AN 6791 Introducing Digital Commerce Solutions Indicators

Type:
Switching release announcement

Audience:
Acquirer
Issuer
Processor
Network enablement partner

Region:
Global

Brand:
Mastercard®
Debit Mastercard®
Maestro®

Product or service:
Digital Secure Remote Payment
Mastercard Digital Enablement Service
Mastercard QR

Release:
23.Q4

Action indicator:
Program or service requirement: acquirer, issuer
Testing recommended: acquirer, issuer

System:
Authorization
Clearing
Single Message System

Published:
6 June 2023

Effective:
7 November 2023

Executive overview

Mastercard is introducing digital commerce solutions indicators, allowing acquirers and issuers to identify digital commerce transactions with ease.

Effective date details

Date	Details
7 November 2023	Dual Message System (Authorization) and Single Message System

Customer benefit

The digital commerce solutions indicators will strengthen the security and performance of digital commerce transactions and help ensure acquirers and issuers can easily identify them.

What Mastercard is doing

In both Authorization and Single Message System an existing subelement and its subfields will be redefined to carry the new digital commerce solutions indicators.

Background

As announced in *AN 6765 Revised Standards for the Decommissioning of Mastercard Mobile*, Mastercard no longer supports the Mastercard Mobile brand or the mobile remote payment transaction type. The subelements and subfields once used to support mobile remote payment transactions are being redefined to support digital commerce transaction data.

Definitions for digital commerce transaction types are as follows:

Biometric Checkout	A global program that sets standards, requirements and guidelines for biometric providers, and other related companies so new biometric payment solutions can be launched with a high degree of security, biometric performance and proven reliability. Biometric payments enable cardholders to enroll a biometric trait such as face, palm or iris and store a payment card then pay for transactions at participation Point-of-Service locations with no need for cards, mobile, or NFC device. Transactions are touchless, fast, and secure. It is a new, innovative payment option expanding across all regions.

Click to Pay	A global specification developed by EMVCo [1] (EMV) to create an e-commerce experience that aims to deliver the same security, convenience, and control offered to consumers in the physical world.
Next Gen POI	A scalable solution for merchants to implement faster, easier and more secure in-store remote payment experiences for consumers. The solution includes APIs, reference implementations and out-of-box hosted components to accelerate go-to-market roll out.
Mastercard Merchant Presented QR SRC (SQR)	An interoperable, tokenized, pull-payments service under Mastercard Merchant Presented QR solutions. It leverages both the EMVCo QR merchant presented QR standards as well as the EMVCo Secure Remote Commerce API specifications.

Related clearing enhancements

Related clearing changes were announced in *AN 6793 23.Q2 Miscellaneous Core Systems Updates*. Private Data Subelement (PDS) 0020 (Digital Commerce Solutions Indicators) and subfields were introduced to support this enhancement.

Version history

Each customer must determine the impact on its operations.

Date	Description of change
6 June 2023	Added Other media to Related documentation
18 April 2023	Initial publication date

Customer impact

This section provides high-level information about customer impact. Refer to the Enhancements section for more details.

Program or service requirement: acquirer, issuer

Participating acquirers and issuers should prepare to receive the digital commerce solutions indicators.

Testing recommended: acquirer, issuer

Mastercard recommends testing for participating acquirers and issuers to prepare for the enhancements provided in this announcement.

Transaction message flow impact

The manner in which a customer is connected to Mastercard determines the group of message flows that apply and the transaction message types they send or receive within that group. Customers can interface to the Mastercard Dual Message System, Single Message System, or both, as applicable. This announcement affects the message flows marked in the Transaction message flow impact table.

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[1] EMV is a registered trademark or trademark of EMVCo LLC in the United States and other countries.

Transaction message flow impact

Acquirer to Mastercard	Mastercard to issuer	Impacted
Dual Message System	Dual Message System	√
Dual Message System	Single Message System	√
Single Message System	Single Message System	√
Single Message System	Dual Message System	√

Examples of message types within the Dual Message System and Single Message System are:

• Authorization Request/0100 and First Presentment/1240 messages
• Financial Transaction Request/0200 and Financial Transaction Advice/0220 messages

Enhancements

Mastercard will introduce changes to support this announcement.

Dual Message System (Authorization) and Single Message System

Mastercard will redefine a subelement and its subfields within Data Element (DE) 48 (Additional Data: Private Use) in Authorization and DE 48 (Additional Data) in Single Message System as follows:

Subelement 48 (Mobile Remote Payment), will be renamed subelement 48 (Digital Commerce Solutions Indicators). The subelements four subfields will be renamed as outlined in the Digital commerce solutions indicators subfields table.

Digital commerce solutions indicators subfields

Subfield ID	Decommissioned subfield name	Subfield name effective 23.Q4
Subfield 01	Remote Payments Program Type Identifier	Digital Commerce Domain Identifier
Subfield 02	Mastercard Mobile Remote Payment Transaction Type	Digital Commerce Program Type
Subfield 03	Mobile Phone Number	Digital Commerce Check-In Entity Type and Name
Subfield 04	Convenience Fee	Digital Commerce Check-In Method

The Transaction Investigator and the Single Message Transaction Manager will be updated to support the digital commerce solutions indicators.

Dual Message System (Clearing)

The Transaction Investigator will be updated to support the digital commerce solutions indicators.

Related documentation

Information relevant to this release announcement can be found in the documents available on Mastercard Connect™. Mastercard updates manuals with necessary changes after release implementation. Depending on timing, information provided in this release announcement may not be reflected in a manual until it is updated.

Announcements

Refer to these previously published announcements for more information:

- *AN 6793 23.Q2 Miscellaneous Core Systems Updates*
- *AN 6765 Revised Standards for the Decommissioning of Mastercard Mobile*
- *AN 4952 Introducing the Biometric Checkout Program, A New Way to Pay In-Store*

Reference manuals

For information about the current state of Mastercard processing refer to the:

- *Customer Interface Specification*
- *Mastercard Biometrics Checkout Program Guide*
- *Mastercard Click to Pay Program Requirements*
- *Secure Card on File QR Program Guide Issuer Wallet Implementation for Mexico, Brazil and Guatemala*
- *Settlement Manual*
- *Single Message System Specifications*
- *Single Message Transaction Manager*

Other media

Statements made in videos presented at the Customer Technical Conference are current when the video was recorded. Videos are currently available only for those announcements presented at the Customer Technical Conference. Mastercard may update announcements without updating the corresponding video. Refer to the most recent version of the announcement for the most up-to-date information.

AN 6791 Introducing Digital Commerce Solutions Indicators, Customer Technical Conference, May 2023

Platform impact

The Platform impact table lists the impact of this announcement. For items that are marked √ (Yes), details are available in the corresponding topics.

Platform impact

Topic	Dual Message System (Authorization)	Dual Message System (Clearing)	Single Message System
Message flows			
Message layouts			
Data element definitions	√		√
IPM MPE			
Interchange			
CAB programs, descriptions, and associated MCCs			

Topic	Dual Message System (Authorization)	Dual Message System (Clearing)	Single Message System
Edits			
Error numbers			
Alternate processing			
Interchange compliance			
Pricing and fees			
Reports			
Bulk files			
Forms			
Quarterly Mastercard reporting			
Transaction Investigator	√	√	
SAFE			
Single Message Transaction Manager			√
250-byte Batch Data File			
80-byte Financial Institution Table File			

Authorization

Mastercard will introduce changes to the Authorization Platform to support this announcement.

CIS data element definitions

Mastercard will update data elements to support this announcement.

DE 48 (Additional Data: Private Use)

DE 48 (Additional Data: Private Use) is reserved for private organizations to define data unique to specific networks or specific programs and services. DE 48 provides other supplemental data in a message when a specific ISO-designated data element is not available. It is a free-format, variable-length data element that may be used for multiple purposes.

List of DE 48 subelements

DE 48 subelements are listed in numeric order. Subelements that are specific to a brand service or program are clearly indicated in the subelement title or description or both.

Subelement ID	Subelement name	Data representation
48	Digital Commerce Solutions Indicators	n-1

Subelement 48 (Digital Commerce Solutions Indicators)
DE 48, subelement 48 (Digital Commerce Solutions Indicators) identifies the domain, program type, and optional check-in details of a digital commerce transaction.

Attributes

Attribute	Description
Subelement ID	48
Subelement length	2
Data representation	ans...73; LLVAR
Data field	Contents of subfields 01-04
Subfields	4
Justification	N/A

Usage

Whether the usage is mandatory, conditional, optional, system-provided, or not required is as noted for each applicable message.

Message	Org	Sys	Dst
Authorization Request/0100	C	X	C
Authorization Request Response/0110	C	X	C
Authorization Advice/0120: system-generated	•	X	C

Values

See subfields.

Application Notes

DE 48, subelement 48 is present in Authorization Request/0100, Authorization Request Response/0110, and Authorization Advice/0120 messages for specific digital commerce transactions.

Subfield 01 (Digital Commerce Domain Identifier)
DE 48, subelement 48 (Digital Commerce Solutions Indicators), subfield 01 (Digital Commerce Domain Identifier) identifies the entity responsible for populating the digital commerce solutions indicators defined in subfield 02 (Digital Commerce Program Type), subfield 03 (Digital Commerce Check-In Entity Type and Name), and subfield 04 (Digital Commerce Check-In Method).

Attributes

Attribute	Description
Subfield ID	01
Subfield length	2

Attribute	Description
Data representation	n-1
Data field	Contents of subfield 01
Justification	N/A

Values

Value	Description
1	Mastercard
2	Acquirer
3	Issuer
4-9	Reserved for future use

Application notes

Mastercard populates the value of 1. Acquirers or issuers provide values 2 and 3.

Subfield 02 (Digital Commerce Program Type)
DE 48, subelement 48 (Digital Commerce Solutions Indicators), subfield 02 (Digital Commerce Program Type) identifies the specific digital commerce program.

Attributes

Attribute	Description
Subfield ID	02
Subfield length	2
Data representation	n-1
Data field	Contents of subfield 02
Justification	N/A

Values

Value	Description
1	SQR
2	Click to Pay
3	Biometric Checkout Program
4	Next Gen POI

Value	Description
5-9	Reserved for future use

Application notes

Subfield 2 is present when subfield 1 is present.

When subfield 01 is 1 (Mastercard), subfield 02 must one of the listed values:

- 1 (SQR)
- 2 (Click to Pay)
- 3 (Biometric Checkout Program).

When subfield 01 is 2 (Acquirer) or 3 (Issuer), subfield 02 must be 4 (Next Gen POI).

Subfield 03 (Digital Commerce Check-In Entity Type and Name)
DE 48, subelement 48 (Digital Commerce Solutions Indicators), subfield 03 (Digital Commerce Check-In Entity Type and Name) identifies entity type and entity name. All entities eligible for this subfield must be integrated with the Mastercard Next Gen POI API.

Attributes

Attribute	Description
Subfield ID	03
Subfield length	2
Data representation	ans...15; LLVAR
Data field	Contents of subfield 03
Justification	N/A

Values

Subfield 03 is an open text field of up to 15 characters.

Application notes

Subfield 03 is

- Only present when subfield 01 and subfield 02 are present.
- Required for Next Gen POI transactions.
- Optional for all other transaction types.

Subfield 04 (Digital Commerce Check-In Method)
DE 48, subelement 48 (Digital Commerce Solutions Indicators), subfield 04 (Digital Commerce Check-In Method) identifies the methods a check-in entity applies to validate cardholder presence. This field may also include a reference number for tracking and reporting purpose.

Attributes

Attribute	Description
Subfield ID	04
Subfield length	2
Data representation	ans...40; LLVAR
Data field	Contents of subfield 04
Justification	N/A

Values

Subfield 04 is an open text field of up to 40 characters.

Application notes

Subfield 04 is

- Only present when subfield 01 and subfield 02 are present.
- Required for Next Gen POI transactions.
- Optional for all other transaction types.

Transaction Investigator updates for the Authorization Platform

The Transaction Investigator will be updated to support the digital commerce solutions indicators communicated in this announcement.

Clearing

Mastercard will introduce changes to the Clearing Platform to support this announcement.

Transaction Investigator updates for the Clearing Platform

The Transaction Investigator will be updated to support the digital commerce solutions indicators in PDS 0020 (Digital Commerce Solutions Indicators) as announced in *AN 6793 23.Q2 Miscellaneous Core Systems Updates*.

Single Message System

Mastercard will introduce changes to the Single Message System to support this announcement.

Single Message System data element definitions

Mastercard will update data elements to support this announcement.

DE 48 (Additional Data)
DE 48 (Additional Data) is reserved for use based on product type.

List of DE 48 subelements
DE 48 subelements are listed in numeric order. Subelements specific to a brand service or program are clearly indicated in the subelement title or description or both.

Subelement ID	Subelement name	Data representation
48	Digital Commerce Solutions Indicators	ans...73; LLVAR

Subelement 48 (Digital Commerce Solutions Indicators)
DE 48, subelement 48 (Digital Commerce Solutions Indicators) identifies the domain, program type and optional check-in details of a digital commerce transaction.

Attributes

Attribute	Description
Subelement ID	48
Subelement length	2
Data representation	ans...73; LLVAR
Data field	Contents of subfields 01-04
Subfields	subfield 01 (Digital Commerce Domain Identifier)
	subfield 02 (Digital Commerce Program Type)
	subfield 03 (Digital Commerce Check-In Entity Type and Name)
	subfield 04 (Digital Commerce Check-In Method)
Justification	N/A

Usage

Whether the usage is mandatory, conditional, optional, system-provided, or not required is as noted for each applicable message.

Message	Org	Sys	Dst
Financial Transaction Request/0200	C	X	C
Financial Transaction Response/0210	C	X	C
Financial Transaction Advice/0220	•	X	C

Values

See subfields.

Application Notes

DE 48, subelement 48 is present in all Financial Transaction Request/0200 or Financial Transaction Response / 0210 messages for digital commerce transactions.

Subfield 01 (Digital Commerce Domain Identifier)
DE 48, subelement 48 (Digital Commerce Solutions Indicators), subfield 01 (Digital Commerce Domain Identifier) identifies the entity responsible for populating the digital commerce solutions indicators defined in subfield 02 (Digital Commerce Program Type), subfield 03 (Digital Commerce Check-In Entity Type and Name), and subfield 04 (Digital Commerce Check-In Method).

Attributes

Attribute	Description
Subfield ID	01
Subfield length	2
Data representation	n-1
Data field	Contents of subfield 01
Justification	N/A

Values

Value	Description
1	Mastercard
2	Acquirer
3	Issuer
4-9	Reserved for future use

Application notes

Mastercard populates the value of 1. Acquirers or issuers provide values 2 and 3.

Subfield 02 (Digital Commerce Program Type)
DE 48, subelement 48 (Digital Commerce Solutions Indicators), subfield 02 (Digital Commerce Program Type) identifies the specific digital commerce program.

Attributes

Attribute	Description
Subfield ID	02
Subfield length	2
Data representation	n-1

Attribute	Description
Data field	Contents of subfield 02
Justification	N/A

Values

Value	Description
1	SQR
2	Click to Pay
3	Biometric Checkout Program
4	Next Gen POI
5-9	Reserved for future use

Application notes

If...	Then...
subfield 01 is populated	subfield 02 must be populated
subfield 01 has a value of 1 (Mastercard)	subfield 02 must have a value of 1 (SQR), 2 (Click to Pay), or 3 (Biometric Checkout Program)
subfield 01 has a value of 2 (Acquirer) or 3 (Issuer)	subfield 02 must have a value of 4 (Next Gen POI)

Subfield 03 (Digital Commerce Check-In Entity Type and Name)
DE 48, subelement 48 (Digital Commerce Solutions Indicators), subfield 03 (Digital Commerce Check-In Entity Type and Name) identifies entity type and entity name. All entities eligible for this subfield must be integrated with the Mastercard Next Gen POI API.

Attributes

Attribute	Description
Subfield ID	03
Subfield length	2
Data representation	ans...15; LLVAR
Data field	Contents of subfield 03
Justification	N/A

Values

Subfield 03 is an open text field of up to 15 characters.

Application notes

Subfield 03 is

- Only present when subfield 01 and subfield 02 are present.
- Required for Next Gen POI transactions.
- Optional for all other transaction types.

Subfield 04 (Digital Commerce Check-In Method)
DE 48, subelement 48 (Digital Commerce Solutions Indicators), subfield 04 (Digital Commerce Check-In Method) identifies the methods a check-in entity applies to validate cardholder presence. This field may also include a reference number for tracking and reporting purpose.

Attributes

Attribute	Description
Subfield ID	04
Subfield length	2
Data representation	ans...40; LLVAR
Data field	Contents of subfield 04
Justification	N/A

Values

Subfield 04 is an open text field of up to 40 characters.

Application notes

Subfield 04 is

- Only present when subfield 01 and subfield 02 are present.
- Required for Next Gen POI transactions.
- Optional for all other transaction types.

Single Message Transaction Manager
The Single Message Transaction Manager will be updated to support the digital commerce solutions indicators communicated in this announcement.