111, the processor must accumulate the notification totals by processing code for customer ID 002222 and customer ID 004444.

NOTE

All summarization of totals occurs within the same currency.

IPM Early Reconciliation File Option

Customers and processors have the option to receive early acknowledgement reconciliation and error messages.

Customers will receive these messages once Central Site has processed their outbound IPM logical clearing files without waiting until the Central Site clearing cutoffs to receive their reconciliation messages. This option is available at the processor level. If a customer is its own processor, the customer also may choose this option for itself.

If the customer has chosen to receive both the File Currency Summary/1644-680 message and the Financial Position Detail/1644-685 message, the IPM Early Reconciliation file includes both of these messages. Both message formats are the same as the reconciliation messages sent in non-Early Reconciliation clearing files.

This feature can provide valuable balancing information and error records without the constraint of waiting for the next clearing system cutoff and distribution of notification data defined by MasterCard. It allows the customer to understand its settlement position for the file processed by MasterCard and to correct and resubmit more quickly any errors that may be present.

NOTE

The Settlement Position Detail/1644-688 message will be delivered along with the customer's normal activity at the end of each clearing cycle (bulk type T112) and will not be distributed within the IPM Early Reconciliation File (bulk type T113).

NOTE

The clearing system does not duplicate the messages provided in the early reconciliation files when it creates the customer inbound clearing files at cycle cutoff times. The customer will receive the messages only once. The Early Reconciliation file is transmitted using bulk type T113. This differs from the normal clearing cycle cutoff file bulk types, to clearly distinguish the Early Reconciliation file from all other clearing files.

NOTE

For more information about sending files for processing by the clearing system, refer to the section titled, "Early Reconciliation Message File" in [Clearing Processing Details](#) of this manual.

Customers may select the Early Reconciliation file option using the *GCMS Parameter Worksheet* (Form 600). Refer to the *GCMS Parameter Worksheet* (Form 600).

Chapter 14 Fee Collection

This chapter describes the IPM messages that are used for fee collection, how to return and resubmit fee collection messages, and reason codes to use in these messages.

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Fee Collection Overview

The clearing system collects all fees through fee collection messages. This includes retrieval fee billing transactions, as well as all other fee types.

The combination of message type indicator (MTI), DE 24 (Function Code), and Data Element (DE) 25 (Message Reason Code) in the fee collection message indicates the fee that is being collected.

DEFINITION

Fee collection messages are IPM messages used for the collection or disbursement of fees that require funds settlement between various payment parties. These messages include fees generated between pairs of customers and fees generated between MasterCard and customers.

NOTE

MasterCard does not provide or validate history for fee collection messages, although the sender may optionally provide it.

Fee Collection Messages for Retrieval Fee Billing

Customers are allowed to submit IPM Fee Collection (Retrieval Fee Billing)/1740 messages for specific document types.

Acquirers may not submit IPM Fee Collection (Retrieval Fee Billing)/1740 messages for:

- Document type 2 (copy)
- Document type 4 (substitute draft)

However, customers may continue to submit these messages for document type 1 (hard copy original document) at a rate of USD 15 each.

Fees for document types 2 (copy) and 4 (substitute draft) are collected through the MasterCard Consolidated Billing System (MCBS). The MasterCom® electronic imaging system does not generate any fulfillment fee IPM messages or records.

MasterCard applies a tiered rate structure to fulfillment fee messages (applies to types 2 and 4), depending on the type of document and number of days for fulfillment.

Fee Collection Messages for Purposes Other Than Retrieval Fee Billing

Customers must settle all miscellaneous fees and charges by use of the IPM Fee Collection/1740 message. The fee collection message is used for a number of diverse applications, and it contains the information required for customers to process the miscellaneous fees and charges identified in DE 25 (Message Reason Code).

Within the IPM Fee Collection/1740 message, DE 25 indicates the reason for, or type of, fee collection. DE 3 (Processing Code), subfield 1 (Cardholder Transaction Type) indicates the direction of funds movement, such as debit to message originator or credit to message originator.

Presenting the Fee Collection/1740 Message

The message originator must submit the entire Fee Collection/1740 message, providing the appropriate information for each element.

The message originator always must provide a control number for returns and resubmissions and must retain the control number for audit trail purposes. The message originator provides this control number in Private Data subelement (PDS) 0137 (Fee Collection Control Number). The contents of PDS 0137 are assigned at the discretion of the message originator.

If the fee collection message requires supporting documentation, the message originator must mail the documentation according to the instructions on the specific ICA form or as specified in this chapter. The message originator should clearly note the PDS 0137 value on all of the documentation to allow the receiving customer to readily match the documentation to the applicable message and transaction.

If the transaction amount exceeds the U.S. dollar maximum for each message reason code, as indicated in “Reason Codes for Fee Collection” later in this chapter, an additional message or messages reflecting the same DE 25 value should be submitted for the excess amount.

NOTE

Transaction amount maximum can be set in currencies other than U.S. dollar. All Fee Collection/1740 message transaction amount maximum settings can be viewed in the IPM MPE Table IP0097T1: Message Reason Code Restrictions for Card Program Identifier and Business Service Arrangement.

Returning and Resubmitting the Fee Collection/1740 Message

Details about the Returning and Resubmitting the Fee Collection/1740 Message and the values that may be entered in DE 24 (Function Code) are as follows.

Customers may return or resubmit a fee collection message by sending a Fee Collection/1740 message with one of the following values in DE 24:

- 780 = Return
 - 781 = Resubmission
 - 782 = Arbitration Return
1. The receiving customer may return a fee collection within 45 calendar days after receipt of the message for any of the following reasons. This is handled by sending a Fee Collection/1740 with the same data originally received, except that DE 24 must contain a value of 780 to indicate a return.
 - “Supporting documentation not received.” The receiving customer must wait 21 calendar days from the date the message is received before returning for this reason.
 - “Missorted to wrong member.”
 - “The message text was not provided or was incomplete.”
 - “Fee charged exceeds amount allowed.”
 - “Fee inaccurate because of entry error.”
 - “Charged twice for same fee.”
 - “Past applicable time frame.”
 - “An erroneous or inappropriate progressive handling fee was received.”
 - “Unauthorized fee/charge—receiving member did not approve or agree to accept fee/charge.” Applicable only to reason codes for good-faith acceptance (DE 25 = 7606) and for collection letters (DE 25=7607).
 2. If a fee collection is returned for any of the previously-mentioned reasons, the receiving customer may **resubmit** it within 45 calendar days of receipt of the message but only if the reason for return has been corrected. (For example, the receiving customer has supplied the missing documentation or the correct amount.) To resubmit the fee collection, the customer sends a Fee Collection/1740 with a DE 24 value of 781 to indicate a resubmission. The customer should indicate an explanation of the correction in DE 72.
 3. If a fee collection is improperly resubmitted, it may be returned within 45 calendar days of receipt of the message, using the **arbitration return**. Before returning the fee collection for missing documentation, the receiving customer must wait 21 calendar days from the date the customer receives the message. To return the fee collection, the customer sends a Fee Collection/1740 with a DE 24 value of 782 to indicate an arbitration return. The customer should indicate an explanation in DE 72.

MasterCard does not permit a third submission (the second submission being in step 2, above). Any remaining unsolved disputes concerning the fee collection message may be pursued by the customer through a compliance case filing with MasterCard.

Fee Collection

Reason Codes for Fee Collection

NOTE

For case filings initiated for a violation of this subsection, the good-faith correspondence is not required. For more information about filing procedure, refer to Chapter 5 of the *Chargeback Guide*.

The sending customer must reverse any Fee Collection/1740 message that is duplicated in error. The customer handles this by processing a duplicate of the message originally processed, except that the customer enters the letter R in PDS 0025 (Message Reversal Indicator), subfield 1 (Message Reversal Indicator). This denotes a reversal transaction.

NOTE

For more information about reversals, refer to [Reversals](#).

Reason Codes for Fee Collection

The following tables describe the DE 25 (Message Reason Code) values that apply to fee collection messages.

Fee Collection (Member-generated)/1740-700 and Fee Collection Resubmission/1740-781

The following table describes the DE 25 (Message Reason Code) values that apply to Fee Collection (Member-generated)/1740-700 and Fee Collection Resubmission/1740-781 Messages.

NOTE

Transaction amount maximum can be set in currencies other than U.S. dollar. All Fee Collection/1740 message transaction amount maximum settings can be viewed in the IPM MPE Table IP0097T1: Message Reason Code Restrictions for Card Program Identifier and Business Service Arrangement. For example, the maximum amount for MRC 7601 for Europe intraregional business services for MCC and DMC acceptance brand is EUR 115.

DE 25	7600									
	Lost/stolen telex/phone fee; for collection of lost stolen report fee and phone or telex costs incurred for taking a lost or stolen card report.									
Maximum Amount	USD 65									
DE 3	19 (credit to message originator)									
DE 72	<table><tr><th>Position</th><th>Length</th><th>Contents</th></tr><tr><td>1–32</td><td>32</td><td>“LOST/STOLEN CARD TRANSACTION FEE”</td></tr><tr><td>33</td><td>1</td><td>Space</td></tr></table>	Position	Length	Contents	1–32	32	“LOST/STOLEN CARD TRANSACTION FEE”	33	1	Space
Position	Length	Contents								
1–32	32	“LOST/STOLEN CARD TRANSACTION FEE”								
33	1	Space								

Fee Collection
Reason Codes for Fee Collection

	34–100	67	When the cardholder number is absent, it is advised that the cardholder name and address be placed in this field.	
DE 73	Date lost/stolen report was taken			
DE 25	7601			
	Recovered card award fee; for collection of reward for a card acceptor or financial institution employee when a card has been recovered.			
Maximum Amount	USD 115			
DE 3	19 (credit to message originator)			
DE 72	Position	Length	Contents	
			Required Message Data:	
			Card type code:	
	1	1	1	= MasterCard® Card
			3	= Gold MasterCard® Card
			4	= MasterCard BusinessCard® Card or MasterCard Corporate Card®
			5	= MasterCard Corporate Purchasing Card™
			6	= MasterCard Corporate Fleet Card™
			7	= Platinum MasterCard® Card
			8	= World MasterCard® Card
	2	1	Space	
	3–6	4	Valid Card Acceptor Business Code (MCC); refer to the <i>Quick Reference Booklet</i> for a current listing	
			Valid Card Acceptor Business Code (MCC); refer to the <i>Quick Reference Booklet</i> for a current listing	
	7	1	Space	
	8	1	Card recovery reason:	
			1	= warning bulletin listing
			2	= authorization response
			4	= code
			5	= authenticator
			6	= non-hologram
			0	= other

Fee Collection

Reason Codes for Fee Collection

			Optional Message Data:		
	9	1	Space		
	10–31	22	Name of card acceptor recovering card; space-filled if not applicable		
	32	1	Space		
	33–45	13	Card Acceptor's City		
	46	1	Space		
	47–49	3	Alphabetic; U.S. state or country code if outside the U.S. region; left-justified with trailing spaces		
	50	1	Space		
	51–100	50	Message text		
DE 73	Date card was recovered as recorded on ICA-6 form				
DE 25	7602				
	Emergency cash disbursement fee; for collection of fees associated with the handling of emergency cash disbursements to cardholders.				
Maximum Amount	USD 5,000				
DE 3	19 (credit to message originator)				
DE 72	Position	Length	Contents		
	1	1	Reason Code	Fee	Description
			A	USD 95	“US ECA-\$65 BASE FEE, \$30 LOCATION FEE” ¹
			B	USD 95	“NON-US ECA-\$65 BASE FEE, \$30 LOCATION FEE” ¹
			C	USD 50	“ECA REQUEST CANCELED/DENIED (US REGION)”
			D	USD 50	“ECA REQUEST CANCELED/DENIED (NON-US REGION)”
			E	USD 50	“REFERRED TO U.S. ISSUER BY REQUEST”
			F	USD 50	“REFERRED TO NON-U.S. ISSUER BY REQUEST”

1. The customer ID of the customer preparing the cash disbursement appears immediately after the description.

Fee Collection
Reason Codes for Fee Collection

			G	USD 95	“ECA AMOUNT TO CARD-HOLDER VIA WESTERN UNION”
			H–Z		Reserved for future use
	2–100	99	Spaces		
DE 73	Emergency cash disbursement date				
DE 25	7603				
	Compliance ruling settlement; for collection of a compliance ruling settlement amount.				
Maximum Amount	USD 5,000				
DE 3	19 (credit to message originator)				
DE 72	Position	Length	Contents		
	1–11	11	MasterCard case number (for example, 31234-001-9)		
	12	1	Space		
	13–100	88	Optional message text as may be needed		
DE 73	Compliance Ruling Date				
DE 25	7604				
	Emergency card replacement fee; for collection of fees associated with the Emergency Card Replacement (ECR) Service.				
Maximum Amount	USD 25,000				
DE 3	19 (credit to message originator)				
DE 72	Position	Length	Contents		
	1	1	Reason Code:		
			A	=	issuance of emergency card
			B	=	emergency cash disbursement not picked up
			C	=	emergency card cancelled
			D	=	second location ECR request
			E	=	issuer denies ECR request
			F	=	referred to card issuer outside the U.S. region
			G	=	delivery of card within the U.S. region

Fee Collection

Reason Codes for Fee Collection

			H	=	delivery of card outside the U.S. region
			I	=	initial member participation fee
			J	=	monthly member participation fee
			K	=	installation and training fee
			L	=	survey statistics
			M–Z	=	reserved for future use
	2–100	99	Spaces		
DE 73	Emergency card replacement date				
DE 25	7605				
	Warning bulletin handling fee—issuer originated; for settlement of warning bulletin handling fees in accordance with MasterCard operating rules.				
Maximum Amount	USD 25				
DE 3	19 (credit to message originator)				
DE 72	Position	Length	Contents		
	1	1	Reason Code:		
			A	=	incorrect card acceptor location
			B	=	incorrect transaction date
			C	=	combination of A and B
	2	1	Space		
	3–25	23	Acquirer Reference Data (ARD)		
	26	1	Space		
	27–36	10	Chargeback reference number		
	37–100	64	Spaces		
DE 73	Second presentment Central Site processing date				
DE 25	7606				
	Good-faith acceptance settlement; for settlement of the amount of a good-faith acceptance.				
Maximum Amount	USD 5,000				
DE 3	19 (credit to message originator), 29 (debit to message originator)				
DE 72	Position	Length	Contents		

Fee Collection
Reason Codes for Fee Collection

	For both credit to message originator and debit to message originator:		
	1–31	31	Reference number and the name of the person who gave acceptance
	32	1	Space
	33–100	68	Optional message text as needed
DE 73	Good-faith date		
DE 25	7607		
	Collection letter handling fee; for settlement of the amount of a collection letter acceptance.		
Maximum Amount	USD 5,000		
DE 3	19 (credit to message originator), 29 (debit to message originator)		
DE 72	Position	Length	Contents
	For both credit to message originator and debit to message originator:		
	1–11	11	Collection letter reference number
	12	1	Space
	13–100	88	Optional message text as needed
DE 73	Collection letter date		
DE 25	7608		
	Telex authorization fee; for collection of fees associated with an international telex authorization.		
Maximum Amount	USD 20		
DE 3	19 (credit to message originator)		
DE 72	Position	Length	Contents
	1–33	33	Telex reference number and response
	34–100	67	Spaces
DE 73	Authorization Request Date		
DE 25	7610		
	Investigation fee; for fee collection when an investigation report has been completed by an investigating member on behalf of the requesting member.		
Maximum Amount	USD 1,000		
DE 72	Position	Length	Contents

Fee Collection

Reason Codes for Fee Collection

	1–19	19	“INVESTIGATION FEES”	
	20–100	81	Spaces	
DE 73	Investigation request date from ICA-7A form			
DE 25	7611			
	Retrieval fee reversal; issuer-originated; used to reverse a retrieval request fulfillment fee for documents never received or invalid documents.			
	NOTE			
	An issuer would use this code in response to receiving an invalid message containing code 7614 from an acquirer.			
Maximum Amount	USD 15			
DE 3	19 (credit to message originator)			
DE 72	Position	Length	Contents	
	1	1	Reason Code:	
			A	= nonreceipt of document
			B	= illegible document
			C	= invalid card acceptor description
	2	1	Space	
	3–25	23	ARD	
	26	1	Space	
	27–36	10	Issuer control number	
	37–100	64	Spaces	
DE 73	PDS 0105 (File ID), subfield 2 (File Reference Date) of the Central Site processed Retrieval Fee Billing/1740-700 message			
DE 25	7612			
	Retrieval handling fee; issuer-originated; used to assess an acquirer for incorrect information verified by the retrieval request document.			
Maximum Amount	USD 25			
DE 3	19 (credit to message originator)			
DE 72	Position	Length	Contents	
	1	1	Reason Code:	
			A	= incorrect card acceptor name

Fee Collection
Reason Codes for Fee Collection

		B	=	incorrect card acceptor location
		C	=	incorrect transaction date nonreceipt of document
2	1	Space		
3–25	23	ARD		
26	1	Space		
If processing handling fee for TID received as a fulfillment, complete as follows:				
27–36	10	Issuer control number		
37	1	Space		
38–59	22	Incorrect A, B, or C condition; card acceptor name, city, state, country, or transaction date from original card acceptor description or Financial Detail message.		
60	1	Space		
61–82	22	Corrected A, B, or C condition; card acceptor name, city, state, country, or transaction date from retrieval fulfillment.		
83–100	18	Spaces		
If processing handling fee for TID received as a second presentment in response to a chargeback, complete as follows:				
27–36	10	Chargeback reference number		
37	1	Space		
38–59	22	Incorrect A, B, or C condition; card acceptor name, city, state, country, or transaction date from the original card acceptor description or Financial Detail message.		
60	1	Space		
61–82	22	Corrected A, B, or C condition; card acceptor name, city, state, country, or transaction date from retrieval fulfillment.		
83–100	18	Spaces		
DE 73	PDS 0105 (File ID), subfield 2 (File Reference Date) of the Central Site processed Retrieval Fee Billing/1740-700 or Second Presentment/1240-205 or 1240-282			
DE 25	7614			
	Non-MasterCom fulfillment fee settlement; for settlement of retrieval request fulfillments not processed through the MasterCom system.			
Maximum Amount	None			

Fee Collection

Reason Codes for Fee Collection

DE 3 19 (credit to message originator [acquirer])

This reason code is valid only for DE 24 (Function Code) value of 700 (acquirer to issuer). An issuer that wants to dispute these charges should submit a Fee Collection/1740-780 message containing a DE 25 (Message Reason Code) value of either 7611 or 7612.

DE 72	Position	Length	Contents
	1–100	100	

DE 25 7616

Handling fee for second presentment of reason codes 12 and 35 for chip transactions where transaction certificate and DE 55 (Integrated Circuit Card [ICC] System-Related Data) are present in the clearing message. Acquirer-originated.

Maximum USD 25
Amount

DE 3 19 (credit to message originator)

DE 72	Position	Length	Contents
	1	1	Reason Code: A = correct information previously provided with first presentment
	2	1	Space
	3–25	23	ARD
	26	1	Space
	27–37	11	Chargeback reference number
	38–100	63	Spaces

DE 73 PDS 0105 (File ID), subfield 2 (File Reference Date) of the member-submitted Second Presentment/1240-205 or 1240-282

DE 25 7617

Adjustment for promotional transactions.

Maximum None
Amount

DE 3 19 (credit to message originator), 29 (debit to message originator)

DE 72	Position	Length	Contents
			For both credit to message originator and debit to message originator:
	1–38	38	“ADJUSTMENT FOR PROMOTIONAL TRANSACTIONS”
	39–100	62	Spaces

Fee Collection
Reason Codes for Fee Collection

DE 73	PDS 0105 (File ID), subfield 2 (File Reference Date) of the File Header/1644				
DE 25	7618				
	Reversal of previously reimbursed State Fuel Tax.				
Maximum Amount	None				
DE 3	19 (credit to message originator)				
DE 72	Position	Length	Contents		
	1–86	86	REVERSAL OF TAX REIMBURSE: FROM JURISDICTION SSSS VIA OIL AAA TO AGENCY NNN PERIOD YYMM		
	87–100	14	Spaces		
DE 25	7619				
	Emergency cash disbursement fee; for collection of fees associated with the handling of emergency cash disbursements to cardholders.				
Maximum Amount	USD 50				
DE 3	19 (credit to message originator)				
DE 72	Position	Length	Contents		
	1	1	Reason Code	Fee	Description
			A	USD 50	“U.S. ECR CENTER REIMBURSEMENT”
			B	USD 30	“ECA LOCATION REIMBURSEMENT”
			C	USD 50	“NON-U.S. ECR CENTER REIMBURSEMENT”
	2–100	99	Spaces		
DE 73	Emergency cash disbursement date				
DE 25	7621				
	ATM Balance Inquiry Fee—reserved for intra-European use.				
DE 3	19 (credit to message originator)				
	Position	Length	Contents		
	1-100	100			
DE 25	7622				

Fee Collection

Reason Codes for Fee Collection

Handling fee for Authorization Related Chargebacks (4807 and 4808). This fee is sent by the issuer after sending a First Chargeback/1442–450 or 1442–453 for one of the chargeback reasons identified above.			
Maximum Amount	USD 50		
DE 3	19 (credit to message originator)		
DE 72	Position	Length	Contents
	1–2	2	Values 07, 08, or 47 correspond to the IPM DE 25 (Message Reason Code) 4807 and 4808 of the related First Chargeback/1442
	3	1	Constant Space
	4	1	Values for Condition indicator:
			A = 4808 Requested/required authorization not obtained (declined)
			B = 4808 Requested/required authorization not obtained
			C = 4808 Requested/required authorization not obtained
			D = 4807 Warning bulletin
	5	1	Constant Space
	6	1	Constant 1 to denote the first chargeback
	7	1	Constant Space
	8–17	10	DE 95 (Card Issuer Reference Data). Chargeback reference number originally assigned by the issuer in the associated First Chargeback/1442 message
	18	1	Constant Space
	19–24	6	Date of the declined authorization associated with the disputed clearing record if position 4 of the DE 72 (Data Record) is “A.” MMDDYY or spaces.
	25	1	Constant Space
	26–28	3	Constant 700
	29	1	Constant Space
	30–49	20	PDS 0137 (Fee Collection Control Number) assigned by the issuer. Right justified, leading zeros
	50–100	51	Constant Space
DE 73	Date of the chargeback cycle with which the handling fee is associated		

Fee Collection
Reason Codes for Fee Collection

DE 25	7623		
	Handling fee for Authorization Related Chargebacks (4807 and 4808). This fee is sent by the acquirer after sending a Second Presentment/1240-205 or 1240-282 for one of the chargeback reasons identified above.		
Maximum Amount	USD 100		
DE 3	19 (credit to message originator)		
DE 72	Position	Length	Contents
	1–2	2	Values 07, 08, or 47 correspond to the DE 25 (IPM Message Reason Code) 4807 and 4808 of the related First Chargeback/1442
	3	1	Constant Space
	4	1	A = 4808 Requested/required authorization not obtained (declined) B = 4808 Requested/required authorization not obtained C = 4808 Requested/required authorization not obtained D = 4807 Warning bulletin
	5	1	Constant Space
	6	1	Constant 2 to denote the second presentment
	7	1	Constant Space
	8–17	10	DE 95 (Card Issuer Reference Date). Chargeback reference number originally assigned by the issuer in the associated First Chargeback/1442 message
	18–25	8	Constant Space
	26–28	3	Constant 700
	29	1	Constant Space
	30–49	20	PDS 0137 (Fee Collection Control Number) assigned by the issuer in the DE 25 (IPM Fee Collection/1740-700 message with a Message Reason Code) of 7622, or spaces, if the issuer did not send a Fee Collection/1740-700 message. Right justified, leading zeros.
	50	1	Constant Space
	51–56	6	Date authorization request approved. MMDDYY
	57	1	Constant Space

Fee Collection

Reason Codes for Fee Collection

	58–63	6	Approval Code (DE 38)–XXXXXX
	64–100	37	Constant Space
DE 73	Date of the chargeback cycle with which the handling fee is associated.		
DE 25	7624		
	Handling fee for Authorization Related Chargebacks (4807 and 4808). This fee is sent by the issuer after sending an Arbitration Chargeback/1442-451 or 1442-454 for one of the chargeback reasons identified above.		
Maximum Amount	USD 150		
DE 3	19 (credit to message originator)		
DE 72	Position	Length	Contents
	1–2	2	Values 07, 08, or 47 correspond to the DE 25 (IPM Message Reason Code) 4807 and 4808 of the related Arbitration Chargeback/1442
	3	1	Constant Space
	4	1	Values for Condition indicator.
			A = 4808 Requested/required authorization not obtained (declined)
			B = 4808 Requested/required authorization not obtained
			C = 4808 Requested/required authorization not obtained
			D = 4807 Warning bulletin
	5	1	Constant Space
	6	1	Constant 3 to denote Arbitration Chargeback/1422
	7	1	Constant Space
	8–17	10	Card Issuer Reference Data (DE 95) from the associated First Chargeback/1442 message
	18	1	Constant Space
	19–24	6	Date of the declined Authorization provided with first chargeback if position 4 of the Data Record (DE 72) is "A". MMDDYY or spaces
	25	1	Constant Space
	26–28	3	Constant 700
	29	1	Constant Space

Fee Collection
Reason Codes for Fee Collection

	30–49	20	Original PDS 0137 (Fee Collection Control Number) assigned by the acquirer in the IPM Fee Collection/1740-700 message with a DE 25 (Message Reason Code) of 7623, or spaces, if the acquirer did not send a Fee Collection/1740-700 message. Right justified, leading zeros.
	50–63	14	Constant Space
	64–100	37	Explanation for arbitration chargeback, such as, the approved authorization was not for this transaction.
DE 73	Date of the chargeback cycle with which the handling fee is associated		
DE 25	7625		
	PIN Management Service at ATM. For Intra-European use.		
Maximum Amount	USD 5		
DE 3	19 (credit to sender of the fee collection)		
DE 72	Position	Length	Contents
	1–100	100	PIN CHANGE xxx xxx xxx xxx (where xxx xxx xxx xxx represents the cardholder number) OR PIN TRY COUNTER RESET xxx xxx xxx xxx (where xxx xxx xxx xxx represents the cardholder number)
DE 73	Date the service was performed at the ATM		
DE 25	7626		
	Private Label Merchant Fee for Private Label fee collection messages. This fee collection message reason code is available for business service arrangements level 1 (interregional), level 2 (intraregional), level 3 (intercountry) and level 4 (intracountry) where Private Label exists.		
Maximum Amount	None		
DE 3	19 (credit to message originator), 29 (debit to message originator)		
DE 25	7627		
	Fees related to the issuer's failure to provide a Merchant Advice Code; for acquirer use only.		
Maximum Amount	USD 100		
DE 3	19 (credit to message originator)		
DE 72	Position	Length	Contents
	1–2	2	Values 07, 08, or 47 correspond to the DE 25 (IPM Message Reason Code) 4807 and 4808 of the related First Chargeback/1442
	3	1	Constant Space

Fee Collection

Reason Codes for Fee Collection

4	1	Values for Condition indicator:	
		A	= 4808 Requested/required authorization not obtained (declined)
		B	= 4808 Requested/required authorization not obtained
		C	= 4808 Requested/required authorization not obtained
		D	= 4807 Warning bulletin
5	1	Constant Space	
6	1	Constant 1 to denote the first chargeback	
7	1	Constant Space	
8–17	10	DE 95 (Card Issuer Reference Data). Chargeback reference number originally assigned by the issuer in the associated First Chargeback/1442 message	
18	1	Constant Space	
19–24	6	Date of the declined authorization associated with the disputed clearing record if position 4 of the DE 72 (Data Record) is “A”. MMDDYY or spaces.	
25	1	Constant Space	
26–28	3	Constant 700	
29	1	Constant Space	
30–49	20	PDS 0137 (Fee Collection Control Number) assigned by the issuer. Right justified, leading zeros.	
50–100	51	Constant Space	
DE 73	Date of the chargeback cycle with which the handling fee is associated		
DE 25	7628		
	Reclaim surcharge—Reserved for intra-European and European transaction related services.		
Maximum Amount	USD 100		
DE 3	19 (credit to message originator)		
DE 72	Position	Length	Contents
	1-100	100	
DE 25	7700		
	Intracurrency settlement agreement; for settlement of amounts in accordance with an intracountry agreement between transaction originator and transaction destination parties.		

Fee Collection
Reason Codes for Fee Collection

Maximum Amount	USD 40,000		
DE 3	19 (credit to message originator), 29 (debit to message originator)		
DE 72	Position	Length	Contents
	For both credit to message originator and debit to message originator:		
	1–100	100	
DE 25	7703		
	Domestic POS VAT Fees/Services—Used for the Mexico Domestic Fee Collection/1740 message on the VAT amount on POS transactions. The member calculates the VAT when submitted with this message reason code.		
DE 25	7704		
	Bank Card Interchange fee, reverse interchange for ATM transactions (Mexico Domestic).		
Maximum Amount	None		
DE 3	19 (credit to message originator), 29 (debit to message originator)		
DE 25	7705		
	Transactions below to threshold published (Mexico Domestic). Member calculates VAT (Value Added Tax).		
Maximum Amount	None		
DE 3	19 (credit to message originator), 29 (debit to message originator)		
DE 25	7706		
	Difference in interchange amount between member calculated and MasterCard calculated (Mexico Domestic). Member calculates VAT (Value Added Tax).		
Maximum Amount	None		
DE 3	19 (credit to message originator), 29 (debit to message originator)		
DE 25	7707		
	Interest for late settlements (Mexico Domestic). Member calculates VAT (Value Added Tax).		
Maximum Amount	None		
DE 3	19 (credit to message originator), 29 (debit to message originator)		
DE 25	7708		
	Non fullfiled documentation penalties (Mexico Domestic). Member calculates VAT (Value Added Tax).		

Fee Collection

Reason Codes for Fee Collection

Maximum Amount	None		
DE 3	19 (credit to message originator), 29 (debit to message originator)		
DE 25	7709		
	Penalties on code 102 miscellaneous (Mexico Domestic). Member calculates VAT (Value Added Tax).		
Maximum Amount	None		
DE 3	19 (credit to message originator), 29 (debit to message originator)		
DE 25	7710		
	Miscellaneous (Mexico Domestic).		
Maximum Amount	None		
DE 3	19 (credit to message originator), 29 (debit to message originator)		
DE 25	7711		
	Pre-fund amount, offset for others (Mexico Domestic).		
Maximum Amount	None		
DE 3	19 (credit to message originator), 29 (debit to message originator)		
DE 25	7712		
	Bank Card Interchange fee, balance inquiry interchange. Member calculates VAT (Value Added Tax).		
Maximum Amount	None		
DE 3	19 (credit to message originator), 29 (debit to message originator)		
DE 25	7750 to 7799		
	Bilateral agreement settlement; for settlement of amounts in accordance with a bilateral agreement between transaction originator and transaction destination parties.		
Maximum Amount	USD 5,000		
DE 3	19 (credit to message originator), 29 (debit to message originator)		
DE 72	Position	Length	Contents
	For both credit to message originator and debit to message originator:		
	1–100	100	
DE 73	Charge date		

Fee Collection
Reason Codes for Fee Collection

DE 25	7800		
		MCBS member settlement; for collection or payment of such things as member assessments, processed through the MasterCard Consolidated Billing System (MCBS).	
Maximum Amount	None		
DE 3	19 (credit to message originator), 29 (debit to message originator)		
DE 72	Position	Length	Contents
	For both credit to message originator and debit to message originator:		
			“MCBS - IIIIII SS - XXXXXXXXXXXXXXXXXXXXXXXX NNN ZZZ,ZZZ,ZZ9.99 BILLING CYCLE DATE - MMM DD, CCYY.”
	1–4	4	Constant = MCBS (system identification)
	5	1	Space
	6	1	Constant = Dash (-)
	7	1	Space
	8–14	7	IIIIII = Member ID (ICA)
	15–16	2	Spaces
	17–18	2	SS = Service Type
	19	1	Space
	20	1	Constant = Dash (-)
	21	1	Space
	22–43	22	XXXXX...XXX = Service Description
	44–45	2	Spaces
	46–48	3	NNN = Numeric Currency Code
DE 72	Position	Length	Contents
	49–50	2	Spaces
	51–64	14	ZZZ,ZZZ,ZZ9.99 = Dollar Amount
	65–67	3	Spaces
	68–85	18	BILLING CYCLE DATE
	86	1	Space
	87	1	Constant = Dash (-)
	88	1	Space

Fee Collection

Reason Codes for Fee Collection

	89–91	3	MMM = Calendar Month (alpha)
	92	1	Space
	93–94	2	DD = Calendar Day
DE 72	Position	Length	Contents
	95	1	Constant = Comma (,)
	96	1	Space
	97–100	4	CCYY = Calendar Year

Fee Collection Return/1740–780 and Fee Collection Arbitration Return/1740–782

The following table describes the DE 25 (Message Reason Code) values that apply to Fee Collection Return/1740–780 and Fee Collection Arbitration Return/1740–782 Messages.

NOTE

Transaction amount maximum can be set in currencies other than U.S. dollar. All Fee Collection/1740 message transaction amount maximum settings can be viewed in the IPM MPE Table IP0097T1: Message Reason Code Restrictions for Card Program Identifier and Business Service Arrangement. For example, the maximum amount for MRC 7601 for Europe intraregional business services for MCC and DMC acceptance brand is EUR 115.

DE 25	7600												
	Lost/stolen telex/phone fee; for collection of lost stolen report fee and phone or telex costs incurred for taking a lost or stolen card report.												
Maximum Amount	USD 65												
DE 3	19 (credit to message originator)												
DE 72	<table><tr><td>Position</td><td>Length</td><td>Contents</td></tr><tr><td>1–32</td><td>32</td><td>“LOST/STOLEN CARD TRANSACTION FEE”</td></tr><tr><td>33</td><td>1</td><td>Space</td></tr><tr><td>34–100</td><td>67</td><td>When the cardholder number is absent, the cardholder name and address should be placed in this field.</td></tr></table>	Position	Length	Contents	1–32	32	“LOST/STOLEN CARD TRANSACTION FEE”	33	1	Space	34–100	67	When the cardholder number is absent, the cardholder name and address should be placed in this field.
Position	Length	Contents											
1–32	32	“LOST/STOLEN CARD TRANSACTION FEE”											
33	1	Space											
34–100	67	When the cardholder number is absent, the cardholder name and address should be placed in this field.											
DE 73	Date lost/stolen report was taken												
DE 25	7601												

Recovered card award fee; for collection of reward for a card acceptor or financial institution employee when a card has been recovered.

Maximum Amount USD 115

DE 3 19 (credit to message originator)

DE 72	Position	Length	Contents
			Required Message Data:
	1	1	Card type code:
			1 = MasterCard® Card
			3 = Gold MasterCard™ Card
			4 = MasterCard BusinessCard™ Card or MasterCard Corporate Card™
			5 = MasterCard Corporate Purchasing Card™
			6 = MasterCard Corporate Fleet Card™
			7 = Platinum MasterCard™ Card
			8 = World MasterCard™ Card
	2	1	Space
DE 72	Position	Length	Contents
	3–6	4	Valid MCC; refer to the <i>Quick Reference Booklet</i> for a current listing. Valid MCC; refer to the <i>Quick Reference Booklet</i> for a current listing.
	7	1	Space
	8	1	Card recovery reason:
			1 = warning bulletin listing
			2 = authorization response
			4 = code
			5 = authenticator
			6 = non-hologram
			0 = other
			Optional Message Data:
	9	1	Space
	10–31	22	Name of card acceptor recovering card; space-filled if not applicable
	32	1	Space
	33–45	13	Card Acceptor's City

Fee Collection

Reason Codes for Fee Collection

	46	1	Space		
	47–49	3	Alphabetic; U.S. state or country code if outside the U.S. region; left-justified with trailing spaces		
	50	1	Space		
	51–100	50	Message text		
DE 73	Date card was recovered as recorded on ICA-6 form				
DE 25	7602				
	Emergency cash disbursement fee; for collection of fees associated with the handling of emergency cash disbursements to cardholders.				
Maximum Amount	USD 5,000				
DE 3	19 (credit to message originator)				
DE 72	Position	Length	Contents		
			Reason Code	Fee	Description
	1	1	A	USD 95	“US ECA-\$65 BASE FEE, \$30 LOCATION FEE” ¹
			B	USD 95	“NON-US ECA-\$65 BASE FEE, \$30 LOCATION FEE” ¹
			C	USD 50	“ECA REQUEST CANCELED/DENIED (US REGION)”
			D	USD 50	“ECA REQUEST CANCELED/DENIED (NON-US REGION)”
			E	USD 50	“REFERRED TO U.S. ISSUER BY REQUEST”
			F	USD 50	“REFERRED TO NON-U.S. ISSUER BY REQUEST”
			G	USD 95	“ECA AMOUNT TO CARD-HOLDER VIA WESTERN UNION”
			H–Z		Reserved for future use
	2–100	99	Spaces		
DE 73	Emergency cash disbursement date				
DE 25	7603				
	Compliance ruling settlement; for collection of a compliance ruling settlement amount.				
Maximum Amount	USD 5,000				
DE 3	19 (credit to message originator)				
DE 72	Position	Length	Contents		

Fee Collection
Reason Codes for Fee Collection

	1–11	11	MasterCard case number (for example, 31234-001-9)	
	12	1	Space	
	13–100	88	Optional message text as may be needed	
DE 73	Compliance Ruling Date			
DE 25	7604			
	Emergency card replacement fee; for collection of fees associated with the Emergency Card Replacement Service (ECR Service).			
Maximum Amount	USD 25,000			
DE 3	19 (credit to message originator)			
DE 72	Position	Length	Contents	
	1	1	Reason Code:	
			A	= issuance of emergency card
			B	= emergency cash disbursement not picked up
			C	= emergency card cancelled
			D	= second location ECR request
			E	= issuer denies ECR request
			F	= referred to card issuer outside the U.S. region
			G	= delivery of card within the U.S. region
			H	= delivery of card outside the U.S. region
			I	= initial member participation fee
			J	= monthly member participation fee
			K	= installation and training fee
			L	= survey statistics
			M–Z	reserved for future use
	2–100	99	Spaces	
DE 73	Emergency card replacement date			
DE 25	7605			
	Warning bulletin handling fee—issuer originated; for settlement of warning bulletin handling fees in accordance with MasterCard operating rules.			
Maximum Amount	USD 25			

Fee Collection

Reason Codes for Fee Collection

DE 3	19 (credit to message originator)		
DE 72	Position	Length	Contents
	1	1	Reason Code:
			A = incorrect card acceptor location
			B = incorrect transaction date
			C = combination of A and B
	2	1	Space
	3–25	23	Acquirer Reference Data (ARD)
	26	1	Space
	27–36	10	Chargeback reference number
	37–100	64	Spaces
DE 73	Second presentment Central Site processing date		
DE 25	7606		
	Good-faith acceptance settlement; for settlement of the amount of a good-faith acceptance.		
Maximum Amount	USD 5,000		
DE 3	19 (credit to message originator), 29 (debit to message originator)		
DE 72	Position	Length	Contents
	For both credit to message originator and debit to message originator		
	1–31	31	Reference number and the name of the person who gave acceptance
	32	1	Space
	33–100	68	Optional message text as may be needed
DE 73	Good-faith date		
DE 25	7607		
	Collection letter handling fee; for settlement of the amount of a collection letter acceptance.		
Maximum Amount	USD 5,000		
DE 3	19 (credit to message originator), 29 (debit to message originator)		
DE 72	Position	Length	Contents
	For both credit to message originator and debit to message originator:		
	1–11	11	Collection letter reference number

Fee Collection
Reason Codes for Fee Collection

	12	1	Space
	13–100	88	Optional message text as may be needed
DE 73	Collection letter date		
DE 25	7608		
	Telex authorization fee; for collection of fees associated with an international telex authorization.		
Maximum Amount	USD 20		
DE 3	19 (credit to message originator)		
DE 72	Position	Length	Contents
	1–33	33	Telex reference number and response
	34–100	67	Spaces
DE 73	Authorization Request Date		
DE 25	7610		
	Investigation fee; for fee collection when an investigation report has been completed by an investigating member on behalf of the requesting member.		
Maximum Amount	USD 1,000		
DE 3	19 (credit to message originator)		
DE 72	Position	Length	Contents
	1–19	19	“INVESTIGATION FEES”
	20–100	81	Spaces
DE 73	Investigation request date from ICA-7A form		
DE 25	7611		
	Retrieval fee reversal; issuer-originated; acquirer may return. For acquirer use when returning an invalid or incorrect retrieval fee reversal; applicable only if the previous cycle message reason code was 7611, or		
	For issuer use when returning an invalid or incorrect non-MasterCom fulfillment fee settlement; applicable only if the previous cycle message reason code was 7614.		
Maximum Amount	USD 15		
DE 3	19 (credit to message originator)		
DE 72	Position	Length	Contents
	1	1	Reason Code:

Fee Collection

Reason Codes for Fee Collection

			A	=	nonreceipt of document
			B	=	illegible document
			C	=	invalid card acceptor description
	2	1	Space		
	3–25	23	ARD		
	26	1	Space		
	27–36	10	Issuer control number		
	37–100	64	Spaces		
DE 73	PDS 0105 (File ID), subfield 2 (File Reference Date) of the Central Site processed Retrieval Fee Billing/1740-700 message.				
DE 25	7612				
	Retrieval handling fee; issuer-originated; acquirer may return. For acquirer use when returning an invalid or incorrect retrieval handling fee; applicable only if the previous cycle message reason code was 7612, or				
	For issuer use when returning an invalid or incorrect non-MasterCom fulfillment fee settlement; applicable only if the previous cycle message reason code was 7614, or for issuer use to assess the acquirer for incorrect information verified by the retrieval request document or a TID sent as chargeback documentation.				
	For issuer use to charge the acquirer for incorrect information verified by the retrieval request document or a TID sent as chargeback documentation.				
Maximum Amount	USD 25				
DE 3	19 (credit to message originator)				
DE 72	Position	Length	Contents		
	1	1	Reason Code:		
			A	=	incorrect card acceptor name
			B	=	incorrect card acceptor location
			C	=	incorrect transaction date
	2	1	Space		
	3–25	23	ARD		
	26	1	Space		
	If processing handling fee for TID received as a fulfillment, complete as follows:				
	27–36	10	Issuer control number		
	37	1	Space		

Fee Collection
Reason Codes for Fee Collection

	38–59	22	Incorrect A, B, or C condition; card acceptor name, city, state, country, or transaction date from original card acceptor description or Financial Detail message.	
	60	1	Space	
	61–82	22	Corrected A, B, or C condition; card acceptor name, city, state, country, or transaction date from retrieval fulfillment	
	83–100	18	Spaces	
	Position	Length	Content	
	If processing handling fee for TID received as a second presentment in response to a chargeback, complete as follows:			
	27–36	10	Chargeback reference number	
	37	1	Space	
	38–59	22	Incorrect A, B, or C condition; card acceptor name, city, state, country, or transaction date from the original card acceptor description or Financial Detail message.	
	60	1	Space	
	61–82	22	Corrected A, B, or C condition; card acceptor name, city, state, country, or transaction date from retrieval fulfillment.	
	83–100	18	Spaces	
DE 73	PDS 0105 (File ID), subfield 2 (File Reference Date) of the Central Site processed Retrieval Fee Billing/1740-700 or Second Presentment/1240-205 or 1240-282			
DE 25	7616			
	Handling fee for second presentment of reason codes 12 and 35 for chip transactions where transaction certificate and DE 55 (Integrated Circuit Card [ICC] System-Related Data) are present in the clearing message. Acquirer-originated.			
Maximum Amount	USD 25			
DE 3	19 (credit to message originator)			
DE 72	Position	Length	Contents	
	1	1	Reason Code:	
			A	= correct information previously provided with first presentment
	2	1	Space	
	3–25	23	ARD	
	26	1	Space	
	27–36	10	Chargeback reference number	

Fee Collection

Reason Codes for Fee Collection

	37–100	45	Spaces		
DE 73	PDS 0105 (File ID), subfield 2 (File Reference Date) of the member-submitted Second Presentment/1240-205 or 1240-282				
DE 25	7617				
	Adjustment for promotional transactions.				
Maximum Amount	None				
DE 3	19 (credit to message originator), 29 (debit to message originator)				
DE 72	Position	Length	Contents		
	For both credit to message originator and debit to message originator:				
	1–38	38	“ADJUSTMENT FOR PROMOTIONAL TRANSACTIONS”		
	39–100	62	Spaces		
DE 73	PDS 0105 (File ID), subfield 2 (File Reference Date) of the File Header/1644				
DE 25	7618				
	Reversal of previously reimbursed State Fuel Tax.				
Maximum Amount	None				
DE 3	19 (credit to message originator)				
DE 72	Position	Length	Contents		
	1–86	86	REVERSAL OF TAX REIMBURSE: FROM JURISDICTION SSSS VIA OIL AAA TO AGENCY NNN PERIOD YYMM		
	87–100	14	Spaces		
DE 25	7619				
	Emergency card replacement center, cash advance lockbox fee.				
Maximum Amount	USD 50				
DE 3	19 (credit to message originator)				
DE 72	Position	Length	Contents		
	1	1	Reason Code	Fee	Description
			A	USD 50	“U.S. ECR CENTER REIMBURSEMENT”
			B	USD 30	“ECA LOCATION REIMBURSEMENT”
			C	USD 50	“NON-U.S. ECR CENTER REIMBURSEMENT”
	2–100	99	Spaces		

DE 73	Emergency card replacement date		
DE 25	7621		
	ATM Balance Inquiry Fee—Reserved for intra-European use.		
Maximum Amount	USD 50		
DE 3	19 (credit to message originator)		
DE 72	Position	Length	Contents
	1-100	100	
DE 25	7622		
	Handling fee for Authorization Related Chargebacks (4807 and 4808). This fee is sent by the issuer after sending a First Chargeback/1442–450 or 1442–453 for one of the chargeback reasons identified above.		
Maximum Amount	USD 50		
DE 3	19 (credit to message originator)		
DE 72	Position	Length	Contents
	1–2	2	Values 07, 08, or 47 correspond to the IPM DE 25 (Message Reason Code) 4807 and 4808 of the related First Chargeback/1442
	3	1	Constant Space
	4	1	Values for Condition indicator:
			A = 4808 Requested/required authorization not obtained (declined)
			B = 4808 Requested/required authorization not obtained
			C = 4808 Requested/required authorization not obtained
			D = 4807 Warning bulletin
	5	1	Constant Space
	6	1	Constant 1 to denote the first chargeback
	7	1	Constant Space
	8–17	10	DE 95 (Card Issuer Reference Data). Chargeback reference number originally assigned by the issuer in the associated First Chargeback/1442 message
	18	1	Constant Space
	19–24	6	Date of the declined authorization associated with the disputed clearing record if position 4 of the DE 72 (Data Record) is “A”. MMDDYY or spaces.

Fee Collection

Reason Codes for Fee Collection

	25	1	Constant Space
	26–28	3	Constant 700
	29	1	Constant Space
	30–49	20	PDS 0137 (Fee Collection Control Number) assigned by the issuer. Right justified, leading zeros.
	50–100	51	Constant Space
DE 73	Date of the chargeback cycle with which the handling fee is associated		
DE 25	7623		
	Handling fee for Authorization Related Chargebacks (4807 and 4808). This fee is sent by the acquirer after sending a Second Presentment/1240-205 or 1240-282 for one of the chargeback reasons identified above.		
Maximum Amount	USD 100		
DE 3	19 (credit to message originator)		
DE 72	Position	Length	Contents
	1–2	2	Values 07, 08, or 47 correspond to the IPM Message Reason Code (DE 25) 4807 and 4808 of the related First Chargeback/1442
	3	1	Constant Space
	4	1	Values for Condition indicator.
			A = 4808 Requested/required authorization not obtained (declined)
			B = 4808 Requested/required authorization not obtained
			C = 4808 Requested/required authorization not obtained
			D = 4807 Warning bulletin
	5	1	Constant Space
	6	1	Constant 2 to denote the second presentment
	7	1	Constant Space
	8–17	10	DE 95 (Card Issuer Reference Data). Chargeback reference number originally assigned by the issuer in the associated First Chargeback/1442 message
	18–25	8	Constant Space
	26–28	3	Constant 700
	29	1	Constant Space

Fee Collection
Reason Codes for Fee Collection

	30–49	20	PDS 0137 (Fee Collection Control Number) assigned by the issuer in the (IPM Fee Collection/1740-700 message with a DE 25 (Message Reason Code) of 7622, or spaces, if the issuer did not send a Fee Collection/1740-700 message. Right justified, leading zeros.		
	50	1	Constant Space		
	51–56	6	Date authorization request approved. MMDDYY		
	57	1	Constant Space		
	58–63	6	DE 38 (Approval Code)–XXXXXX		
	64–100	37	Constant Space		
DE 73	Date of the chargeback cycle with which the handling fee is associated				
DE 25	7624				
	Handling fee for Authorization Related Chargebacks (4807 and 4808). This fee is sent by the issuer after sending an Arbitration Chargeback/1442-451 or 1442-454 for one of the chargeback reasons identified above.				
Maximum Amount	USD 150				
DE 3	19 (credit to message originator)				
DE 72	Position	Length	Contents		
	1–2	2	Values 07, 08, or 47 correspond to the DE 25 (IPM Message Reason Code) 4807 and 4808 of the related Arbitration Chargeback/1442 message		
	3	1	Constant Space		
	4	1	Values for Condition indicator.		
			A	=	4808 Requested/required authorization not obtained (declined)
			B	=	4808 Requested/required authorization not obtained
			C	=	4808 Requested/required authorization not obtained
			D	=	4807 Warning bulletin
	5	1	Constant Space		
	6	1	Constant 2 to denote the second presentment		
	7	1	Constant Space		
	5	1	Constant Space		
	6	1	Constant 3 to denote Arbitration Chargeback/1422		
	7	1	Constant Space		

Fee Collection

Reason Codes for Fee Collection

	8–17	10	DE 95 (Card Issuer Reference Data) from the associated First Chargeback/1442 message
	18	1	Constant Space
	19–24	6	Date of the declined Authorization provided with first chargeback if position 4 of the DE 72 (Data Record) is “A”. MMDDYY or spaces
	25	1	Constant Space
	26–28	3	Constant 700
	29	1	Constant Space
	30–49	20	Original PDS 0137 (Fee Collection Control Number) assigned by the acquirer in the IPM Fee Collection/1740-700 message with a DE 25 (Message Reason Code) of 7623, or spaces, if the acquirer did not send a Fee Collection/1740-700 message.
	50–63	14	Constant Space
	64–100	37	Explanation for arbitration chargeback, such as, the approved authorization was not for this transaction.
DE 73	Date of the chargeback cycle with which the handling fee is associated		
DE 25	7625		
	PIN Management Service at ATM. (Intra-European use only).		
Maximum Amount	USD 5		
DE 3	19 (credit to sender of the fee collection)		
DE 72	Position	Length	Contents
	1–100	100	PIN CHANGE xxxx xxxx xxxx xxxx (where xxxx xxxx xxxx xxxx represents the cardholder number) OR PIN TRY COUNTER RESET xxxx xxxx xxxx (where xxxx xxxx xxxx xxxx represents the cardholder number)
DE 73	Date the service was performed at the ATM		
DE 25	7626		
	Private Label Merchant Fee for Private Label fee collection messages. This fee collection message reason code is available for business service arrangements level 1 (interregional), level 2 (intraregional), level 3 (intercountry) and level 4 (intracountry) where Private Label exists.		
Maximum Amount	None		
DE 3	19 (credit to message originator), 29 (debit to message originator)		
DE 25	7627		
	Fees related to the issuer's failure to provide a Merchant Advice Code; for acquirer use only.		

Maximum Amount	USD 100		
DE 3	19 (credit to message originator)		
DE 72	Position	Length	Contents
	1–2	2	Values 07, 08, or 47 correspond to the IPM DE 25 (Message Reason Code) 4807 and 4808 of the related First Chargeback/1442
	3	1	Constant Space
	4	1	Values for Condition indicator.
			A = 4808 Requested/required authorization not obtained (declined)
			B = 4808 Requested/required authorization not obtained
			C = 4808 Requested/required authorization not obtained
			D = 4807 Warning bulletin
	5	1	Constant Space
	6	1	Constant 1 to denote the first chargeback
	7	1	Constant Space
	8–17	10	DE 95 (Card Issuer Reference Data). Chargeback reference number originally assigned by the issuer in the associated First Chargeback/1442 message
	18	1	Constant Space
	19–24	6	Date of the declined authorization associated with the disputed clearing record if position 4 of the DE 72 (Data Record) is “A”. MMDDYY or spaces.
	25	1	Constant Space
	26–28	3	Constant 700
	29	1	Constant Space
	30–49	20	PDS 0137 (Fee Collection Control Number) assigned by the issuer. Right justified, leading zeros.
	50–100	51	Constant Space
DE 73	Date of the chargeback cycle with which the handling fee is associated		

DE 25 7628

Reclaim surcharge—Reserved for intra-European and European transaction related services.

DE 3 19 (credit to message originator)

DE 72 Position Length Contents

Fee Collection

Reason Codes for Fee Collection

	1-100	100
DE 25	7700	
	Intracurrency settlement agreement; for settlement of amounts in accordance with an intracountry agreement between transaction originator and transaction destination parties.	
Maximum Amount	USD 40,000	
DE 3	19 (credit to message originator), 29 (debit to message originator)	
DE 72	Position	Length Contents
	For both credit to message originator and debit to message originator:	
	1-100	100
DE 25	7704	
	Bank Card Interchange fee, reverse interchange for ATM transactions (Mexico Domestic).	
Maximum Amount	None	
DE 3	19 (credit to message originator), 29 (debit to message originator)	
DE 25	7705	
	Transactions below to threshold published (Mexico Domestic). Member calculates VAT (Value Added Tax).	
Maximum Amount	None	
DE 3	19 (credit to message originator), 29 (debit to message originator)	
DE 25	7706	
	Difference in interchange amount between member calculated and MasterCard calculated (Mexico Domestic). Member calculates VAT (Value Added Tax).	
Maximum Amount	None	
DE 3	19 (credit to message originator), 29 (debit to message originator)	
DE 25	7707	
	Interest for late settlements (Mexico Domestic). Member calculates VAT (Value Added Tax).	
Maximum Amount	None	
DE 3	19 (credit to message originator), 29 (debit to message originator)	
DE 25	7708	
	Non fullfilled documentation penalties (Mexico Domestic). Member calculates VAT (Value Added Tax).	

Maximum Amount	None
DE 3	19 (credit to message originator), 29 (debit to message originator)
DE 25	7709
	Penalties on code 102 miscellaneous (Mexico Domestic). Member calculates VAT (Value Added Tax).
Maximum Amount	None
DE 3	19 (credit to message originator), 29 (debit to message originator)
DE 25	7710
	Miscellaneous (Mexico Domestic).
Maximum Amount	None
DE 3	19 (credit to message originator), 29 (debit to message originator)
DE 25	7711
	Pre-fund amount, offset for others (Mexico Domestic).
Maximum Amount	None
DE 3	19 (credit to message originator), 29 (debit to message originator)
DE 25	7712
	Bank Card Interchange fee, balance inquiry interchange. Member calculates VAT (Value Added Tax).
Maximum Amount	None
DE 3	19 (credit to message originator), 29 (debit to message originator)
DE 25	7750–7799
	Bilateral agreement settlement; for settlement of amounts in accordance with a bilateral agreement between transaction originator and transaction destination parties.
Maximum Amount	USD 5,000
DE 3	19 (credit to message originator), 29 (debit to message originator)
DE 72	Position Length Contents
	For both credit to message originator and debit to message originator:
	1–100 100
DE 73	Charge date

Fee Collection

Reason Codes for Fee Collection

DE 25	7800		
		MCBS member settlement; for collection or payment of such things as member assessments, processed through the MasterCard Consolidated Billing System (MCBS).	
Maximum Amount	None		
DE 3	19 (credit to message originator), 29 (debit to message originator)		
DE 72	Position	Length	Contents
	For both credit to message originator and debit to message originator:		
			"MCBS - IIIIII SS - XXXXXXXXXXXXXXXXXXXXXXXX NNN ZZZ,ZZZ,ZZ9.99 BILLING CYCLE DATE - MMM DD, CCYY."
	1-4	4	Constant = MCBS (system identification)
	5	1	Space
	6	1	Constant = Dash (-)
	7	1	Space
	8-14	7	IIIII = Member ID (ICA)
	15-16	2	Spaces
	17-18	2	SS = Service Type
	19	1	Space
	20	1	Constant = Dash (-)
	21	1	Space
	22-43	22	XXXXX...XXX = Service Description
	44-45	2	Spaces
	46-48	3	NNN = Numeric Currency Code
	49-50	2	Spaces
	51-64	14	ZZZ,ZZZ,ZZ9.99 = Dollar Amount
	65-67	3	Spaces
	68-85	18	BILLING CYCLE DATE
	86	1	Space
	87	1	Constant = Dash (-)
	88	1	Space
	89-91	3	MMM = Calendar Month (alpha)
	92	1	Space

93–94	2	DD = Calendar Day
95	1	Constant = Comma (,)
96	1	Space
97–100	4	CCYY = Calendar Year

Fee Collection (Clearing System-generated)/1740–783

The following table describes the DE 25 (Message Reason Code) values that apply to Fee Collection (Clearing System-generated)/1740–783 Messages.

NOTE

Transaction amount maximum can be set in currencies other than U.S. dollar. All Fee Collection/1740 message transaction amount maximum settings can be viewed in the IPM MPE Table IP0097T1: Message Reason Code Restrictions for Card Program Identifier and Business Service Arrangement. For example, the maximum amount for MRC 7601 for Europe intraregional business services for MCC and DMC acceptance brand is EUR 115.

DE 25	7629																					
	Interregional non-financial ATM interchange for collection of interchange due on a non-financial ATM transaction (MasterCard® Debit Switch [MDS])-originated.																					
Maximum Amount	USD 5																					
DE 3	19 (credit to message originator), 29 (debit to message originator)																					
DE 72	<table><tr><th>Position</th><th>Length</th><th>Contents</th></tr><tr><td colspan="3">For both credit to message originator and debit to message originator:</td></tr><tr><td>1–11</td><td>11</td><td>DE 32 (Acquiring Institution ID Code) from the authorization message. This value contains the acquiring institution identification code. It is right-justified with leading zeros.</td></tr><tr><td>12–22</td><td>11</td><td>DE 33 (Forwarding Institution ID Code) from the authorization message. This value contains the forwarding institution identification code. It is right-justified with leading zeros.</td></tr><tr><td>23–26</td><td>4</td><td>DE 13 (Date, Local Transaction) from the authorization message. This value contains the local month and day at which the transaction takes place at the point of service.</td></tr><tr><td>27–32</td><td>6</td><td>DE 11 (Systems Trace Audit Number) from the authorization message. This value contains the systems trace audit number (STAN) which is a unique identifier assigned to each transaction by the message originator.</td></tr><tr><td>33–44</td><td>12</td><td>DE 37 (Retrieval Reference Number) from the authorization message. This value contains the retrieval reference number and is supplied by the system, retaining the original document of the transaction.</td></tr></table>	Position	Length	Contents	For both credit to message originator and debit to message originator:			1–11	11	DE 32 (Acquiring Institution ID Code) from the authorization message. This value contains the acquiring institution identification code. It is right-justified with leading zeros.	12–22	11	DE 33 (Forwarding Institution ID Code) from the authorization message. This value contains the forwarding institution identification code. It is right-justified with leading zeros.	23–26	4	DE 13 (Date, Local Transaction) from the authorization message. This value contains the local month and day at which the transaction takes place at the point of service.	27–32	6	DE 11 (Systems Trace Audit Number) from the authorization message. This value contains the systems trace audit number (STAN) which is a unique identifier assigned to each transaction by the message originator.	33–44	12	DE 37 (Retrieval Reference Number) from the authorization message. This value contains the retrieval reference number and is supplied by the system, retaining the original document of the transaction.
Position	Length	Contents																				
For both credit to message originator and debit to message originator:																						
1–11	11	DE 32 (Acquiring Institution ID Code) from the authorization message. This value contains the acquiring institution identification code. It is right-justified with leading zeros.																				
12–22	11	DE 33 (Forwarding Institution ID Code) from the authorization message. This value contains the forwarding institution identification code. It is right-justified with leading zeros.																				
23–26	4	DE 13 (Date, Local Transaction) from the authorization message. This value contains the local month and day at which the transaction takes place at the point of service.																				
27–32	6	DE 11 (Systems Trace Audit Number) from the authorization message. This value contains the systems trace audit number (STAN) which is a unique identifier assigned to each transaction by the message originator.																				
33–44	12	DE 37 (Retrieval Reference Number) from the authorization message. This value contains the retrieval reference number and is supplied by the system, retaining the original document of the transaction.																				

Fee Collection

Reason Codes for Fee Collection

	45–64	20	DE 127 (Private Data) from the authorization message. This value contains the first 20 positions of Acquirer Private Data. It is left justified with trailing spaces.
DE 25	7702		
			Domestic ATM VAT Fees/Services—Used for the Mexico Domestic Fee Collection/1740 message on the VAT amount on ATM transactions. MasterCard calculates the VAT when submitted with this message reason code.
DE 25	7800		
			MCBS member settlement; for collection or payment of such things as member assessments, processed through the MasterCard Consolidated Billing System (MCBS).
Maximum Amount	None		
DE 3	19 (credit to message originator), 29 (debit to message originator)		
DE 72	Position	Length	Contents
			For both credit to message originator and debit to message originator:
			“MCBS - IIIIII SS - XXXXXXXXXXXXXXXXXXXXXXX NNN ZZZ,ZZZ,ZZ9.99 BILLING CYCLE DATE - MMM DD, CCYY.”
	1–4	4	Constant = MCBS (system identification)
	5	1	Space
	6	1	Constant = Dash (-)
	7	1	Space
	8–14	7	IIIIII = Member ID (ICA)
	15–16	2	Spaces
	17–18	2	SS = Service Type
	19	1	Space
	20	1	Constant = Dash (-)
	21	1	Space
	22–43	22	XXXXX...XXX = Service Description
	44–45	2	Spaces
	46–48	3	NNN = Numeric Currency Code
	49–50	2	Spaces
	51–64	14	ZZZ,ZZZ,ZZ9.99 = Dollar Amount
	65–67	3	Spaces

	68–85	18	BILLING CYCLE DATE
	86	1	Space
	87	1	Constant = Dash (-)
	88	1	Space
	89–91	3	MMM = Calendar Month (alpha)
	92	1	Space
	93–94	2	DD = Calendar Day
DE 72	Position	Length	Contents
	95	1	Constant = Comma (,)
	96	1	Space
	97–100	4	CCYY = Calendar Year
DE 25	7802		
	Interchange compliance adjustment; for settlement of financial amounts related to interchange compliance.		
Maximum Amount	None		
DE 3	19 (credit to message originator), 29 (debit to message originator)		
DE 73	PDS 0105 (File ID), subfield 2 (File Reference Date) of the File Header/1644		
DE 72	Position	Length	Contents
	For both credit to message originator and debit to message originator:		
	1–33	33	“INTERCHANGE COMPLIANCE ADJUSTMENT”
	34–100	67	Spaces
DE 25	7803		
	Interchange compliance adjustment reversal; for settlement of financial amounts related to the reversal of a previous interchange compliance adjustment.		
Maximum Amount	None		
DE 3	19 (credit to message originator), 29 (debit to message originator)		
DE 73	PDS 0105 (File ID), subfield 2 (File Reference Date) of the File Header/1644		
DE 72	Position	Length	Contents
	For both credit to message originator and debit to message originator:		
	1–41	41	“INTERCHANGE COMPLIANCE BACKOUT ADJUSTMENT”

Fee Collection

Reason Codes for Fee Collection

	42–100	59	Spaces
DE 25	7804		
	ATM transaction settlement; for settlement of daily ATM transaction amounts.		
Maximum Amount	None		
DE 3	19 (credit to message originator), 29 (debit to message originator)		
DE 72	Position	Length	Contents
	For both credit to message originator and debit to message originator:		
			Indicates an association with ATM processing: When the issuer receives only summary data from GCMS, the message text must be one of the following:
	1–7	7	“NET AMT” = transaction amount field equals the net dollar value of all ATM withdrawals transacted by an issuer’s cardholders.
	8–100	93	Spaces
	1–4	4	“FEES” = transaction amount field equals the accumulation of processing fees owed by the issuer for noncash withdrawal transactions and the acquirer interchange fees owed by the issuer
	5–100	96	Spaces
	1–5	5	“SWFEE” = transaction amount field represents the MasterCard ATM Network fees owed by the issuer for ATM transactions
	6–100	95	Spaces
			When the issuer receives GCMS detail data, the message text must be one of the following:
	1–4	4	“FEES” = transaction amount field represents the accumulated processing fees owed by the issuer for noncash withdrawal transactions
	5–100	96	Spaces
	1–5	5	“SWFEE” = transaction amount field represents the MasterCard ATM Network fees owed by the issuer for ATM transactions
	6–100	95	Spaces
			When an ATM acquirer receives GCMS settlement information in the Fee Collection/1740 message, the message text must be one of the following:
	1–5	5	“NETAQ” = if summarizing the ATM cash disbursement “FEEAQ” = if summarizing the ATM fees owed by the acquirer
	6–100	95	Spaces
DE 25	7805		

	ATM intracountry switch fee settlement; for settlement of daily ATM transaction intracountry switch fees.		
Maximum Amount	None		
DE 3	19 (credit to message originator)		
DE 72	Position	Length	Contents
			When the issuer receives GCMS summary or detail data, the message text must be:
	1–5	5	“ISISW” = transaction amount represents Cirrus ATM fees owed by the issuer for intracountry ATM activity
	6–100	95	Spaces

DE 25 7806

	ATM NICS™ switch fee settlement; for settlement of MDS NICS™ Switch Fees.		
Maximum Amount	None		
DE 3	19 (credit to message originator), 29 (debit to message originator)		
DE 72	Position	Length	Contents
			For both credit to message originator and debit to message originator:
	1–100	100	

DE 25 7807

	ATM intracountry first chargeback settlement; for settlement of daily ATM transaction intracountry first chargeback amounts.		
Maximum Amount	None		
DE 3	29 (debit to message originator)		
DE 72	Position	Length	Contents
			When the issuer receives GCMS detail data, the message text must be:
	1–5	5	“ICHBK” = transaction amount represents chargeback funds owed to the issuer for intracountry ATM activity
	6–100	95	Spaces

DE 25 7808

	Miscellaneous Override Financial Adjustment.		
Maximum Amount	None		

Fee Collection

Reason Codes for Fee Collection

DE 3	19 (credit to message originator [MasterCard]), 29 (debit to message originator [MasterCard])		
DE 72	Position	Length	Contents
	1–29	29	“INTERCHANGE ADJUSTMENT FOR :”
	30–37	8	Process Date in MM/DD/YY format
	38–38	1	Blank (only when the fee collection is for the issuer)
	39–76	78	Account Range (only when the fee collection is for the issuer)

DE 25	7811

	Reimbursement of State Fuel Tax.		
Maximum Amount	None		
DE 3	19 (credit to message originator [MasterCard]), 29 (debit to message originator [MasterCard])		
DE 72	Position	Length	Contents
	For credit to message originator:		
	1–80	80	“TAX REIMBURSE DEBIT FROM JURISDICTION SSSS VIA OIL AAA TO AGENCY NNN PERIOD YYMM”
	81–100	20	Spaces
	For debit to message originator:		
	1–81	81	“TAX REIMBURSE CREDIT FROM JURISDICTION SSSS VIA OIL AAA TO AGENCY NNN PERIOD YYMM”
	82–100	19	Spaces

DE 25	7812

	Collection or return of collateral for security arrangement.		
Maximum Amount	None		
DE 3	19 (credit to message originator [MasterCard]), 29 (debit to message originator [MasterCard])		
DE 72	Position	Length	Contents
	For credit to message originator:		
	1–49	49	“COLLECTION OF COLLATERAL FOR SECURITY ARRANGEMENT”
	50–100	51	Spaces
	For debit to message originator:		
	1–46	46	“RETURN OF COLLATERAL FROM SECURITY ARRANGEMENT”
	47–100	54	Spaces

DE 25	7813		
	IVA fees		
Maximum Amount	None		
DE 3	19 (credit to message originator), 29 (debit to message originator)		
DE 73	PDS 0105 (File ID), subfield 2 (File Reference Date) of the File Header/1644		
DE 72	Position	Length	Contents
	For both credit to message originator and debit to message originator:		
	1–15	15	IVA on IC/Fee
	16–100	85	Spaces
DE 25	7820		
	Disaster Relief Fund (credit to sender).		
Maximum Amount	None		
DE 3	19 (credit to message originator), 29 (debit to message originator)		
DE 73	PDS 0105 (File ID), subfield 2 (File Reference Date) of the File Header/1644		
DE 72	Position	Length	Contents
	For both credit to message originator and debit to message originator:		
	1–100	100	
DE 25	7821		
	MCBS Credit Emergency.		
Maximum Amount	None		
DE 3	19 (credit to message originator), 29 (debit to message originator)		
DE 72	Position	Length	Contents
	For both credit to message originator and debit to message originator:		
	1–100	100	
DE 25	7822		
	Settlement Adjustment		
Maximum Amount	None		
DE 3	19 (credit to message originator), 29 (debit to message originator)		

Fee Collection

Reason Codes for Fee Collection

DE 73	The date of the settlement adjustment		
DE 72	Position	Length	Contents
	1–21	21	“SETTLEMENT ADJUSTMENT”
	22–100	79	Spaces

DE 25	7823

	MDS Offline Debit Settlement (MasterCard Internal Use Only).		
Maximum Amount	None		
DE 3	19 (credit to message originator)		
DE 72	Position	Length	Contents
	1–100	100	MDS feed via S.A.M.

DE 25	7824

	Collection of Reward Amount as agreed upon between the members.		
Maximum Amount	None		
DE 3	29 (debit to message originator)		
DE 72	Position	Length	Contents
	1–27	27	“Collection of reward amount”
	28–100	73	Spaces

Chapter 15 Reversals

This chapter describes how to create reversals and how GCMS will process them.

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How to Create Reversals

A reversal message informs the receiver to disregard the original message.

The settlement values for a reversal message and its original together produce a net settlement value of zero.

Customers can reverse one or more individual messages or an entire clearing file.

Identification of Reversal Messages

Customers must identify a single reversal message by adding Private Data Subelement (PDS) 0025 (Message Reversal Indicator) to the message and populating its subfields as follows.

In...	The customer provides...
Subfield 1	A value of R.
Subfield 2	The original Global Clearing Management System (GCMS) processing date of the message being reversed.

Identification of Reversal Files

Customers have two options for identifying a reversal file. They must choose only one of the following options:

- Add PDS 0026 (File Reversal Indicator) to the File Header message of the file, and populate subfield 1 (File Reversal Indicator) with a value of R. In subfield 2 (Central Site Processing Date of Original File), provide the original GCMS processing date of the file being reversed.
- Add PDS 0025 to every message in the file except for the File Header and File Trailer messages. Subfield 1 (Message Reversal Indicator) must contain a value of R. Subfield 2 (Central Site Processing Date of Original Message) must contain the original GCMS processing date of the message being reversed.

How to Send Reversal Messages

Customers will follow the procedure below to reverse an individual message.

Reversals

How to Create Reversals

Step	Action
1.	The customer realizes that it needs to reverse an individual message.
2.	The customer extracts the message to be reversed. For example, if a customer wants to reverse a message containing a specific cardholder account number, the customer can use the IPM Message Selection Criteria utility to select and extract the message containing that cardholder account number.
3.	The customer adds PDS 0025 to the message, with the value R in subfield 1 and the original GCMS processing date in subfield 2.
4.	The customer adds the reversal message to one of its outgoing clearing files.
5.	If the customer's original message needs to be resent because it contained incorrect data, the customer corrects the data in the original message and resubmits it.

GCMS will recognize and process individual reversal messages submitted in a file. There is no requirement to isolate reversal messages or to send them in separate files.

How to Send Reversal Files—Full Files

GCMS allows customers to send one original file and one reversal file using the same file ID. This allows customers to correct invalid files with minimal changes to the original file.

Customers will follow the procedure below to reverse full files.

Step	Action
1.	The customer realizes that it needs to reverse an entire file.
2.	The customer sends a full file reversal using the same file ID or a new file ID. The customer adds PDS 0026 to the file header message with the value R in subfield 1 and the original GCMS processing date in subfield 2. Because PDS 0026 is present in the File Header message, GCMS recognizes the file as a full file reversal. GCMS inserts PDS 0025 Message Reversal Indicator into each individual message in the file and processes and distributes each message as a single-item reversal.
3.	If the customer's original file needs to be resent because it contained incorrect data, the customer corrects the data in the original file and resubmits it using a different file ID.

For example, suppose that customer 001234 sends file ID 0020406150000000123400001 on 15 June 2004.

1. The customer realizes that the data is incorrect and that the customer needs to reverse the file and resubmit the data.

2. Customer 001234 sends a full file reversal using the same file ID 0020406150000000123400001, on 16 June 2004 to reverse the incorrect data. The customer adds PDS 0026 to the File Header message of this file before sending it. The date provided in PDS 0026 subfield 2 must be the 15 June 2004 date. This is the original file processing date. GCMS processes each individual message in the file as a reversal; however, if an individual message is already a reversal transaction, it will be processed as an original transaction.
3. Customer 001234 then corrects the data in the original file and resubmits it using a different file ID, such as 0020406150000000123400002.

If customer 001234 submits the corrected data using file ID 0020406150000000123400001 again, GCMS will reject this third file because it contains a duplicate file ID. GCMS allows one original file and one reversal file for each file ID.

Allowing customers to reverse files using the same file ID simplifies the creation of reversal files. Customers only need to populate PDS 0026 in the File Header message with an R to indicate that the entire file is being reversed.

NOTE

Customers will not receive an entire file that is a full file reversal file (that is, PDS 0026 will not be present in the customer inbound file header). In the receiving customer's clearing file, reversal messages will be mixed with non-reversal messages.

How to Send Reversal Files—Partial Files

Instructions on how to send a partial reversal file are as follows.

1. Extract the messages to be reversed into a new file. For example, if a customer wants to reverse all of the first chargebacks from a file, the customer can extract all first chargebacks from the original file.
2. Create a file header message with a value of R in PDS 0026.
3. Create a file trailer containing zeros in PDS 0301 (File Amount, Checksum) and PDS 0306 (File Message Counts).
4. Submit the file for processing.

Customers should not combine messages from more than one processing date to be reversed. This is because the date in subfield 2 of PDS 0026 will allow specification of only one original processing date for the currency conversion rate history. The clearing system uses that date's currency conversion rate (if necessary) to apply to the reversal transactions.

NOTE

Customers submitting a full or partial reversal file (indicated by the presence of PDS 0026 in the File Header) are not required to use a File ID that has already been processed. For example, customers creating a partial reversal file may choose to assign a new File ID instead of using the original File ID.

Using MasterCard Software Utilities to Create Reversals

MasterCard IPM Software Utilities consist of a suite of utilities that read, write, and process messages in the IPM format. Customers can use one of these utilities, the IPM Message Selection Criteria Utility, to simplify the process of creating reversal messages and files.

This utility reads a given IPM clearing file and selects messages that match the customer-specified criteria. Its output is an IPM file containing a File Header message and the messages that match the selection criteria.

A customer can use the IPM Message Selection Criteria Utility to select the messages it wants to reverse. For example, if a customer needs to reverse all first presentments submitted for the U.S. region Merit III interchange program with a transaction date of 21 August 2003, the customer can create selection criteria for these conditions. The customer uses the selection criteria as input to the IPM Message Selection Criteria Utility, along with the original file.

The utility selects all messages that match the input criteria and puts them in an output file along with the file header message of the original file. The customer would then insert PDS 0026 into this file header message and optionally change the value of PDS 0105 (File ID). Finally, the customer would add a file trailer message to the end of this file, with values of all zeros in PDS 0301 and PDS 0306. Then the customer would send this file to MasterCard for processing within GCMS.

NOTE

For more information about the IPM Message Selection Criteria, refer to either the *IPM Pre-edit and Utilities—Mainframe* guide or to the *IPM Pre-edit and Utilities—Workstation Plus* guide.

Having MasterCard Reverse Files

MasterCard will submit full file reversals at the customer's request.

Customers that want to request this service must provide the File ID of the file to be reversed and the original GCMS processing date of that file to their Customer Operations Services team, regional office representative, or Strategic Operations representative. MasterCard will use this information to create and submit a full-file reversal as documented in the [How to Send Reversal Files—Full Files](#) section.

Editing Reversal Messages

GCMS automatically excludes reversal messages from most interchange qualification edits. For example, GCMS excludes reversal First Presentment/1240 messages from interchange timeliness and industry-related addendum requirements.

GCMS does edit the File ID in all full-file reversals to ensure that it has not been previously reversed. As noted, the File ID in a reversal file does not have to be the original file ID, but it cannot be a File ID that has been used in a previous full-file reversal.

Reporting Reversal Rejects

GCMS generates Message Exception/1644 or File Reject/1644 messages for all rejected messages or files. Within these error messages, GCMS designates reversal transactions by the presence of PDS 0025 in the individual message for individual transaction reversals and PDS 0026 in the header message for full file reversals.

Duplicate GCMS Postings

A duplicate file occurs when GCMS processes an individual transaction more than once. GCMS has certain edits and built-in controls that help it to detect duplicate files.

GCMS Editing for Duplicate Files

To prevent a duplicate file from being processed, GCMS rejects the entire file if PDS 0105 in the File Header/1644 message matches one that was processed within the last 180 days for the customer or processor (specified in PDS 0105, subfield 3 [Processor ID]).

For example, suppose that customer 1234 sends file ID number 00204061500000001234000001. If the GCMS File ID History File contains the same file ID number within the last 180 days of file IDs from customer 1234, GCMS will reject that second file 00204061500000001234000001 as a duplicate file.

Reasons for Duplicate GCMS Files or Postings

Following are some reasons that duplicate postings may occur.

- An operator changes the file ID number on a previously processed file and resends it.
- Previously processed merchant deposits are processed again.
- The merchant deposits the same transaction more than once.

MasterCard recommends that customers establish controls to prevent and detect these and other errors to help prevent duplicate files and postings.

Identification of Duplicate GCMS Postings

If a duplicate posting does occur, either the sending customer or the receiving customer may identify it.

If the receiving customer discovers a duplicate posting, it must notify the sending customer. The sending customer must inform the St. Louis Operations Center by telephone and then take action to correct the duplicate postings by submitting reversals.

When the sending customer notifies MasterCard about a duplicate posting, the customer must provide the following information about both the original and the duplicated postings:

- File ID numbers
- Net amounts

Chapter 16 Collection Only Activity

This chapter describes what Collection Only activity is and how GCMS will process these transactions.

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Definition of Collection-Only Transactions

The definition of a Collection-Only transaction is as follows.

A Collection-Only transaction is one that is either:

- Acquired and issued by the same customer (that is, On-Us)
- Acquired and issued by customers processing through the same processor (that is, intraprocessor)

MasterCard introduces the Global Brand Compliance program to manage these transactions and retain them for reporting and analysis purposes. MasterCard neither clears nor settles them.

Identification of Collection-Only Transactions

Customers must identify a Collection-Only transaction by populating PDS 0165 (Settlement Indicator), subfield 1 (Settlement Indicator) with a value of C.

This causes the Global Clearing Management System (GCMS) to perform limited edits on the transaction and to truncate it at MasterCard.

Processing On-Us and Intraprocessor Transactions for Collection-Only

Details about how On-Us and Intraprocessor transactions are processed are as follows.

If conducted with a MasterCard card or Debit MasterCard card, the following types of First Presentment/1240 transactions must be submitted to MasterCard for reporting purposes:

Collection Only Activity

Processing On-Us and Intraprocessor Transactions for Collection-Only

- Purchase (DE 3 [Processing Code], subfield 1 [Cardholder Transaction Type] = 00)
- ATM (DE 3, subfield 1 = 01). Customers that do not already process their On-Us or intraprocessor ATM transactions via the MasterCard® Debit Switch (MDS) or GCMS, must provide them to GCMS as Collection Only messages.
- Purchase with cash back (DE 3, subfield 1 = 09)
- Cash disbursement (DE 3, subfield 1 = 12)
- Unique (DE 3, subfield 1 = 18)
- Credit (DE 3, subfield 1 = 20)
- Payment Transaction (DE 3, subfield 1 = 28)
- Balance Inquiry (DE 3, subfield 1 = 30)
- PIN Unblock (DE 3, subfield 1 = 91)
- PIN Change (DE 3, subfield 1 = 92)

Although not required, customers may also submit Collection-Only balance transfers (DE 3, subfield 1 = 50) and convenience checks (DE 3, subfield 1 = 17) to MasterCard. If submitted, both of these transaction types must contain a Card Acceptor Business Code (MCC) of 6012 (Financial Institutions—Merchandise and Services) and are available only for Collection-Only transactions.

Customers may combine Collection-Only transactions with all other transactions in the same file, or they may provide Collection-Only transactions in a separate file. GCMS has no requirements to separate Collection-Only transactions from other transactions.

Transactions that are Not Permitted for Collection-Only

The following types of transactions should not be submitted as Collection-Only.

- Retrieval Request/1644
- First Chargeback/1442
- Second Presentment/1240
- Arbitration Chargeback/1442
- Fee Collection (Retrieval Fee Billing)/1740
- Fee Collection (Other)/1740
- Fee Collection (Handling Fees)/1740

Reversing Collection-Only Data

A customer should reverse Collection-Only data only in the following circumstances.

- Previously submitted Collection-Only data was duplicated (same messages sent twice).
- Previously submitted Collection-Only data was incorrect.

NOTE

For instructions for reversing a single message or an entire file (applicable to both Collection-Only activity and non-Collection-Only activity), refer to [Bilateral Settlement Activity](#).

Editing Collection-Only Data

GCMS automatically excludes Collection Only transactions from most interchange qualification edits.

For example, GCMS excludes Collection Only First Presentment/1240 transactions from authorization code, interchange timeliness, and industry-related addendum requirements.

Reporting Collection-Only Rejects

GCMS generates Message Exception/1644 or File Reject/1644 messages for all rejected messages and files. Within these error messages, Collection-Only activity is designated by a value of C in PDS 0165 (Settlement Indicator), subfield 1 (Settlement Indicator).

The clearing system reports rejected Collection-Only data via the Collection-Only Error Detail Report, report number IP857010-BB. Refer to [Clearing Processing Details](#) for more information.

Collection-Only Activity in Relation to Reconciliation Messages

IPM Financial Position Detail Reconciliation messages provide amount and fee totals in each customer's reconciliation currency. These totals are also optionally available in transaction currency.

Because MasterCard does not clear or settle Collection-Only transactions, IPM Financial Position Detail Reconciliation message totals for these transactions in the customer's **reconciliation** currency will contain zeros. If the customer has requested the "transaction currency" option for reconciliation messages, IPM Financial Position Detail Reconciliation message totals for these transactions in the **transaction** currency will be present and will contain the correct (non-zero) amounts.

Customers that want to receive reconciliation totals for Collection-Only activity should request both the **transaction currency** option and the **settlement indicator** option for IPM Financial Position Detail Reconciliation messages to differentiate amount totals for these transactions.

Collection Only Activity

Collection-Only Activity in Relation to Reconciliation Messages

Customers may select category options using the *GCMS Parameter Worksheet* (Form 600).

GCMS offers one report—IP727010-AA, Clearing Cycle Acknowledgement—for the reconciliation of Collection-Only clearing activity. However, because GCMS does not calculate the reconciliation amount on these transactions, the amount fields will be zero. The counts field will contain the number of collection items processed.

Chapter 17 Bilateral Settlement Activity

This chapter describes what bilateral settlement is and how GCMS will process these transactions.

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Definition of Bilateral Settlement Agreement

The definition of a bilateral settlement agreement is as follows.

A bilateral settlement agreement is an arrangement between two MasterCard customers to settle transactions directly, rather than through the MasterCard Settlement Account Management (S.A.M.) system. If this arrangement is in place, MasterCard clears transaction data between the participating customers but does not perform settlement on the data.

Customers interested in establishing a bilateral settlement agreement with other customers should contact their Customer Operations Services team.

Identification of Bilateral Settlement Transactions

Customers requesting bilateral settlement for a given transaction must indicate this by populating Private Data Subelement (PDS) 0165 (Settlement Indicator), subfield 1 (Settlement Indicator) with a value of B to denote bilateral settlement.

This causes the Global Clearing Management System (GCMS) to edit and clear the transactions but not initiate settlement. Customers may combine bilateral transactions with all other transactions in the same file.

These customers also may optionally populate PDS 0165, subfield 2 (Settlement Agreement Information) with additional information related to the bilateral settlement.

Editing Bilateral Transactions

GCMS will edit bilateral settlement transactions to ensure that a bilateral settlement agreement is on file between the sending and receiving customer IDs.

Tables indicating bilateral settlement agreements and customer participation are available in the Integrated Product Messages (IPM) Member Parameter Extract (MPE).

GCMS will automatically exclude bilateral settlement chargeback transactions from the following edits:

- Chargeback timeliness edits
- Cycle appropriateness edits
- Retrieval history edits
- Documentation history edits

GCMS does not exclude bilateral settlement transactions from any other edits. For example, bilateral settlement First Presentment/1240 transactions must conform to data format and content edits, and to interchange program requirements, the same as transactions settled by MasterCard.

GCMS Calculations for Bilateral Settlement Transactions

Information about the bilaterally settled transactions for which GCMS calculates amounts is as follows.

GCMS does not calculate the following amounts for bilaterally settled transactions:

- DE 6 (Amount, Cardholder Billing)
- Amounts resulting from Currency Conversion Assessment

DE 5 (Amount, Reconciliation) and DE 50 (Currency Code, Reconciliation)

GCMS does calculate DE 5 (Amount, Reconciliation) and determine DE 50 (Currency Code, Reconciliation) for bilaterally settled transactions. To do this, GCMS obtains the reconciliation currency by performing settlement service selection. The settlement service selection process for regional and intracurrency settlement transactions is documented in [Business Service](#).

Just as customers can specify settlement service selection criteria for regionally settled transactions (as described in [Business Service](#)), they can also specify settlement service selection criteria for bilaterally settled transactions. If customers do not specify any settlement service selection criteria for bilaterally settled transactions, GCMS will use the reconciliation currency associated with the customer's default regional settlement agreement.

GCMS then performs any necessary currency conversion to convert DE 4 Amount Transaction to the customer's reconciliation currency. To do this, GCMS uses market buy and sell rates or a fixed rate if one exists. The currency conversion process for bilaterally settled transactions is similar to that described for regionally settled transactions in [Reconciliation](#).

Interchange Fees

GCMS offers several options related to interchange fees for bilaterally settled transactions:

- If the Business Service assigned to a bilaterally settled transaction indicates that GCMS should calculate interchange fees, GCMS will calculate the interchange fees, convert them to the receiving customer's reconciliation currency, and populate PDS 0146 (Amounts, Transaction Fees), subfield 4 (Currency Code, Fee), subfield 5 (Amount, Fee), subfield 6 (Currency Code, Fee, Reconciliation), and subfield 7 (Amount, Fee, Reconciliation) PDS 0147 (Extended Precision Amounts), subfield 4 (Currency Code, Fee), subfield 5 (Amount, Fee), subfield 6 (Currency Code, Fee, Reconciliation), and subfield 7 (Amount, Fee, Reconciliation) with the correct interchange fees and associated currency codes before forwarding the message to the receiver.
- If the Business Service assigned to a bilaterally settled transaction indicates that GCMS should not calculate interchange fees, the sending customer may optionally populate PDS 0146, subfields 4 and 5 with the relevant interchange fees. GCMS will forward PDS 0146, subfields 4 and 5 to the receiving customer without altering the data. In addition, GCMS will convert the fees that were provided in PDS 0146, subfields 4 and 5 to the receiving customer's reconciliation currency and place this amount and currency into PDS 0146, subfields 6 and 7 before forwarding the message to the receiver.
- If the Business Service assigned to a bilaterally settled transaction indicates that GCMS should not calculate interchange fees, and the sending customer does not provide fees in PDS 0146, GCMS will process the transaction with no interchange fees. PDS 0146 will not be present in the message sent to the receiver.

Bilateral Transactions in Relation to Reconciliation Messages

IPM Financial Position Detail Reconciliation messages provide amount and fee totals in each customer's reconciliation currency. These totals are also optionally available in transaction currency.

Because MasterCard does not settle bilateral settlement transactions, IPM Financial Position Detail Reconciliation message totals for these transactions in the customer's **reconciliation** currency will contain zeros. If the customer has requested the "transaction currency" option for Reconciliation messages, IPM Financial Position Detail Reconciliation message totals for these transactions in the **transaction** currency will be present and will contain the correct (non-zero) amounts.

Customers that want to receive reconciliation totals for bilateral settlement activity should request both the **transaction currency** option and the **settlement indicator** option for IPM Financial Position Detail Reconciliation messages to differentiate amount totals for these transactions.

Customers may select category options using the *GCMS Parameter Worksheet* (Form 600).

Chapter 18 Electronic and Mobile Commerce

This chapter describes how Global Clearing Management System (GCMS) performs transaction processing for applicable electronic and mobile commerce services.

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Electronic Commerce (e-commerce)

Electronic commerce (e-commerce) transactions are non-face-to-face, online transactions that use electronic media over any public network such as the Internet, or private network such as an extranet.

E-commerce processing allows transactions to be initiated from a cardholder-controlled device, such as a PC, for purchasing goods and services on the Internet.

Customer Requirements in Processing e-Commerce Transactions

Certain requirements exist for customers to be able to process e-commerce transactions.

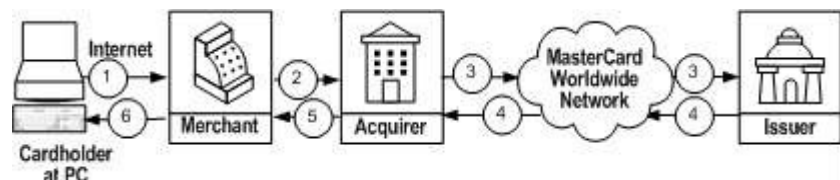
To process e-commerce transactions:

- All issuers must be able to receive and process all e-commerce data present in the Authorization Request/0100 messages.
- All acquirers must (a) properly identify e-commerce messages within the Authorization Request/0100 and (b) be able to receive and process e-commerce Authorization Request Response/0110 messages.

Process for an Electronic Commerce Transaction

The process by which an e-commerce transactions undergoes is described as follows.

The following diagram illustrates the flow of a typical e-commerce transaction.



1. The cardholder accesses a merchant's Web site via the Internet and requests to make a purchase.
2. The merchant submits the cardholder's information to the acquirer.
3. The acquirer sends an Authorization Request/0100 message via the MasterCard Worldwide Network to the issuer.
4. The issuer makes the authorization decision and replies using an Authorization Request Response/0110 message.
5. The acquirer responds to the merchant.
6. The merchant completes the transaction according to the authorization response returned.

Security of Electronic Commerce Transactions

There are various methods for securing e-commerce transactions that customers may process through the MasterCard Worldwide Network.

MasterCard messaging requirements about e-commerce may vary depending on the security protocol involved in the transactions. Security protocols may include:

- No security protocol
- Channel encryption, which is a security layer that resides between an application and its transport layers, for example, SSL (Secure Sockets Layer) and HTTPS (Hypertext Transfer Protocol Secure)
- MasterCard® *SecureCode*™ transaction using the Universal Cardholder Authentication Field (UCAF™)

For more information about *SecureCode*, including detailed transaction flows and participation requirements, see the *SecureCode Member Enrollment and Implementation Guide*.

Universal Cardholder Authentication Field

The Universal Cardholder Authentication Field (UCAF™) is a standard, globally interoperable method of collecting cardholder authentication data at the point of interaction.

Within the MasterCard authorization networks, UCAF is a universal, multipurpose data transport infrastructure that is used to communicate authentication information between cardholders, merchants, issuers, and acquirers

Accountholder Authentication Value

The Accountholder Authentication Value (AAV) is a *SecureCode*-specific implementation of UCAF related to issuer authentication platforms that incorporate the Secure Payment Application (SPA) algorithm.

SPA is a MasterCard security method designed to authenticate cardholders when they pay online.

AAV is generated by the issuer and presented to the merchant for placement in the authorization request upon successful authentication of the cardholder.

UCAF is used to transmit the AAV from the merchant to the issuer for authentication purposes during the authorization process.

Merchants participating in the Maestro Advance Registration Program or the MasterCard® Advance Registration Program submit the first transaction with *SecureCode* dynamic AAV for a primary account number (PAN). Subsequent transactions for that PAN can be submitted with the MasterCard assigned static AAV.

Relationship between e-Commerce and MasterCard *SecureCode*

MasterCard *SecureCode* builds upon the infrastructure requirements for channel encryption with the additional benefit of cardholder authentication.

When used in conjunction with components of the MasterCard payment infrastructure, MasterCard *SecureCode* provides a mechanism for online merchants to potentially receive an enhanced payment guarantee similar to what retailers (non-Internet) receive with qualifying physical point-of-sale transactions.

MasterCard requires authorization requests for MasterCard Electronic™ cards acquired in e-commerce environments to be fully authenticated through *SecureCode*. MasterCard Electronic issuers that want to process e-commerce transactions must participate in *SecureCode* and provide UCAF™ data for e-commerce transactions for a MasterCard Electronic card. MasterCard electronic acquirers and merchants that want to process e-commerce transactions must participate in *SecureCode* and be UCAF-enabled.

MasterCard Advance and Maestro Advance Registration Programs

GCMS supports e-commerce transactions processed under the MasterCard Advance Registration Program and the Maestro® Advance Registration Program.

MasterCard Advance Registration Program

The MasterCard Advance Registration Program enables enrolled merchants that have met specific qualification criteria to accept MasterCard cards for electronic commerce (e-commerce) transactions without using MasterCard *SecureCode* to authenticate every transaction.

Merchants are required to perform full *SecureCode* authentication on the first transaction they perform for any individual cardholder.

Acquirers in the Europe region that process MasterCard e-commerce transactions may optionally participate in the MasterCard Advance Registration Program.

The presence of MasterCard *SecureCode* and static AAV UCAF™ data are both identified in First Presentment/1240 messages by the presence of PDS 0052 (Electronic Commerce Security Level Indicator), subfield 3 (UCAF Collection Indicator), value 3 (Merchant is UCAF-enabled, and the transaction was processed under the Maestro Advance Registration Program).

The MasterCard assigned ID is identified in PDS 0176 (MasterCard Assigned ID) of the First Presentment/1240 message.

Mobile Remote Payment Program Overview

The Mobile Remote Payment program enables highly secure remote payments and additional payment options from mobile devices, particularly in high-growth markets where mobile phone-based payment and banking services are increasing most rapidly.

Because of the additional security introduced through secure cardholder authentication, the transactions generated from mobile devices are eligible for chargeback protection for merchants.

The Mobile Remote Payment Program supports the security of transactions by establishing cardholder credentials on three levels:

- Highly secure transmission of transaction details between the mobile device application and the Service Manager.
- Authentication of the cardholder to access the payment credentials stored on the Service Manager by means of a mobile PIN (m-PIN) or Service Authentication.
- Verification of the cardholder against the funding account held at the issuer by means of a transaction authorization token.

The Mobile Remote Payment program supports two types of transaction authentication:

- Use of a c-PIN, an online PIN, that is verified by the issuer during transaction authentication. When the c-PIN is used for transaction authentication, the transaction authentication token is the encrypted c-PIN. •
- Use of a mobile-specific authentication method, such as a passcode, that is verified by the Service Manager. When the m-PIN is used for transaction authentication, the Service Manager will generate an Accountholder Authentication Value (AAV) to indicate that the cardholder has authenticated the transaction. This AAV will be verified by the issuer during transaction authorization. When the m-PIN is used for transaction authentication, the transaction authentication token is the AAV.

Cardholders that choose to participate in the Mobile Remote Payment Program can perform various secure mobile transactions, including:

- Purchases such as General Purchase, Mobile Phone Top-Up, and Bill Payment transactions
- Balance Inquiries

For more details about the program, refer to *Mobile Remote Payment Program Guide*.

DE 22 (Point of Service Data Code), Subfield 1 (Terminal Data: Card Data Input Capability)

The description for DE 22 (Point of Service Data Code), subfield 1 (Terminal Data: Card Data Input Capability), value 1 reads “Manual; no terminal; server.” This definition indicates the ability to capture the PAN entry via server.

DE 22 (Point of Service Data Code), Subfield 7 (Card Data: Input Mode)

Value T for DE 22 (Point of Service Data Code), subfield 7 (Card Data: Input Mode) identifies the PAN entry mode via server for the Mobile Remote Payments program.

PDS 0194 (Remote Payments Program Data)

PDS 0194 (Remote Payments Program Data) is used to identify which domain the Service Manager of the Mobile Remote Payments program is operating in.

Chapter 19 Merchant Data Cleansing Suite of Services

This chapter describes the Merchant Data Cleansing Suite of services and provides additional value-added, merchant-related information. Cleansed merchant data can be provided to cardholders to improve their statements and reduce calls to customer service centers. The value-added merchant information can be used by issuers to perform spend, marketing, rewards, and other analyses.

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About the Merchant Data Cleansing Suite of Services

The Merchant Data Cleansing Suite of services help to solve the merchant identification problem faced by card issuers.

Cryptic merchant names and the lack of standardization result in disputed transactions and less-than-definitive data about spending patterns. MasterCard can help solve this problem by disseminating cleansed and additional value-added data in the clearing record. This allows cardholders to see more familiar, less ambiguous names on their statements. Issuers can take advantage of additional merchant information to deepen their analytic capabilities and uncover new insight about their customers.

MasterCard offers three service levels within the Merchant Data Cleansing Suite of services:

- MasterCard Merchant Data Cleansing
- MasterCard Merchant Data Cleansing Plus
- MasterCard Merchant Data Advance

MasterCard Merchant Data Cleansing

MasterCard Merchant Data Cleansing overwrites the acquirer-furnished merchant names in the issuer-provided data with consumer-familiar versions of merchant names and also can populate missing or incorrect information including the business address and phone.

Placing recognizable names directly in the data allows the issuer to pass more definitive information to cardholders on their statements. This also means that the issuer can take advantage of the service without modifying their processes.

Issuers participating in the MasterCard Merchant Data Cleansing Service receive cleansed merchant data in the following data fields on First and Second Presentment/1240 messages:

- DE 43 (Card Acceptor Name/Location), subfield 1 (Card Acceptor Name)
- DE 43, subfield 2 (Card Acceptor Street Address)
- DE 43, subfield 3 (Card Acceptor City)
- DE 43, subfield 4 (Card Acceptor Postal [ZIP] Code)
- DE 43, subfield 5 (Card Acceptor State, Province, or Region Code)
- DE 43, subfield 6 (Card Acceptor Country Code)
- PDS 0170 (Card Acceptor Inquiry Information), subfield 2 (Card Acceptor Phone Number)

MasterCard Merchant Data Cleansing Plus

MasterCard Merchant Data Cleansing Plus appends additional data fields to the data including the merchant's legal name, sales channel (brick and mortar, online, other), and the merchant URL, where available.

Issuers participating in this service also receive the data fields for MasterCard Merchant Data Cleansing. This extra information can be used to assist the cardholder in identifying the merchant, potentially avoiding additional dispute cases.

Issuers participating in the MasterCard Merchant Data Cleansing Plus service receive cleansed merchant data in the following data fields on First and Second Presentment/1240 messages:

- DE 43 (Card Acceptor Name/Location), subfield 1 (Card Acceptor Name)
- DE 43, subfield 2 (Card Acceptor Street Address)
- DE 43, subfield 3 (Card Acceptor City)
- DE 43, subfield 4 (Card Acceptor Postal [ZIP] Code)
- DE 43, subfield 5 (Card Acceptor State, Province, or Region Code)
- DE 43, subfield 6 (Card Acceptor Country Code)
- PDS 0170 (Card Acceptor Inquiry Information), subfield 2 (Card Acceptor Phone Number)

MasterCard Merchant Data Advance

MasterCard Merchant Data Advance broadens the issuer's analytic capabilities by adding industry codes and other merchant identifiers to each transaction.

The ability to accurately identify merchant locations and to understand the specific brands or chains to which they belong is crucial to helping the issuer develop customer loyalty programs, merchant incentive agreements, and fraud scoring mechanisms.

MasterCard Merchant Data Fields

Issuers participating in one or a combination of the Merchant Data Cleansing Suite of Services receive the following data fields based on the service or services registered.

	Merchant Data Cleansing	Merchant Data Cleansing Plus	Merchant Data Advance
Cleansed Merchant Name	√	√	
Cleansed Merchant Street Address	√	√	

	Merchant Data Cleansing	Merchant Data Cleansing Plus	Merchant Data Advance
Cleansed City Name	√	√	
Cleansed State Province Code	√	√	
Cleansed Merchant Postal Code	√	√	
Cleansed Country Code	√	√	
Cleansed Merchant Telephone Number	√	√	
Cleansed Legal Corporate Name		√	
Sales Channel—% Brick		√	
Sales Channel—% Online		√	
Sales Channel—% Other		√	
Cleansed Merchant URL (when available)		√	
Aggregate Merchant ID			√
Aggregate Merchant Name			√
Industry Code			√
Super Industry Code			√
Key Aggregate Merchant ID			√
Channel of Distribution Code			√
NAICS Code			√
Parent Aggregate Merchant ID			√

Enrichment of First and Second Presentment/1240 Messages for the Merchant Data Cleansing Suite of Services

Each Merchant Data service offered by MasterCard involves a variety of cleansed merchant data in various fields on First and Second Presentment/1240 messages.

For First and Second Presentment/1240 messages to be enriched with the required data for each service, the following conditions must be met:

Merchant Data Cleansing Suite of Services

Enrichment of First and Second Presentment/1240 Messages for the Merchant Data Cleansing Suite of Services

- Issuer must register its account ranges
- Transaction must be cleared through Global Clearing Management System (GCMS)
- DE 3 (Processing Code), subfield 1 (Cardholder Transaction Type) must have one of the following values:
 - 00 (Purchase [Goods and Services])
 - 18 (Unique Transaction)
 - 20 (Credit [Purchase Return])
- Merchant Cleansing participation switch indicator on IPM MPE table IP0040T1 is present with a valid service level indicator value
- Clearing processing date must be after the service-level activation date as provided on IP0040T1 (Issuer Account Range).

MasterCard populates the following data fields in First and Second Presentment/1240 messages when an issuer is participating in any of the Merchant Data Cleansing Suite of services. Issuers participating in any of the Merchant Data Cleansing Suite of services may optionally support new PDS 0212 (Merchant Data Services), subfield 1 (Service Level Indicator) and subfield 2 (Response Code).

- PDS 0212, subfield 1—this value represents the services for which the issuer has registered.
- PDS 0212, subfield 2—this value represents the action taken, if any, by MasterCard for the service level indicated in PDS 0212, subfield 1

MasterCard Merchant Data Cleansing Service

Issuers participating in the MasterCard Merchant Data Cleansing Service receive cleansed merchant data in the following data fields on First and Second Presentment/1240 messages:

- DE 43 (Card Acceptor Name/Location), subfield 1 (Card Acceptor Name)
- DE 43, subfield 2 (Card Acceptor Street Address)
- DE 43, subfield 3 (Card Acceptor City)
- DE 43, subfield 4 (Card Acceptor Postal [ZIP] Code)
- DE 43, subfield 5 (Card Acceptor State, Province, or Region Code)
- DE 43, subfield 6 (Card Acceptor Country Code)
- PDS 0170 (Card Acceptor Inquiry Information), subfield 2 (Card Acceptor Phone Number)

MasterCard copies the acquirer-submitted merchant data from DE 43, subfields 1–6 and PDS 0170, subfield 2 to the following data fields. Issuers optionally may support new PDS 0213 (Original Merchant Data), subfields 1–7.

- PDS 0213, subfield 1 (Card Acceptor Name)
- PDS 0213, subfield 2 (Card Acceptor Street Address)
- PDS 0213, subfield 3 (Card Acceptor City)
- PDS 0213, subfield 4 (Card Acceptor Postal [ZIP] Code)
- PDS 0213, subfield 5 (Card Acceptor State, Province or Region Code)
- PDS 0213, subfield 6 (Card Acceptor Country Code)
- PDS 0213, subfield 7 (Card Acceptor Phone Number)

MasterCard Merchant Data Cleansing Plus Service

Issuers participating in the MasterCard Merchant Data Cleansing Plus Service receive cleansed merchant data in the following data fields on First and Second Presentment/1240 messages:

- DE 43 (Card Acceptor Name/Location), subfield 1 (Card Acceptor Name)
- DE 43, subfield 2 (Card Acceptor Street Address)
- DE 43, subfield 3 (Card Acceptor City)
- DE 43, subfield 4 (Card Acceptor Postal [ZIP] Code)
- DE 43, subfield 5 (Card Acceptor State, Province, or Region Code)
- DE 43, subfield 6 (Card Acceptor Country Code)
- PDS 0170 (Card Acceptor Inquiry Information), subfield 2 (Card Acceptor Phone Number)

MasterCard will copy the acquirer-submitted merchant data from DE 43, subfields 1–6 and PDS 0170, subfield 2 to the following data fields. Issuers may optionally support new PDS 0213 (Original Merchant Data), subfields 1–7:

- PDS 0213, subfield 1 (Card Acceptor Name)
- PDS 0213, subfield 2 (Card Acceptor Street Address)
- PDS 0213, subfield 3 (Card Acceptor City)
- PDS 0213, subfield 4 (Card Acceptor Postal [ZIP] Code)
- PDS 0213, subfield 5 (Card Acceptor State, Province or Region Code)
- PDS 0213, subfield 6 (Card Acceptor Country Code)
- PDS 0213, subfield 7 (Card Acceptor Phone Number)

In addition, participating issuers receive additional data in PDS 0214 (Merchant Data Cleansing Plus) on First and Second Presentment/1240 messages in the following data fields.

Merchant Data Cleansing Suite of Services

Enrichment of First and Second Presentment/1240 Messages for the Merchant Data Cleansing Suite of Services

- PDS 0214, subfield 1 (Cleansed Legal Corporate Name)
- PDS 0214, subfield 2 (Sales Channel—Percentage Brick)
- PDS 0214, subfield 3 (Sales Channel—Percentage Online)
- PDS 0214, subfield 4 (Sales Channel—Percentage Other)
- PDS 0214, subfield 5 (Cleansed Merchant URL, where available)

NOTE

Issuers participating in MasterCard Cleansed Merchant Data or MasterCard Cleansed Merchant Data Plus:

First and Second Presentment/1240 messages are not enriched with cleansed merchant data if the country code, as submitted by the acquirer in DE 43, subfield 6 is different than the cleansed merchant data country code maintained by MasterCard. However, if participating in MasterCard Merchant Data Cleansing Plus, the following additional data fields are provided in First and Second Presentment/1240 messages:

- PDS 0214 (Merchant Data Cleansing Plus), subfield 1 (Cleansed Legal Corporate Name)
- PDS 0214, subfield 2 (Sales Channel—Percentage Brick)
- PDS 0214, subfield 3 (Sales Channel—Percentage Online)
- PDS 0214, subfield 4 (Sales Channel—Percentage Other)
- PDS 0214, subfield 5 (Cleansed Merchant URL)

MasterCard Merchant Data Cleansing Advance Service

Issuers participating in the MasterCard Merchant Data Cleansing Advance Service receive data in new PDS 0215 (MasterCard Merchant Data Advance) on First and Second Presentment/1240 messages in the following data fields.

- PDS 0215, subfield 1 (Aggregate Merchant ID)
- PDS 0215, subfield 2 (Aggregate Merchant Name)
- PDS 0215, subfield 3 (Industry Code)
- PDS 0215, subfield 4 (Super Industry Code)
- PDS 0215, subfield 5 (Key Aggregate Merchant ID)
- PDS 0215, subfield 6 (Channel Distribution ID)
- PDS 0215, subfield 7 (NAICS Code)
- PDS 0215, subfield 8 (Parent Aggregate Merchant ID)

NOTE

For First Chargeback and Arbitration Chargeback/1442 messages, the issuer is not required to retain and return the PDS 0212, PDS 0213, PDS 0214, or PDS 0215 data.

Issuers must return the same data values in DE 43 and PDS 0170, subfield 2 as was received in the associated First and Second Presentment/1240 messages.

Viewing Data Fields of Merchant Data Services in the Transaction Research Tool

Issuers participating in any of the MasterCard Merchant Data services may view all of the applicable data fields in the Transaction Research Tool.

Attributes and Subfields of Private Data Subelements of the Merchant Data Cleansing Suite of Services

The Merchant Data Cleansing Suite of services use multiple private data subelements, of which each has unique attributes and subfields.

For details about the attributes and subfields of the following private data subelements used by the Merchant Data Cleansing Suite of services, refer to the *IPM Clearing Formats* manual:

- PDS 0212—Merchant Data Services
- PDS 0213—Original Merchant Data
- PDS 0214—Merchant Data Cleansing Plus
- PDS 0215—MasterCard Merchant Data Advance



Settlement Manual

14 October 2014

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Summary of Changes, 14 October 2014

This document reflects changes associated with the business of settlement.

Description of Change	Where to Look
Added Settlement Payment Tips to Best Practices section	Best Practices for Settlement
Added Russian Ruble regional service	Russian Ruble—EU000RUB34
Modified Australian Dollar intracurrency service	Australian Dollar—AP00003601

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Chapter 1 Settlement Concepts

This section describes the concepts used in settlement.

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Settlement Definition

Settlement is the process by which MasterCard facilitates the exchange of funds on behalf of its customers that have sent or received financial transactions through a clearing system.

Some of the important financial transactions included in this process are:

- Presentments from acquirer to issuer
- Chargebacks from issuer to acquirer
- Fee Collections (sender and receiver depends on message reason code and includes transactions sent from MasterCard to the customer)
- Bill Payments, such as RPPS®
- Other, such as reversals

The exchange of successfully processed detailed financial transaction data through a clearing system represents an obligation to exchange funds. To facilitate the settlement of funds, MasterCard uses the Settlement Account Management (S.A.M.) system—a Windows®-based, client–server software application designed to streamline the process of moving funds.

Funds are exchanged based on the net value of all cleared financial transactions for each settlement day. The net value may include the following:

- Transaction amounts and all other transaction and interchange charges processed through the clearing system(s)
- Cash disbursement and ATM cash disbursement accommodation fees
- Billing items submitted by the MasterCard Consolidated Billing System (MCBS) to the clearing system(s), the S.A.M. system, or both.

The process by which MasterCard facilitates the exchange of funds on behalf of its customers and the distinct components of the process are referred to herein as MasterCard Settlement.

Participation in MasterCard Settlement

Customers must meet conditions to participate in MasterCard settlement.

As a condition of MasterCard membership, each customer must enter into a license agreement with MasterCard, pursuant to which, and among other things, a grant by MasterCard to the customer of a non-exclusive license to use MasterCard Marks (as such term is defined in the license agreement). The license agreement expressly conditions the customer's use of MasterCard Marks on the customer's agreement to comply with the quality assurance and other standards set forth in the bylaws, rules, procedures, policies, bulletins, memoranda, actions of the board of directors, and other directives adopted, modified, supplemented, changed or rescinded, from time to time (collectively, the "Standards"). The Standards include the provisions of this *Settlement Manual*, as such provisions may be modified from time to time.

To participate in MasterCard Settlement, and as a condition of continued participation in MasterCard Settlement, a customer must be prepared to perform all of the following obligations on an ongoing basis:

- Ensure that the MasterCard settlement bank has received funds on the value date for the amount due as indicated on the Transfer Agent Detail Advisement; and
- Is able to receive funds when the customer has a net credit position; and
- Be prepared to settle on local holidays. Principals must handle their holiday calendars that differ from the MasterCard settlement calendar by establishing a nostro account at a correspondent bank that can effect settlement with MasterCard on their behalf.

Initial and continued participation in MasterCard Settlement by a customer is further expressly conditioned upon such customer's compliance with the following obligations:

- If MasterCard does not support the local currency of a particular country in the regional settlement service, then each Customer engaged in Intracurrency Transaction Activity in that country must participate in the intracurrency settlement service for that country, if such an intracurrency settlement service is offered by MasterCard;
- To notify the MasterCard Customer Implementation Services team promptly and, in no event not more than 24 hours should the customer become aware that any information provided in the Net Settlement Information Form (NSIF) is not accurate or complete or is no longer accurate;
- To ensure that necessary and appropriate personnel of the customer and, if applicable, the customer's transfer agent, including personnel responsible for the customer's participation in MasterCard settlement, are aware of and faithfully and fully perform all the customer's obligations arising from or relating to customer's participation in MasterCard settlement; and
- To timely pay fees and other assessments arising from or relating to participation in MasterCard Settlement.

In addition, a customer that participates in an intracurrency settlement service for a country in the MasterCard Europe region acknowledges, accepts, and agrees to the terms and conditions in this *Settlement Manual*.

Best Practices for Settlement

Principals should consider best practices to avoid settlement fails and noncompliance fees when in a net debit position.

Settlement Payment Tips

Following are tips that MasterCard suggests using when making settlement payments:

- Reference the ICA number on payment details.
- Pay the exact amount listed on settlement advisements for debit positions.
- Ensure that payments are made before the cut time and on value date.
- Ensure all payments are marked as urgent.
- Reference member account details.

Failure to act on the following items may delay payment to MasterCard and result in noncompliance assessments:

- Receive a Transfer Agent Advisement Detail and execute the amount due on the value date as indicated on the advisement.
- Do not combine payments for many member IDs/ICAs or value dates into one payment. Payments must be executed for the amount due on each Transfer Agent Advisement Detail on the specified value date.
- Ensure that the payment instruction includes the correct MasterCard settlement bank name for the amount due on the value date.
- Do not pay late or avoid paying late.
- Ensure that the transfer agent's correspondent bank fees are not deducted from the amount due to MasterCard.
- Include the transfer agent ID and name within the payment message when sending payments due to MasterCard. The transfer agent ID and name included in the payment message must match the advisement to ensure payments are posted timely.
- Principals in a net debit position and that participate in direct request payment processing are responsible for settlement to the MasterCard settlement account on the value date. Non-receipt of a direct debit request is not just cause to fail settlement with MasterCard. Principals must monitor completion of settlement by verifying with the transfer agent's bank that the following occurs on the value date:
 - The principal's nostro account has been debited.
 - The MasterCard settlement account has been credited.

Principals must consider the transfer agent's account requirements and settlement methods when in a net debit or credit position. MasterCard offers options to principals on maintaining accounts to support MasterCard settlement. Payments that avoid correspondent banking tend to have reduced points of failure. Principals should contact their payment processing area to evaluate each option, and consider timeliness and the cost of payments to determine which option best meets its needs but fulfills the MasterCard transfer agent account requirements.

Principals must make interbank payments with the MasterCard settlement bank using one of the following methods:

- The principal owns a nostro account with the MasterCard settlement bank. Typically these are low risk payments because the principal's account and the MasterCard settlement account are maintained at the same bank and payments are considered on-us transactions executed through book transfer.
- The principal is a direct participant of the local Real Time Gross Settlement (RTGS) system. Typically these are low risk payments because the principal and the MasterCard settlement bank are direct participants of the RTGS system and payments are executed through systems such as Fedwire® funds service or TARGET2.
- The principal owns a nostro account with a correspondent bank. The correspondent bank should own a nostro account at the MasterCard settlement bank or be able to effect settlement with the MasterCard settlement bank through the local RTGS system. These payments are more likely to have points of failure because the participants that have to take action in the payment process have increased. Payments are typically executed through book transfers, the RTGS system, or a combination thereof.

Net Settlement Information Form

To initially participate in MasterCard Settlement, a principal must complete and submit an NSIF to MasterCard.

The NSIF is the means by which the customer provides MasterCard information necessary for MasterCard to commence the exchange of funds on behalf of the customer. The NSIF is used by MasterCard to identify the customer and the customer's settlement contact; the customer's transfer agent and "pay thru" bank; and other information pertinent to the means, nature and scope of the customer's MasterCard Settlement participation. Such other information includes, by way of example and not limitation, information about settlement service, settlement currency, settlement parameters, and whether the customer elects to receive a Net Settlement Advisement, which is a reporting mechanism through which a customer can be notified of the daily net settlement position.

Instructions for completing and submitting an NSIF to MasterCard are in Net Settlement Information Form Instructions.

When an NSIF is received by MasterCard, MasterCard relies on the completeness and accuracy of the information appearing thereon and act in reliance that the NSIF was submitted by a person duly authorized and empowered by the customer to do so and in accordance with the *MasterCard Rules*.

MasterCard Transaction Processing Systems

MasterCard processing systems are used to determine the net monetary value of a transaction in the selected settlement currency.

MasterCard clearing systems are used to enable an acquirer and an issuer to exchange financial transaction information. The following are the MasterCard clearing systems:

- Global Clearing Management System (GCMS)
- Integrated Processing Systems (IPS)
- Local Clearing Center (LCC)
- RPPS®
- Single Message System
- MasterCard Consolidated Billing System (MCBS)

After transactions are submitted to the MasterCard clearing systems in various currencies, the MasterCard clearing system converts the transaction amount to the chosen settlement currency.

The S.A.M. system then accumulates the settlement transactions resulting from the clearing process and calculates the customers' daily net settlement position. The S.A.M. system performs an edit process, called Variance Alert Reporting, to assess a reasonability check and validate the customer's net settlement position.

The variance alert process is designed to detect deviations in the customers' settlement activity. It reduces the risk of erroneous or fraudulent transactions being settled. If a customer has submitted erroneous or fraudulent transactions, the customer may be assessed additional fees as described in this document. The customer's settlement will be held until explanation of the variance is communicated to MasterCard. To assist in validating the variance and to avoid holding settlement, when a customer incurs BIN changes, merchant moves, or platform consolidations that in the end affect settlement, notification to MasterCard through Customer Operations Services would alleviate research performed to explain the variance alert invoked within the S.A.M. system.

If the customer has chosen to receive net settlement advisements (designated on the NSIF), MasterCard notifies the customer of its net settlement position by sending the customer, or the customer's transfer agent, a net settlement advisement that contains the net debit or net credit settlement position for each settlement day.

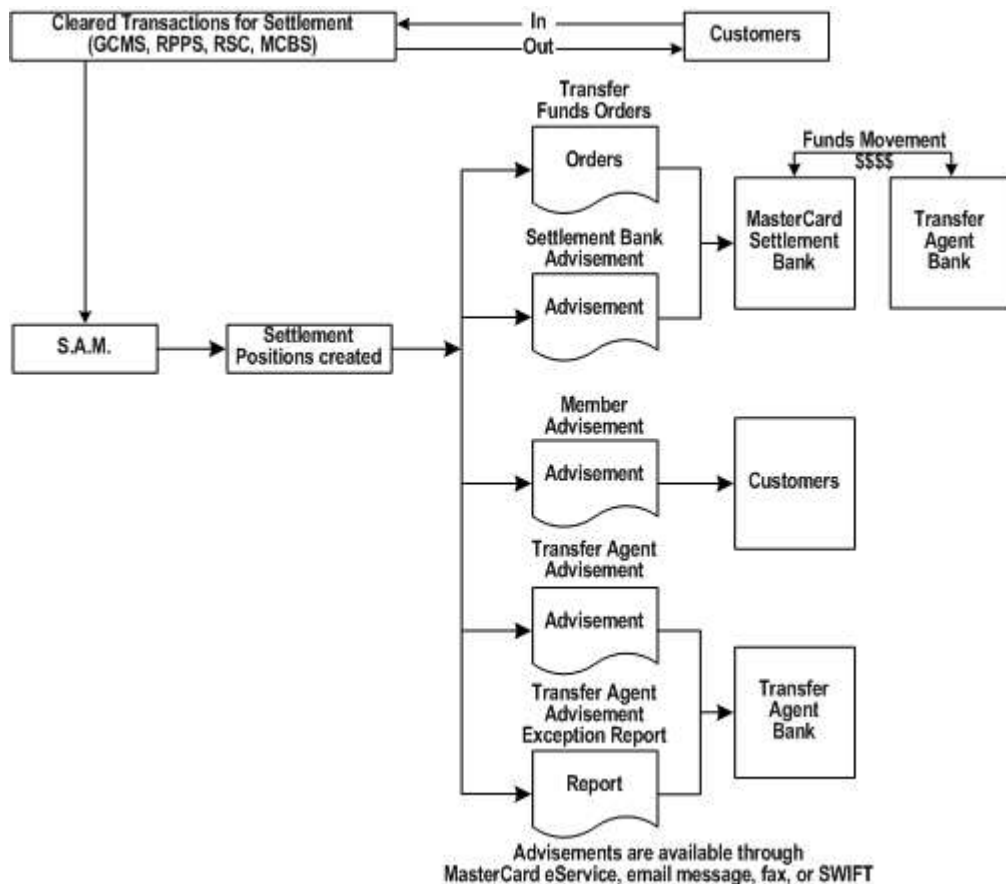
NOTE:

Transfer funds orders and net settlement advisements facilitate the movement of funds and the reconciliation of the customer's settlement account.

Along with the MasterCard settlement bank and the customer's Transfer Agent Bank, the actual settlement or exchange of funds occurs through various banking systems.

Settlement Operational Flow

This diagram illustrates the steps in the settlement operations process.



Funds Settlement

Funds are transferred among parties during settlement. There are several methods by which funds may be transferred.

Funds transfer must occur on the value date that appears on the settlement advisement.

NOTE:

Value date is the date when funds transfers must be received or completed at the settlement bank.

For local currency or intracurrency settlement, funds may be transferred on a future business day. This business day will be designated on the settlement advisement. The customer,

MasterCard, and the MasterCard settlement bank agree on the method and timing by which the funds are transferred between MasterCard and the customer's transfer agent bank.

NOTE:

Value date interval is the open number of business days that funds are required to move after the settlement date. Funds due to MasterCard must be paid by the close of the MasterCard settlement bank's banking day on the value date assigned. Value date intervals for each settlement service are provided in Regional Settlement Services for Customers Licensed in Regions other than Europe, Regional Settlement Services for Customers Licensed in Europe, Intracurrency Settlement Services for Customers Licensed in Regions other than Europe, and Intracurrency Settlement Services for Customers Licensed in Europe.

MasterCard may suspend, delay, or adjust settlement positions at any time to resolve occurrences of erroneous settlement. Funds transfers are generally communicated to the MasterCard settlement bank within two to three hours from the settlement service cutoff time. Specific cutoff times are noted in Regional Settlement Services for Customers Licensed in Regions other than Europe and Regional Settlement Services for Customers Licensed in Europe. Funds transfers occur by one of the following methods:

- Book transfer
- Interbank settlement systems, such as Fedwire
- Local payment systems

MasterCard supports settlement arrangements based upon the banking relationships established.

Supported Payment Process Flows

MasterCard supports various settlement arrangements for customers to move funds.

MasterCard supports the following flows:

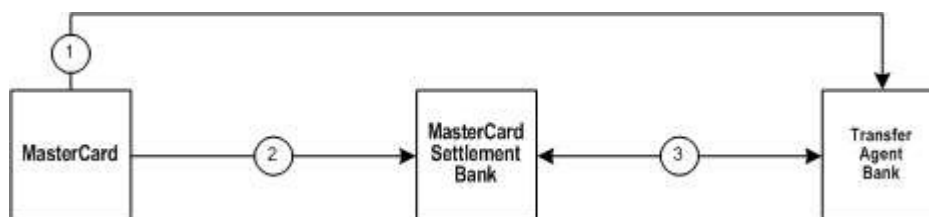
- Standard Settlement (Two Party)
- Standard Settlement (Three Party)
- Consolidated Settlement (Two Party)
- Consolidated Settlement (Three Party)
- Pay Thru Settlement (Three Party)
- Pay Thru Settlement (Four Party)

The preferred flow, which has the least operational and settlement risk to MasterCard and its customers, is the standard two party. The methods in which the funds are moved are discussed in each individual settlement service, located in Regional Settlement Services for Customers Licensed in Regions other than Europe, and Regional Settlement Services for Customers Licensed in Europe.

Standard Settlement (Two Party)

The payment process flow for this arrangement has the following characteristics.

- The MasterCard principal customer is its own transfer agent.
- The customer or transfer agent owns the bank account used for settlement.



1. At settlement service cutoff, MasterCard sends an advisement to the transfer agent bank.
2. MasterCard sends a transfer funds order to the MasterCard settlement bank.
3. One of the following occurs:

WHEN the customer...

Is in a credit position

Is in a debit position

THEN...

The MasterCard settlement bank pays the transfer agent bank.

The transfer agent bank pays the MasterCard settlement bank.

For regional settlement service funds transfer options, payment account requirements and payment method for each settlement service are noted in the following:

- Regional Settlement Services for Customers Licensed in Regions other than Europe
- Regional Settlement Services for Customers Licensed in Europe

NOTE:

For United States Dollar—RPPS—US00000002, the MasterCard RPPS® participant or the RPPS third-party processor's (TPP) biller is the transfer agent and the owner of the settlement account that is maintained at the transfer agent bank.

NSIF Instructions for Standard Settlement (Two Party)

Customers must complete a Net Settlement Information Form (NSIF) for this method of settlement.

Section/Field within NSIF	Information Required
Section I: Principal Information	
Member ID	A unique identification number, also known as ICA, that is assigned by MasterCard to identify a customer or processing endpoint

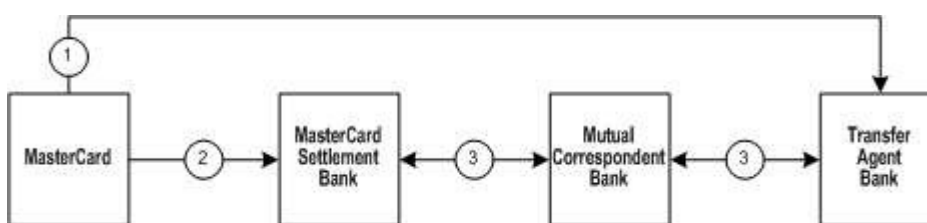
Section/Field within NSIF	Information Required
Customer Name	Name of principal institution
Customer Address	Customer's address
Customer Settlement Contact	Customer's settlement contact
Section II: Settlement Information	
Type of request	Select the type of request
Type of settlement service	Select "Regional" or "Intracurrency"
Notify MasterCard if the NSIF is for the regional settlement service default	Select either "Yes" or "No" and proceed with completing applicable sections
Section III: Transfer Agent Information	
Transfer Agent Name (Owner of the account)	Name of the transfer agent should be the same as the customer name because it is the owner of the account
Transfer Agent Contact	Individual responsible for settlement
Transfer Agent Bank Name	Name of the bank where the customer's account is maintained
Transfer Agent Bank Address	Address of the bank where the customer's account is maintained
Routing Number	Not Applicable
SWIFT ID	SWIFT ID of the transfer agent bank
Transfer Agent Account Number	Account number that is owned by the customer
Transfer Agent Account Currency	ISO Currency Code
International Bank Account Number (IBAN) ISO Country Code	ISO Country Code associated with the transfer agent IBAN; optional field for future expansion of the IBAN account format
IBAN Check Number	Check Number associated with the IBAN; optional field for future expansion of the IBAN account format
IBAN Bank Code	Bank Code associated with the transfer agent IBAN; optional field for future expansion of the IBAN account format
IBAN Branch Code	Branch Code associated with the transfer agent IBAN; optional field for future expansion of the IBAN account format
Section III: Pay Thru Information	
Pay Thru Bank Name	Not Applicable
Pay Thru Bank Address	Not Applicable

Section/Field within NSIF	Information Required
U.S. Federal Banking Routing Transit Number	Not Applicable
SWIFT ID	Not Applicable
Pay Thru Bank Account Number	Not Applicable
Pay Thru Bank Account Currency	Not Applicable
International Bank Account Number (IBAN) ISO Country Code	Not Applicable
IBAN Check Number	Not Applicable
IBAN Bank Code	Not Applicable
IBAN Branch Code	Not Applicable
Section IV: Consolidated Settlement Through Another Principal	
Consolidated Settlement Transfer Agent Name	Not Applicable
Consolidated Transfer Agent Member ID	Not Applicable
Transfer Agent Account Currency	Not Applicable
Section V: Settlement Selection Criteria	
Settlement Criteria: • Card Program Identifier • Transaction Currency • Issuer Account Range • Acquirer BIN • Issuer Only • Acquirer Only	Customer completes if settlement criteria is needed to direct the settlement of transactions to a specific settlement service
Section VI: Daily Net Settlement Advisement Transmission	
Transfer Agent Advisement Delivery Method and Destination	Should the transfer agent choose to receive an advisement, the media type and destination are required
Customer Advisement Delivery Method and Destination	Not Applicable

Standard Settlement (Three Party)

The payment process flow for this arrangement has the following characteristics.

- The MasterCard principal is its own transfer agent.
- The transfer agent bank affects payments to and from the MasterCard settlement bank.
- The mutual correspondent bank acts on behalf of the MasterCard settlement bank.



1. At settlement service cutoff, MasterCard sends an advisement to the transfer agent bank.
2. MasterCard sends a transfer funds order to the MasterCard settlement bank.
3. One of the following occurs:

WHEN the customer...

Is in a credit position

Is in a debit position

THEN...

1. The MasterCard settlement bank pays the mutual correspondent bank.
 2. The mutual correspondent bank pays the transfer agent bank.
1. The transfer agent bank pays the mutual correspondent bank.
 2. The mutual correspondent bank pays the MasterCard settlement bank.

For regional settlement service funds transfer options, payment account requirements and payment method for each settlement service are noted in Regional Settlement Services for Customers Licensed in Regions other than Europe.

NOTE:

For United States Dollar—RPPS—US00000002, MasterCard expects the RPPS® participant or the TPP's biller to own settlement accounts at both the correspondent bank and transfer agent bank.

NSIF Instructions for Standard Settlement (Three Party)

Customers must complete a Net Settlement Information Form (NSIF) for this method of settlement.

Section/Field within NSIF	Information Required
Section I: Principal Information	
Member ID	A unique identification number, also known as ICA, that is assigned by MasterCard to identify a customer or processing endpoint
Customer Name	Name of principal institution
Customer Address	Customer's address

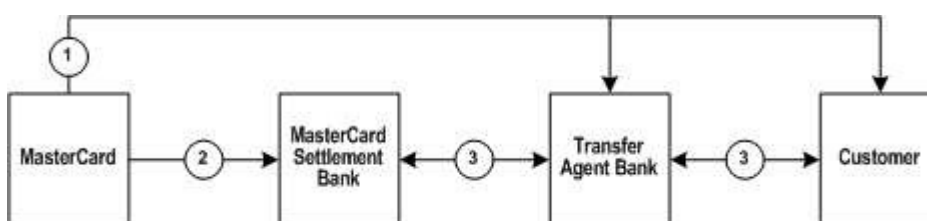
Section/Field within NSIF	Information Required
Customer Settlement Contact	Customer's settlement contact
Section II: Settlement Information	
Type of request	Select the type of request
Type of settlement service	Select "Regional"
Notify MasterCard if the NSIF is for the regional settlement service default	Select either "Yes" or "No" and proceed with completing applicable sections
Section III: Transfer Agent Information	
Transfer Agent Name (Owner of the account)	Name of the transfer agent should be the same as the customer name because it is the owner of the account
Transfer Agent Contact	Individual responsible for settlement
Transfer Agent's Bank Name	Name of the bank where the customer's account is maintained
Transfer Agent Bank Address	Address of the bank where the customer's account is maintained
Routing Number	Not Applicable
SWIFT ID	SWIFT ID of the transfer agent bank
Transfer Agent Account Number	Account number that is owned by the customer
Transfer Agent Account Currency	ISO Currency Code
International Bank Account Number (IBAN) ISO Country Code	ISO Country Code associated with the transfer agent IBAN; optional field for future expansion of the IBAN account format
IBAN Check Number	Check Number associated with the transfer agent IBAN; optional field for future expansion of the IBAN account format
IBAN Bank Code	Bank Code associated with the transfer agent IBAN; optional field for future expansion of the IBAN account format
IBAN Branch Code	Branch Code associated with the transfer agent IBAN; optional field for future expansion of the IBAN account format
Section III: Pay Thru Information	
Pay Thru Bank Name	Not Applicable
Pay Thru Bank Address	Not Applicable
U.S. Federal Banking Routing Transit Number	Not Applicable

Section/Field within NSIF	Information Required
SWIFT ID	Not Applicable
Pay Thru Bank Account Number	Not Applicable
Pay Thru Bank Account Currency	Not Applicable
International Bank Account Number (IBAN) ISO Country Code	Not Applicable
IBAN Check Number	Not Applicable
IBAN Bank Code	Not Applicable
IBAN Branch Code	Not Applicable
<i>Section IV: Consolidated Settlement Through Another Principal</i>	
Consolidated Settlement Transfer Agent Name	Not Applicable
Consolidated Transfer Agent Member ID	Not Applicable
Transfer Agent Account Currency	Not Applicable
<i>Section V: Settlement Selection Criteria</i>	
Settlement Criteria: • Card Program Identifier • Transaction Currency • Issuer Account Range • Acquirer BIN • Issuer Only • Acquirer Only	Customer completes if settlement criteria is needed to direct the settlement of transactions to a specific settlement service
<i>Section VI: Daily Net Settlement Advisement Transmission</i>	
Transfer Agent Advisement Delivery Method and Destination	Should the customer choose to receive an advisement, the media type and destination are required
Customer Advisement Delivery Method and Destination	Not Applicable

Consolidated Settlement (Two Party)

The payment process flow for this arrangement has the following characteristics.

- The principal has designated another principal to settle on its behalf.
- A customer that designates another principal as its transfer agent is considered to be participating in a consolidated settlement relationship.
- The transfer agent—the designated bank—is the owner of the settlement account and will manage the movement of funds on behalf of the customer.



1. At settlement service cutoff, MasterCard may send an advisement to the transfer agent bank and may send an advisement to the customer.
2. MasterCard sends a transfer funds order to the MasterCard settlement bank.
3. One of the following occurs:

WHEN the customer...

Is in a credit position

Is in a debit position

THEN...

The MasterCard settlement bank pays the transfer agent bank.

The transfer agent bank pays the MasterCard settlement bank.

For regional settlement service funds transfer options, payment account requirements and payment method for each settlement service are noted in the following:

- Regional Settlement Services for Customers Licensed in Regions other than Europe
- Regional Settlement Services for Customers Licensed in Europe

NSIF Instructions for Consolidated Settlement (Two Party)

Customers must complete a Net Settlement Information Form (NSIF) for this method of settlement.

Section/Field within NSIF	Information Required
Section I: Principal Information	
Member ID	A unique identification number, also known as ICA, that is assigned by MasterCard to identify a customer or processing endpoint
Customer Name	Name of principal institution
Customer Address	Customer's address
Customer Settlement Contact	Customer's settlement contact
Section II: Settlement Information	
Type of request	Select the type of request
Type of settlement service	Select "Regional" or "Intracurrency"

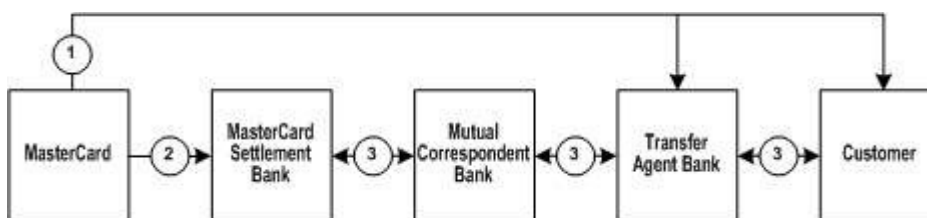
Section/Field within NSIF	Information Required
Notify MasterCard if the NSIF is for the regional settlement service default	Select either "Yes" or "No" and proceed with completing applicable sections
Section III: Transfer Agent Information	
Transfer Agent Name (Owner of the account)	Not Applicable
Transfer Agent Contact	Not Applicable
Transfer Agent Bank Name	Not Applicable
Transfer Agent Bank Address	Not Applicable
Routing Number	Not Applicable
SWIFT ID	Not Applicable
Transfer Agent Account Number	Not Applicable
Transfer Agent Account Currency	Not Applicable
International Bank Account Number (IBAN) ISO Country Code	Not Applicable
IBAN Check Number	Not Applicable
IBAN Bank Code	Not Applicable
IBAN Branch Code	Not Applicable
Section III: Pay Thru Information	
Pay Thru Bank Name	Not Applicable
Pay Thru Bank Address	Not Applicable
U.S. Federal Banking Routing Transit Number	Not Applicable
SWIFT ID	Not Applicable
Pay Thru Bank Account Number	Not Applicable
Pay Thru Bank Account Currency	Not Applicable
International Bank Account Number (IBAN) ISO Country Code	Not Applicable
IBAN Check Number	Not Applicable
IBAN Bank Code	Not Applicable
IBAN Branch Code	Not Applicable
Section IV: Consolidated Settlement Through Another Principal	
Consolidated Settlement Transfer Agent Name	Transfer Agent Name
Consolidated Transfer Agent Member ID	Transfer Agent ID

Section/Field within NSIF	Information Required
Transfer Agent Bank Account Currency	ISO Currency Code
Section V: Settlement Selection Criteria	
Settlement Criteria: • Card Program Identifier • Transaction Currency • Issuer Account Range • Acquirer BIN • Issuer Only • Acquirer Only	Customer completes if settlement criteria is needed to direct the settlement of transactions to a specific settlement service
Section VI: Daily Net Settlement Advisement Transmission	
Transfer Agent Advisement Delivery Method and Destination	Should the Transfer Agent choose to receive an advisement for the customers that have designated them to move money on their behalf, the media type and destination are required
Customer Advisement Delivery Method and Destination	Should the customer choose to receive an individual advisement on their settlement position, the media type and destination are required

Consolidated Settlement (Three Party)

The payment process flow for this arrangement has the following characteristics.

- The principal has designated another bank to settle on its behalf.
- The transfer agent—the designated bank—is the owner of the settlement account and manages the movement of funds on behalf of the customer.
- The mutual correspondent bank acts on behalf of the MasterCard settlement bank.



1. At settlement service cutoff, MasterCard may send an advisement to the transfer agent bank and may send an advisement to the customer.
2. MasterCard sends a transfer funds order to the MasterCard settlement bank.
3. The transfer agent bank moves funds on the customer's behalf.

WHEN the customer...

Is in a credit position

Is in a debit position

THEN...

1. The MasterCard settlement bank pays the mutual correspondent bank.
 2. The mutual correspondent bank pays the transfer agent bank.
-
1. The transfer agent bank pays the mutual correspondent bank.
 2. The mutual correspondent bank pays the MasterCard settlement bank.

For regional settlement service funds transfer options, payment account requirements and payment method for each settlement service are noted in Regional Settlement Services for Customers Licensed in Regions other than Europe.

NSIF Instructions for Consolidated Settlement (Three Party)

Customers must complete a Net Settlement Information Form (NSIF) for this method of settlement.

Section/Field within NSIF	Information Required
Section I: Principal Information	
Member ID	A unique identification number, also known as ICA, that is assigned by MasterCard to identify a customer or processing endpoint
Customer Name	Name of principal institution
Customer Address	Customer's address
Customer Settlement Contact	Customer's settlement contact
Section II: Settlement Information	
Type of request	Select the type of request
Type of settlement service	Select "Regional"
Notify MasterCard if the NSIF is for the regional settlement service default	Select either "Yes" or "No" and proceed with completing applicable sections
Section III: Transfer Agent Information	
Transfer Agent Name (Owner of the account)	Not Applicable
Transfer Agent Contact	Not Applicable
Transfer Agent Bank Name	Not Applicable

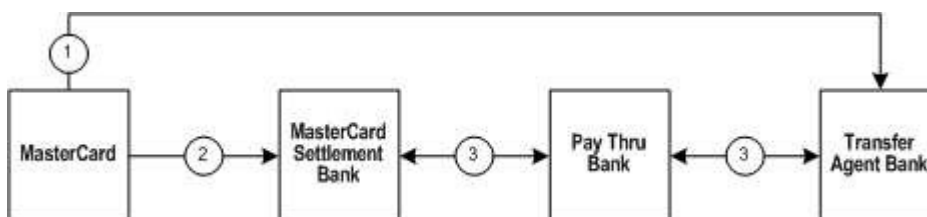
Section/Field within NSIF	Information Required
Transfer Agent Bank Address	Not Applicable
Routing Number	Not Applicable
SWIFT ID	Not Applicable
Transfer Agent Account Number	Not Applicable
Transfer Agent Account Currency	Not Applicable
International Bank Account Number (IBAN) ISO Country Code	Not Applicable
IBAN Check Number	Not Applicable
IBAN Bank Code	Not Applicable
IBAN Branch Code	Not Applicable
Section III: Pay Thru Information	
Pay Thru Bank Name	Not Applicable
Pay Thru Bank Address	Not Applicable
U.S. Federal Banking Routing Transit Number	Not Applicable
SWIFT ID	Not Applicable
Pay Thru Bank Account Number	Not Applicable
Pay Thru Bank Account Currency	Not Applicable
International Bank Account Number (IBAN) ISO Country Code	Not Applicable
IBAN Check Number	Not Applicable
IBAN Bank Code	Not Applicable
IBAN Branch Code	Not Applicable
Section IV: Consolidated Settlement Through Another Principal	
Consolidated Settlement Transfer Agent Name	Transfer Agent Name
Consolidated Transfer Agent Member ID	Transfer Agent ID
Transfer Agent Account Currency	ISO Currency Code
Section V: Settlement Selection Criteria	

Section/Field within NSIF	Information Required
Settlement Criteria: • Card Program Identifier • Transaction Currency • Issuer Account Range • Acquirer BIN • Issuer Only • Acquirer Only	Customer completes if settlement criteria is needed to direct the settlement of transactions to a specific settlement service
Section VI: Daily Net Settlement Advisement Transmission	
Transfer Agent Advisement Delivery Method and Destination	Should the Transfer Agent choose to receive an advisement for the customers that have designated them to move money on their behalf, the media type and destination are required
Customer Advisement Delivery Method and Destination	Should the customer choose to receive an individual advisement on their settlement position, the media type and destination are required

Pay Thru Settlement (Three Party)

The payment process flow for this arrangement has the following characteristics.

- The pay thru bank facilitates payments to and from the MasterCard settlement bank.
- A pay thru bank is used in situations where the transfer agent bank is unable to complete financial transactions with the MasterCard settlement bank.
- MasterCard expects the customer to own the settlement accounts at both the pay thru bank and transfer agent bank.



1. At settlement service cutoff, MasterCard may send an advisement to the transfer agent bank.
2. MasterCard sends a transfer funds order to the MasterCard settlement bank.
3. The transfer agent bank moves funds on the customer's behalf.

WHEN the customer...

Is in a credit position

Is in a debit position

THEN...

1. The MasterCard settlement bank pays the pay thru bank.
2. The pay thru bank pays the transfer agent bank.

1. The transfer agent bank pays the pay thru bank.
2. The pay thru bank pays the MasterCard settlement bank.

For regional settlement service funds transfer options, payment account requirements and payment method for each settlement service are noted in Regional Settlement Services for Customers Licensed in Regions other than Europe.

NSIF Instructions for Pay Thru Settlement (Three Party)

Customers must complete a Net Settlement Information Form (NSIF) for this method of settlement.

Section/Field within NSIF	Information Required
Section I: Principal Information	
Member ID	A unique identification number, also known as ICA, that is assigned by MasterCard to identify a customer or processing endpoint
Customer Name	Name of principal institution
Customer Address	Customer's address
Customer Settlement Contact	Customer's settlement contact
Section II: Settlement Information	
Type of request	Select the type of request
Type of settlement service	Select "Regional" or "Intracurrency"
Notify MasterCard if the NSIF is for the regional settlement service default	Select either "Yes" or "No" and proceed with completing applicable sections
Section III: Transfer Agent Information	
Transfer Agent Name (Owner of the account)	Name of the transfer agent should be the same as the customer name because it is the owner of the account
Transfer Agent Contact	Individual responsible for settlement

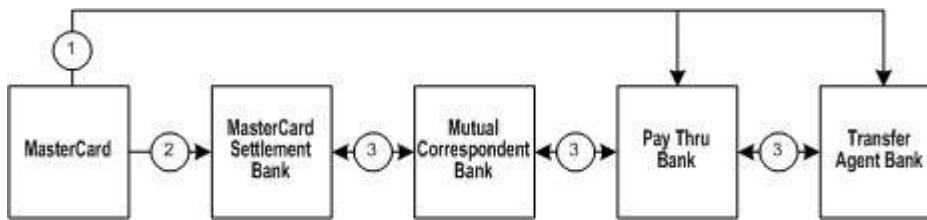
Section/Field within NSIF	Information Required
Transfer Agent Bank Name	Name of the bank where the customer's account is maintained
Transfer Agent Bank Address	Address of the bank where the customer's account is maintained
Routing Number	Not Applicable
SWIFT ID	SWIFT ID of the transfer agent bank
Transfer Agent Account Number	Account number that is owned by the customer
Transfer Agent Account Currency	ISO Currency Code
International Bank Account Number (IBAN) ISO Country Code	ISO Country Code associated with the transfer agent IBAN; optional field for future expansion of the IBAN account format
IBAN Check Number	Check Number associated with the transfer agent IBAN; optional field for future expansion of the IBAN account format
IBAN Bank Code	Bank Code associated with the transfer agent IBAN; optional field for future expansion of the IBAN account format
IBAN Branch Code	Branch Code associated with the transfer agent IBAN; optional field for future expansion of the IBAN account format
Section III: Pay Thru Information	
Pay Thru Bank Name	Pay thru bank name that has the banking relationship with the transfer agent bank to move funds on behalf of the customer
Pay Thru Bank Address	Pay thru bank address
U.S. Federal Banking Routing Transit Number	Not Applicable
SWIFT ID	SWIFT ID of the pay thru bank
Pay Thru Bank Account Number	The pay thru bank account number
Pay Thru Bank Account Currency	ISO Currency Code
International Bank Account Number (IBAN) ISO Country Code	ISO Country Code associated with the pay thru's IBAN; optional field for future expansion of the IBAN account format
IBAN Check Number	Check Number associated with the pay thru's IBAN; optional field for future expansion of the IBAN account format

Section/Field within NSIF	Information Required
IBAN Bank Code	Bank Code associated with the pay thru's IBAN; optional field for future expansion of the IBAN account format
IBAN Branch Code	Branch Code associated with the pay thru's IBAN; optional field for future expansion of the IBAN account format
Section IV: Consolidated Settlement Through Another Principal	
Consolidated Settlement Transfer Agent Name	Not Applicable
Consolidated Transfer Agent Member ID	Not Applicable
Transfer Agent Account Currency	Not Applicable
Section V: Settlement Selection Criteria	
Settlement Criteria: • Card Program Identifier • Transaction Currency • Issuer Account Range • Acquirer BIN • Issuer Only • Acquirer Only	Customer completes if settlement criteria is needed to direct the settlement of transactions to a specific settlement service
Section VI: Daily Net Settlement Advisement Transmission	
Transfer Agent Advisement Delivery Method and Destination	Should the pay thru and the transfer agent choose to receive an advisement for the customers that have designated them to move money on their behalf, the media type and destination are required
Customer Advisement Delivery Method and Destination	Not Applicable

Pay Thru Settlement (Four Party)

The payment process flow for this arrangement has the following characteristics.

- The pay thru—or mutual correspondent—bank facilitates payments to and from the MasterCard settlement bank and the mutual correspondent bank.
- A pay thru bank is used in situations where the transfer agent bank is unable to complete financial transactions with the MasterCard settlement bank and the mutual correspondent bank.
- MasterCard expects the customer to own the settlement accounts at both the pay thru bank and transfer agent bank.



1. At settlement service cutoff, MasterCard may send an advisement to the transfer agent bank.
2. MasterCard sends a transfer funds order to the MasterCard settlement bank.
3. The transfer agent bank moves funds on the customer's behalf.

WHEN the customer...

Is in a credit position

THEN...

1. The MasterCard settlement bank pays the mutual correspondent bank.
2. The mutual correspondent bank pays the pay thru bank.
3. The pay thru bank pays the transfer agent bank.

Is in a debit position

1. The transfer agent bank pays the pay thru bank.
2. The pay thru bank pays the mutual correspondent bank.
3. The mutual correspondent bank pays the MasterCard settlement bank.

For regional settlement service funds transfer options, payment account requirements and payment method for each settlement service are noted in Regional Settlement Services for Customers Licensed in Regions other than Europe.

NSIF Instructions for Pay Thru Settlement (Four Party)

Customers must complete a Net Settlement Information Form (NSIF) for this method of settlement.

Section/Field within NSIF	Information Required
Section I: Principal Information	
Member ID	A unique identification number, also known as ICA, that is assigned by MasterCard to identify a customer or processing endpoint
Customer Name	Name of principal institution
Customer Address	Customer's address

Section/Field within NSIF	Information Required
Customer Settlement Contact	Customer's settlement contact
Section II: Settlement Information	
Type of request	Select the type of request
Type of settlement service	Select "Regional"
Notify MasterCard if the NSIF is for the regional settlement service default	Select either "Yes" or "No" and proceed with completing applicable sections
Section III: Transfer Agent Information	
Transfer Agent Name (Owner of the account)	Name of the transfer agent should be the same as the customer name because it is the owner of the account
Transfer Agent Contact	Individual responsible for settlement
Transfer Agent Bank Name	Name of the bank where the customer's account is maintained
Transfer Agent Bank Address	Address of the bank where the customer's account is maintained
Routing Number	Not Applicable
SWIFT ID	SWIFT ID of the transfer agent bank
Transfer Agent Account Number	Account number that is owned by the customer
Transfer Agent Account Currency	ISO Currency Code
International Bank Account Number (IBAN) ISO Country Code	ISO Country Code associated with the transfer agent IBAN; optional field for future expansion of the IBAN account format
IBAN Check Number	Check Number associated with the transfer agent IBAN; optional field for future expansion of the IBAN account format
IBAN Bank Code	Bank Code associated with the transfer agent IBAN; optional field for future expansion of the IBAN account format
IBAN Branch Code	Branch Code associated with the transfer agent IBAN; optional field for future expansion of the IBAN account format
Section III: Pay Thru Information	
Pay Thru Bank Name	Pay thru bank name that has the banking relationship with the transfer agent bank to move funds on behalf of the customer
Pay Thru Bank Address	Pay thru bank address

Section/Field within NSIF	Information Required
U.S. Federal Banking Routing Transit Number	Not Applicable
SWIFT ID	SWIFT ID of the pay thru bank
Pay Thru Bank Account Number	The pay thru bank account number
Pay Thru Bank Account Currency	ISO Currency Code
International Bank Account Number (IBAN) ISO Country Code	ISO Country Code associated with the pay thru's IBAN; optional field for future expansion of the IBAN account format
IBAN Check Number	Check Number associated with the pay thru's IBAN; optional field for future expansion of the IBAN account format
IBAN Bank Code	Bank Code associated with the pay thru's IBAN; optional field for future expansion of the IBAN account format
IBAN Branch Code	Branch Code associated with the pay thru's IBAN; optional field for future expansion of the IBAN account format
Section IV: Consolidated Settlement Through Another Principal	
Consolidated Settlement Transfer Agent Name	Not Applicable
Consolidated Transfer Agent Member ID	Not Applicable
Transfer Agent Account Currency	Not Applicable
Section V: Settlement Selection Criteria	
Settlement Criteria: • Card Program Identifier • Transaction Currency • Issuer Account Range • Acquirer BIN • Issuer Only • Acquirer Only	Customer completes if settlement criteria is needed to direct the settlement of transactions to a specific settlement service
Section VI: Daily Net Settlement Advisement Transmission	
Transfer Agent Advisement Delivery Method and Destination	Should the pay thru and the transfer agent choose to receive an advisement for the customers that have designated them to move money on their behalf, the media type and destination are required
Customer Advisement Delivery Method and Destination	Not Applicable

International Bank Account Number

The International Bank Account Number (IBAN)-based bank account number structure is intended to improve the effectiveness of cross-border payments within the European Union by utilizing a commonly structured and validated format.

The use of IBAN will help ensure that receiving banks are able to process payments efficiently to the beneficiary's account. The use of the IBAN account structure is mandatory for EUR settlement services and MasterCard recommends it for all other settlement services.

To allow for the future expansion of the IBAN account format into additional non-EUR currencies, customers may specify an IBAN, when available, in the Transfer Agent Information section, Pay Thru Information section, or both, of the NSIF.

Settlement Services

MasterCard requires customers to select the settlement service in which they want to participate.

The settlement service types offered by MasterCard are:

- Regional settlement
- Intracurrency settlement (or Domestic Settlement for MasterCard Europe customers)
- Bilateral settlement

All customers must participate in at least one regional settlement service. In the defined regional settlement service, customers can settle in either U.S. dollars or a local currency supported by MasterCard.

To use the intracurrency settlement service, customers enter an intracurrency settlement arrangement and designate a settlement payment currency for all participating customers. At least one acquirer and one issuer must participate in the intracurrency settlement arrangement. Each intracurrency settlement service must net to zero in the payment currency for each settlement date. Contact a Regional Office representative for additional information about intracurrency settlement participation.

One customer may enter a bilateral agreement with another customer to settle transactions between themselves. MasterCard is able to process the transactions and provide settlement detail within the outbound clearing message in the Global Clearing Management System (GCMS). However, MasterCard does not perform settlement, create settlement advisements, move funds between the two customers, or provide any daily reconciliation and settlement reports for bilateral settlement activity. Both customers that participate in a bilateral agreement must notify MasterCard before submitting bilateral transactions. Failure to notify MasterCard will result in rejected transactions.

All customers must submit a complete NSIF to select or change their selected regional or intracurrency settlement services. A customer indicates the settlement payment currency on the NSIF. For a complete listing of settlement currencies supported by MasterCard and their corresponding currency codes, refer to sections 2–5. Net Settlement Information Form

Instructions, contains instructions for completing the NSIF. To obtain a copy of the RPPS® NSIF to be completed, MasterCard RPPS customers should refer to the *MasterCard RPPS—User Guide and Operating Rules*.

MasterCard offers an enhanced settlement process called settlement service selection. Customers that participate in regional settlement with the GCMS platform can settle transactions based on specific settlement selection criteria. This settlement selection criteria offers customers the ability to customize settlement of the transactions processed by MasterCard. More information is in Settlement Service Selection Criteria.

NOTE:

The services listed in Regional Settlement Services for Customers Licensed in Regions other than Europe, Regional Settlement Services for Customers Licensed in Europe, Intracurrency Settlement Services for Customers Licensed in Regions other than Europe, and Intracurrency Settlement Services for Customers Licensed in Europe are not intended to be all inclusive and local requirements may change after the publication of this document. The participating customer is responsible to verify all information and requirements with the settlement agent. Before participating in any services, customers should contact their settlement agent or a Global Settlement Services representative with questions.

Member ID Licensed Region

The licensed region is the geographical region where the principals are authorized to conduct card activities as specified in their license agreement.

For more information on licensing, refer to the MasterCard Rules in the countries for each geographical region listed. The settlement service tables in Regional Settlement Services for Customers Licensed in Regions other than Europe, Regional Settlement Services for Customers Licensed in Europe, Intracurrency Settlement Services for Customers Licensed in Regions other than Europe, and Intracurrency Settlement Services for Customers Licensed in Europe indicate the regions that apply to each settlement service.

Europe

These include principals licensed in Europe.

All Regions Except Europe

These include principals licensed in countries other than Europe in the following regions: Asia/Pacific, Canada, Latin America and the Caribbean, South Asia/Middle East/Africa, and the United States.

Settlement Service Continuity Procedures

MasterCard recognizes the value of providing to our customers settlement in local currencies. The support of settlement in currencies other than U.S. dollars exposes MasterCard to several types of risk.

While MasterCard continues working to enhance and expand these services, certain economic, geopolitical, or other events may require MasterCard to suspend or discontinue settlement in a specific currency with little or no notification. In the event that a country's primary communication system is unavailable and a secondary or back-up system is not provided, MasterCard may suspend settlement in that currency or country until such time as the communication lines are operable. In any event, MasterCard ultimately determines whether settlement is delayed or suspended and notifies participating customers accordingly.

Intracurrency Settlement

If MasterCard deems it necessary to suspend or discontinue one of its intracurrency settlement services, MasterCard will convert each participating customer's settlement position to its regional settlement currency.

MasterCard will use the most recent published foreign exchange rates to perform this conversion.

Regional Settlement

If MasterCard must suspend or discontinue one of its regional settlement services, MasterCard will convert each participating customer's settlement position to the clearing system's base currency of U.S. dollar.

Communication to Customers

If MasterCard suspends a settlement service, MasterCard will provide affected customers and transfer agents with revised settlement advisements. In addition, MasterCard will publish a special customer alert to describe the circumstances surrounding the event.

Settlement Service Selection Criteria

Settlement service selection criteria functionality offers customers that participate in regional settlement to customize settlement processing for their GCMS transactions.

At this time, settlement service selection criteria is supported only by the GCMS platform. Customers that participate in other clearing platforms will continue to abide by current business rules for settlement.

Customers that participate in the GCMS platform may settle in multiple regional services using one member ID. The GCMS platform will use settlement service selection criteria to determine the customer's settlement currency and account number when the customer participates in more than one regional service. The following are settlement service selection criteria: transaction currency, card program identifier (CPI), issuer account range, acquirer BIN, issuer-only activity, or acquirer-only activity.

Customers that choose to participate in multiple intracurrency settlement agreements using one member ID should contact their regional office and Customer Operations Services to discuss possible settlement options. The discussion will help ensure that the settlement request meets the intracurrency agreement whereby all participants realize the expected settlement outcome.

Since a customer may participate in multiple settlement arrangements per member ID for transactions processed within the GCMS platform, one regional settlement account must be defined as the default and carry no settlement service selection criteria.

MasterCard has defined a process to use when a customer wants to implement settlement service selection criteria functionality. Because of the complexity of settlement requests using selection criteria, the standard timeline for implementing an NSIF with criteria will be waived and an implementation date will be determined on a case-by-case basis. Customers that settle GCMS transactions using the new functionality should expect to participate in the steps stated as follows:

1. The customer communicates the business application for using settlement service selection criteria to their business contact. This includes defining the types of GCMS transactions to be processed and settled within a specific settlement account/currency.
2. MasterCard representatives work with the customer to refine the request and assess the level of effort from a business and technical perspective to help ensure that all needs are addressed. Testing of the new functionality may be required depending on the complexity of the request.
3. The customer completes and delivers the NSIF to MasterCard.
4. The customer and MasterCard establish an implementation date.

NOTE:

MasterCard, in its sole discretion, may restrict usage of settlement selection criteria as deemed appropriate to protect MasterCard programs and help ensure service quality.

NOTE:

In connection with the implementation and activation of the capacity to direct settlement of GCMS processed transactions using settlement selection criteria, MasterCard strongly recommends testing. MasterCard cannot ensure that the implementation and activation of this functionality will not affect the qualification of transactions for new and existing accounts under the customer's ID/ICA if testing is not executed. The customer and transfer agent will assume all risks (including, without limitation, paying assessments associated with the failure to transfer funds in accordance with the MasterCard *Settlement Manual*) and indemnify MasterCard against all loss, damage, liability arising out of or relating to the implementation and activation of the capacity to direct settlement of GCMS processed transactions without testing.

Settlement Service Selection Criteria Example

This example shows how a customer processing through GCMS may establish criteria for settlement service selection.

Customer	Settlement Account Number	Settlement Service	Issuer Account Range	Acquirer BIN	Acquirer Only	Issuer Only	Transaction Currency	Card Program Identifier
1234	MMMNNN	Intracurrency A Hong Kong Dollar settlement currency	none specified	none specified	none specified	none specified	none specified	none specified
	BBBCCC	Regional A Japanese Yen settlement currency	none specified	none specified	none specified	none specified	Japanese Yen, Hong Kong Dollar	MCC
	AAABBB	Default Service Regional BUSD settlement currency	none specified	none specified	none specified	none specified	none specified	none specified

Customer 1234 has chosen to participate in intracurrency settlement and two regional services with one being the default regional service. In one of the regional settlement services, the customer has included specific criteria to guide settlement, as follows:

- Intracurrency A supports all transactions applicable to the intracurrency agreement.
- Regional A supports transaction currency processed in Yen and Hong Kong Dollar along with the card program identifier of MasterCard® Credit.
- Regional B is defined as the regional default. If the transactions processed do not meet the business requirements or settlement criteria defined for intracurrency A or regional A, then the transaction will settle in regional B.

After the customer determines the settlement parameters necessary to guide the transactions for settlement, the customer must complete an NSIF. Instructions for completing the NSIF are in Net Settlement Information Form Instructions.

The hierarchy for settlement service selection is bilateral, intracurrency, regional, and then the regional default. The settlement service selection process evaluates customer participation in this order. If no intracurrency settlement service agreement exists in which both customers participate, MasterCard assigns settlement to each customer's regional settlement service and account information.

If, during the settlement service selection process, it is determined that the transaction qualifies for multiple settlement services within the same level, GCMS will use the parameters with the most specific matching criteria. For an example of the multiple settlement services within the same level, refer to the previous table.

NOTE:

For additional information about the GCMS settlement service selection process, refer to Section 4, "Settlement Service," of the GCMS Reference Manual.

Settlement Service Selection Process Example

To illustrate the settlement service selection process, assume that the following customers participate in settlement service agreements, with no additional criteria specified, per the following table.

Customer	Intracurrency	Regional
1234	X	X
5678	X	X
6541		X

Assume that customers 1234 and 5678 participate in the same intracurrency settlement agreement. Based on the previous table, the following settlement services would be selected.

Transactions between...	Would use the following settlement service
1234 and 5678	Intracurrency settlement
5678 and 6541	Regional settlement
6541 and 1234	Regional settlement

To further illustrate settlement service selection, the following example includes settlement for intracurrency and regional services using settlement criteria.

Customer	Settlement Account and Settlement Currency	Settlement Service ID	Issuer Account Range	Acquirer BIN	Acquirer Only	Issuer Only	Transaction Currency	Card Program Identifier
3214	LLRRR SGD-702	Intracurrency A	none specified	none specified	none specified	none specified	none specified	none specified

Customer	Settlement Account and Settlement Currency	Settlement Service ID	Issuer Account Range	Acquirer BIN	Acquirer Only	Issuer Only	Transaction Currency	Card Program Identifier
	UUUBBB MYR-458	Regional F default	none specified	none specified	none specified	none specified	none specified	none specified
9876	KKKFFF SGD-702	Intracurrency A	none specified	none specified	none specified	none specified	none specified	none specified
	JJLLLL CAN-124	Regional E	none specified	none specified	none specified	none specified	Canadian Dollar	MCC
	AAAMMM AUD-036	Regional C default	none specified	none specified	none specified	none specified	none specified	none specified
4521	RRRVVV JPY-392	Regional B	none specified	none specified	none specified	none specified	Yen	none specified
	VVVPPP USD-840	Regional D default	none specified	none specified	none specified	none specified	none specified	none specified
8523	SSSMMM USD-840	Regional D default	none specified	none specified	none specified	none specified	none specified	none specified

Transactions Between 3214 and 9876

Transaction currency is Singapore Dollar and the Card Program Identifier is MasterCard Credit. Sending and receiving customers both participate in the Intracurrency agreement. Settlement is as follows:

- 3214 will settle in account LLLRRR/SGD-702, Intracurrency A
- 9876 will settle in account KKKFFF/SGD-702, Intracurrency A

Transactions Between 4521 and 9876

Transaction currency is Canadian Dollars and the Card Program Identifier is MasterCard Credit. Settlement is as follows:

- 4521 will settle in account VVVPPP/USD-840, Regional D—Customer's regional default service
- 9876 will settle in account JJLLLL/CAN-124, Regional E

Transactions Between 4521 and 3214

Transaction currency is Yen and the Card Program Identifier is MasterCard Credit. Settlement is as follows:

- 4521 will settle in account RRRVVV/JPY-392, Regional B
- 3214 will settle in account UUUBBB/MYR-458, Regional F—Customer's regional default service

Transactions Between 4521 and 8523

Transaction currency is U.S. Dollar and the Card Program Identifier is MasterCard Credit. Settlement is as follows:

- 4521 will settle in account VVVPPP/USD-840, Regional D—customer's regional default service
- 8523 will settle in account SSSMMM/USD-840, Regional D—customer's regional default service

Regional Settlement Service

Regional settlement allows customers to settle their activity in any regional settlement currency supported by MasterCard independent of the settlement currency of the other party to the transaction.

Customers must participate in a regional settlement service. However, the customers involved in a clearing transaction that qualifies for regional settlement are not required to settle in the same regional settlement service.

To participate in a regional settlement service, customers must meet the following requirements:

- The customer must identify an acceptable transfer agent bank for net settlement payments or receipts.
- The customer must have an agreement with its transfer agent bank to transfer funds through the applicable funds movement mechanism available for the regional currency to be transferred.
- MasterCard must approve of the currency for settlement. MasterCard may add or remove supported currencies at any time.
- The customer must honor holiday schedules as published by MasterCard.

NOTE:

All customers must have a default regional settlement arrangement defined.

MasterCard charges customers that participate in regional settlement service (U.S. dollar or local currency) a monthly settlement service participation fee. The monthly fees are assessed for each transfer agent settlement account within the regional settlement service. The fees cover the administrative costs that MasterCard incurs.

The settlement service fees appear on the customer's GB073010-AA Customer Service Summary MCBS report.

Customers that choose to settle in local currency must indicate the settlement currency in the NSIF and receive approval from MasterCard for its use. The customer must return the NSIF to MasterCard at least 30 days before settlement implementation.

Any customer that wants MasterCard to consider supporting a new regional settlement service currency should submit its request in writing and identify the chosen transfer agent bank for consideration to the Head of Global Settlement Services (GSS).

MasterCard will base its approval of a local currency for regional settlement on factors including, but not limited to, currency liquidity, economic feasibility, and local banking regulations.

For scenarios of regional settlement service processing by currency, refer to Regional Settlement Services for Customers Licensed in Regions other than Europe and Regional Settlement Services for Customers Licensed in Europe.

U.S. Dollar Settlement Requirements for US00000001, US00000002, EU00000002, P000000001, AP00000010, and EU00000018 Services

The following are requirements specific to U.S. dollar settlement:

- The customer must maintain a U.S. dollar account at a transfer agent bank that is a customer of the Federal Reserve System in the United States, or maintain an account at the MasterCard settlement bank.
- The transfer agent bank must be prepared to receive and respond to a Fedwire credit and Federal Reserve 1031 drawdown request.

To participate in regional U.S. dollar settlement, the customer must provide to both MasterCard and the customer's designated transfer agent bank a letter authorizing the transfer agent bank to accept and act on settlement instructions it receives from MasterCard. An original, signed debit authorization letter must be forwarded to MasterCard along with the NSIF. An original, signed debit authorization letter should be forwarded to the banking institution where the account resides. The form and content of this authorization letter must be acceptable to MasterCard. Refer to the *Debit Authorization Letter* (Form 336).

NOTE:

Customers participating in regional settlement services that settle in currency other than U.S. dollars are not required to complete the Authorization Letter for Wire Transfers.

U.S. Dollar Regional Funds Transfer for US000000001, US000000002, EU000000002, P000000001, AP00000010, and EU00000018 Services

A transfer agent bank settling on behalf of a customer with a net debit settlement position for the day must transfer the appropriate amounts to the MasterCard settlement bank by 14:00 St. Louis time, the same day. All late payments to the MasterCard net settlement account will be subject to a non-compliance assessment, including those received after 14:00 but before the close of the business day. For U.S. dollar regional settlement, refer to the following table to determine the status of funds based on receipt at the MasterCard settlement bank.

If funds are received by...	Then their status will be...	Assessment?
14:00 St. Louis time, same day	On-time	No
Close of business, same day	Late	Yes
Next business day	Late	Yes

If a customer cannot transfer funds by 14:00 St. Louis time, it must transfer funds by the close of the business day in St. Louis (17:00).

NOTE:

For assessment information, issuers processing and settling private label should refer to Private Label.

MasterCard bases its approval of U.S. dollar settlement outside the U.S. region on factors including, but not limited to, availability, local custom, and economic feasibility.

When a transfer agent bank maintains a U.S. dollar account with the MasterCard settlement bank, the MasterCard settlement bank effects a book transfer. The MasterCard settlement bank will initiate instructions through the Federal Reserve using a Fedwire 1031 drawdown message to initiate collection of U.S. dollar payments from accounts maintained at other financial institutions.

Direct Request Payment Processing with MasterCard Settlement Banks

MasterCard offers direct request payment processing on various settlement services.

Direct request debit processing with MasterCard settlement banks is offered and supported by establishing nostro accounts as instructed in this section for each regional settlement service and its settlement currency. Principals must give written notification of the debit authorization to the bank where the nostro account resides, also known as the transfer agent's bank, and to MasterCard.

Principals in a net debit position and that participate in direct request payment processing are responsible for settlement to the MasterCard settlement account on the value date. Non-receipt of a direct debit request is not just cause to fail settlement with MasterCard.

Principals must monitor completion of settlement by verifying with the transfer agent's bank that its nostro account has been debited and that the MasterCard settlement account has been credited on the value date.

To support direct request payments, each principal's nostro account must be funded or have established credit lines to cover its settlement position. If the principal or its designated transfer agent fails to effect settlement on the value date for the amount stated on the advisement, it is noncompliant and will incur assessments as outlined in the *Settlement Manual*.

JPMorgan Chase

The following settlement service IDs for U.S. dollar settlement with the MasterCard settlement bank, JPMorgan Chase, support direct request payment processing:

- United States Dollar—US000000001
- United States Dollar—RPPS—US000000002
- United States Dollar—EU000000002
- United States Dollar—Private Label—P000000001
- United States Dollar Processed Through the Single Message System—AP000000010
- United States Dollar—EU000000018

Direct request processing with JPMorgan Chase is available when the principal has its U.S. dollar settlement account in the United States.

Principals have two direct request processing options as follows:

- The principal maintains a U.S. dollar nostro account with JPMorgan Chase, New York, USA **or** its correspondent bank maintains a U.S. dollar account with JPMorgan Chase, New York, USA. MasterCard instructs JPMorgan Chase to effect a direct debit book transfer to the principal's settlement account.
- The principal maintains a U.S. dollar nostro account with a correspondent bank in the United States that is a Fedwire participant. JPMorgan Chase initiates instructions through the Federal Reserve using a Fedwire 1031 drawdown message to request U.S. dollar payments from accounts maintained at other financial institutions that are Fedwire participants.

MasterCard requires principals to complete and deliver a *Debit Authorization Letter* (Form 336) to the banking institution where the account resides and to MasterCard. In addition, customers must submit new account information to MasterCard, through an NSIF. The NSIF and letter are on MasterCard Connect™ on the **Forms** page under the category **Clearing and Settlement**.

IF the customer does not perform all the following...	THEN...
• Ensure that JPMorgan Chase or its correspondent bank is prepared to honor the direct debit request. • Deliver the new account information through the NSIF. • Deliver the <i>Debit Authorization Letter</i> (Form 336) as instructed, with acceptance by the transfer agent's bank and MasterCard.	Direct request processing will not be authorized and the principal must initiate payment to MasterCard without the direct debit book transfer or 1031 drawdown message.

Citibank

The MasterCard settlement bank, Citibank, supports direct request payment processing for the following service IDs:

- Australian Dollar—EU000000023
- Canadian Dollar—EU000000020
- Hong Kong Dollar—EU000000022
- Japanese Yen—EU000000014
- New Zealand Dollar—EU000000021
- South African Rand—EU000000019

Direct debit book transfers are available when the principal's nostro account is held at Citibank within the country of the settlement currency. Information about establishing nostro accounts, direct debit book transfers, or both, with Citibank can be obtained through one of the following:

- Principals that currently have nostro accounts with Citibank should contact their relationship manager.
- Principals that do not have nostro accounts with Citibank should contact the branch within the country of the settlement currency.

The following table lists contacts for establishing nostro accounts for direct request payment processing with Citibank.

Country	Contact Name	Email Address and Phone Number
Australia and New Zealand	Leah-Ann Mchenry	leahann.mchenry@citi.com 64-9-307-1966 x71966
Canada	Ted Chase	theodore.chase@citi.com 1-212-816-6393
Hong Kong	Sunny Wong	sunny.wong@citi.com 852-2868-8902
Japan	Taiichiro Higasa	taiichiro.higasa@citi.com 81-3-6270-9545 x9545
South Africa	Daniel Grossman	daniel.grossman@citi.com 27-11-944-0001

Should the principal meet Citibank's requirements for opening an account, Citibank requires a debit authorization in the account opening process. After the customer has completed the *Debit Authorization Letter* (Form 336), the customer must submit a signed copy to

MasterCard along with the NSIF. MasterCard will then be authorized to instruct Citibank to affect direct debit book transfers to the principal's nostro account.

IF the customer does not perform all the following...	THEN...
• Ensure that Citibank is prepared to honor the direct debit request. • Deliver the new account information through the NSIF. • Deliver the <i>Debit Authorization Letter</i> (Form 336), including the principal's transfer agent name and ICA number/member ID, with acceptance by Citibank and MasterCard.	Direct request processing will not be authorized and the principal must initiate payment to MasterCard.

Deutsche Bank

The MasterCard settlement bank, Deutsche Bank, supports direct request payment processing for the following settlement service IDs:

- Danish Krone—EU00000011
- Euro—EU00000008
- Pound Sterling—EU00000012

Direct debit book transfers are available when the principal's nostro account is held at Deutsche Bank, Frankfurt. Information about establishing nostro accounts and direct debit book transfers with Deutsche Bank can be obtained through one of the following:

- Principals that currently have nostro accounts with Deutsche Bank should contact their relationship manager.
- Principals that do not have nostro accounts with Deutsche Bank should contact the following:

Sonja Luckan

Global Transaction Banking

Phone: +49 69 / 910 - 47055

Email: sonja.luckan@db.com

Should the principal meet Deutsche Bank's requirements for opening an account, Deutsche Bank requires a debit authorization in the account opening process. After the customer has completed the *Debit Authorization Letter* (Form 336), the customer must submit a signed copy to MasterCard along with the new account information through the NSIF. MasterCard is then be authorized to instruct Deutsche Bank to affect a direct debit book transfer to the principal's nostro account.

IF the customer does not perform all the following...	THEN...
• Ensure that Deutsche Bank is prepared to honor the direct debit request. • Deliver the new account information through the NSIF. • Deliver the <i>Debit Authorization Letter</i> (Form 336), including the principal's transfer agent name and ICA number/member ID, with acceptance by Deutsche Bank and MasterCard.	Direct request processing will not be authorized and the principal must initiate payment to MasterCard.

Minimum Threshold for Funds Transfer

MasterCard has established criteria for small dollar payments that will help customers that participate in regional settlement services to manage their settlement costs.

MasterCard will use the following criteria to determine if a payment meets the threshold minimums:

- The payment is a minimum of USD 1,000 equivalent for net settlement to or from MasterCard.
- MasterCard will retain the funds transfer for 10 business days if the cumulative net settlement amount remains less than the threshold minimum.

S.A.M. will review net settlement positions at the transfer agent level to determine whether the net settlement position meets the criteria for a small dollar payment. The transfer agent level represents the level at which the assigned clearing bank generates or receives a transfer order for the daily net settlement.

MasterCard will communicate the dates, amounts, and cumulative value associated with the payments that MasterCard is holding through a Transfer Agent Advisement Exception report. For more information about this report, refer to Net Settlement Advisements.

Currently, this functionality does not apply to participants of RPPS® and intracurrency services. Customers participating in the European regional settlement services defined in Regional Settlement Services for Customers Licensed in Europe, may choose to participate by completing the *Participant of Transfer Funds Order Minimum Thresholds* (Form 829). For all other settlement services, customers will automatically participate by default. Customers choosing not to participate must complete and submit the *Non-participant of Transfer Funds Order Minimum Thresholds* (Form 814).

Regional Settlement Holidays

Regional holidays factor into when settlement occurs among customers.

The following holiday rules apply to regional settlement services for customers licensed in Europe and regions other than Europe:

- Settlement will not occur on any MasterCard declared holidays including 1 January and 25 December and settlement will not be valued on 1 January and 25 December.
- Settlement will not occur on any of the local country's banking holidays.