



GLB 11248.3 Enhancing Digital Commerce Solutions Indicators

Type:

Switching Release Announcement

Audience:

Acquirer
Issuer
Processor
Network Enablement Partner

Region:

Global

Brand:

Mastercard®
Debit Mastercard
Maestro®
Cirrus®

Release:

25.Q4

Action indicator:

Mandated: Acquirer, Issuer

System:

Dual Message Authorization System
Dual Message Clearing System
Single Message System

Published:

15 July 2025

Effective:

17 October 2025

4 November 2025

Executive overview

Mastercard is enhancing the digital commerce solutions indicators to better identify the details of digital commerce transactions and to support the identification of new programs.

Effective date details

Date	Time	Details
17 October 2025	22:00 to 23:59 U.S. Central Time	Delivery of IPM MPE Full File (T068) for Asia/Pacific, Europe, and Middle East/ Africa regions.
	03:00 to 04:59 UTC (-1D)	
4 November 2025	04:00 to 06:00 U.S. Central Time	Delivery of IPM MPE Full File (T068) for U.S., Canada, and Latin America and the Caribbean regions.
	09:00 to 11:00 UTC	
4 November 2025	01:00 to 09:00 U.S. Central Time	Dual Message Authorization System
	07:00 to 15:00 UTC	
15 July 2025	18:00 to 23:59 U.S. Central Time	Dual Message Clearing System
	00:00 to 05:59 UTC (+1D)	
4 November 2025	02:00 to 5:00 U.S. Central Time	Single Message System
	08:00 to 11:00 UTC	

Customer benefit

The enhanced digital commerce solutions indicators will provide acquirers and issuers with detailed insight into digital commerce transactions, enabling more effective identification of:

- New programs
- Transactions belonging to multiple programs
- Future program values as they are introduced

What Mastercard is doing

Mastercard is:

- Adding a value in existing subfields
- Modifying the data representation in existing subfields and private data subfields to support future programs
- Renaming subfields in an existing data element and private data subelement

Background

The digital commerce solutions indicators are designed to enhance the security and performance of digital commerce transactions, making it easier for acquirers and issuers to identify them. These indicators were initially introduced in *AN 6791 Introducing Digital Commerce Solutions Indicators*, Release 23.Q4.

Customer impact

This table represents a high-level overview of the impact as detailed in later sections of this announcement.

Impact overview

Audience	Card type	System connections	Impact type	Action indicator
Acquirer	Consumer: • Credit • Debit • Prepaid Commercial: • Credit • Debit • Prepaid	Dual Message Authorization Dual Message Clearing Single Message System	Modified subfields IPM MPE	Mandated
Issuer	Consumer: • Credit • Debit • Prepaid Commercial: • Credit • Debit • Prepaid	Dual Message Authorization Dual Message Clearing Single Message System	Modified subfields IPM MPE	Mandated

Acquirer, Issuer: Mandated

Acquirers and issuers must update their systems to support:

- A new value in Data Element (DE) 48 (Additional Data: Private Use), subelement 48 (Digital Commerce Solutions Indicators)subfield 01 (Digital Commerce Domain Identifier) and subfield 02 (Digital Commerce Program Type) for the Dual Message Authorization System and Single Message System.
- Alphanumeric format instead of numeric format in DE 48, subelement 48, subfield 02 for the Dual Message Authorization System and Single Message System.

Only issuers must update their systems to support:

- Private Data Subelement (PDS) 0020 (Digital Commerce Solutions Indicators), subfield 1 (Digital Commerce Domain Identifier) and subfield 2 (Digital Commerce Program Type) for the Dual Message Clearing System
- PDS 0020, subfield 2 for the Dual Message Clearing System

Acquirers and issuers should be aware of the renamed subfields for the previously mentioned DE and PDS.

Renamed subfields

DE 48, subelement 48, subfield ID	PDS 0020, subfield ID	Current name	Effective 25.Q4
Subfield 03	Subfield 3	Digital Commerce Check-In Entity Type and Name	Digital Commerce Program Type Details
Subfield 04	Subfield 4	Digital Commerce Check-In Method	Digital Commerce Check-In Details

Acquirers and issuers should be aware of Integrated Product Message (IPM) Mastercard Parameter Extract (MPE) changes as described in this release announcement.

Impacted switch transactions

How a customer connects to Mastercard determines the applicable switch transactions message types. This release announcement affects the message flows marked in the table.

Impacted switch transactions

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

Testing

Mastercard recommends testing to support this release announcement.

System impact

For items marked ✓ (Yes), details are available in the corresponding sections.

System impact

Topic	Dual Message Authorization System	Dual Message Clearing System	Single Message System
Message flows			

Topic	Dual Message Authorization System	Dual Message Clearing System	Single Message System
Message layouts			
Data element definitions	✓	✓	✓
IPM MPE		✓	
Interchange programs			
AB programs, descriptions, and associated MCCs			
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			

Dual Message Authorization System specification changes

Mastercard will introduce changes to the Dual Message Authorization System to support this release announcement.

DE 48 (Additional Data: Private Use)

DE 48 (Additional Data: Private Use) contains data associated with various Mastercard programs, products, and services. DE 48 is used to convey data that is not related to any other ISO-defined data elements. It is a variable-length data element used for multiple purposes.

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.

Subfield 01 (Digital Commerce Domain Identifier)

DE 48, subelement 48, 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 Program Type Details), and subfield 04 (Digital Commerce Check-In Details).

Values

Value	Description
0	Multi-Domain

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
Data Representation	an-1

Values

Value	Description
0	Multi-Program

Subfield 03 (Digital Commerce Program Type Details)

DE 48, subelement 48, subfield 03 (Digital Commerce Program Type Details) identifies the methods a program type and its subtype apply to validate cardholder presence.

Application notes

When a transaction belongs to a single program type, subfield 03 will contain two characters:

- The first character indicates the program type
- The second character indicates the program subtype

A value of zero in the second character indicates the absence of a subtype. For example, a subfield 03 value of 10 indicates the transaction type is Mastercard Merchant Presented QR: SRC (SQR) with no subtype.

For Mastercard QR: X QR and Mastercard QR: Pay by Link program types, two distinct subtypes will be applicable:

- A second character value of 1 will specify the subtype as Merchant Presented
- A second character value of 2 will specify the subtype as Consumer Presented

For example, a subfield 03 value of 61 indicates the transaction type is Mastercard QR: X QR and subtype is Merchant Presented. Similarly, a subfield 03 value of 62 indicates the transaction type is Mastercard QR: X QR and subtype is Consumer Presented.

When a transaction belongs to more than one program type:

- Subfield 02 will have a value of 0 (Multi-Program)
- Subfield 03 will have four characters to indicate each type and subtype the transaction belongs to

For example, a subfield 03 value of 3040 indicates the transaction type is both Biometric with no subtype and Next Gen Point-of-Interaction (POI) with no subtype.

For a full list of digital commerce solution indicators, refer to [MDES Technical Specifications for Dual and Single Message Systems](#).

Example field values

Example program	DE 48, subelement 48 representation	Comments
Transaction with SQR	<ul style="list-style-type: none">• Subfield 01 =1 (Mastercard)• Subfield 02 = 1 (SQR)• Subfield 03 = 10 (SQR)• Subfield 04 = Not present	Sample values when the transaction belongs to a single program type
Transaction with XQR when the QR is Merchant presented	<ul style="list-style-type: none">• Subfield 01 = 2 (Acquirer)• Subfield 02 = 6 (XQR)• Subfield 03 = 61 (XQR, Merchant Presented)• Subfield 04 = Not present	Sample values when the transaction belongs to a single program type and sub-type
Transaction with Next Gen POI and Stand-in Biometric	<ul style="list-style-type: none">• Subfield 01 =1 (Mastercard)• Subfield 02 = 0 (Multi-Program)• Subfield 03 = 3040 (30 = Biometric, 40 = Next Gen POI)• Subfield 04 = Next Gen POI Check In details	Sample values when the transaction belongs to more than one program type (Multi-Program)
Transaction with Click to Pay and Pay By Link QR when the QR is consumer presented	<ul style="list-style-type: none">• Subfield 01 = 0 (Multi-Domain)• Subfield 02 = 0 (Multi-Program)• Subfield 03 = 2052 (20 = Click to Pay, 52 = Pay By Link QR, Consumer Presented)• Subfield 04 = Not Present	Sample values when multiple program details are collected by multiple sources, like Click to Pay from Mastercard and Pay By Link QR, Consumer presented from the acquirer

Subfield 04 (Digital Commerce Check-In Details)

DE 48, subelement 48 (Digital Commerce Solutions Indicators), subfield 04 (Digital Commerce Check-In Details) is an open text field. This field identifies entity type, entity name and the methods a check-in entity applies to validate cardholder presence. All entities eligible for this subfield must be integrated with the Mastercard Next Gen POI API. This field may also include a reference number for tracking and reporting purpose.

Transaction Investigator

Mastercard will update the Authorization Transaction Investigator tool to support this release announcement.

Dual Message Clearing System specification changes

Mastercard will introduce changes to the Dual Message Clearing System to support this release announcement.

PDS 0020 (Digital Commerce Solutions Indicators)

PDS 0020 (Digital Commerce Solutions Indicators) identifies the domain, program type, and optional check-in details of a digital commerce transaction.

Subfield 1 (Digital Commerce Domain Identifier)

PDS 0020, subfield 1 (Digital Commerce Domain Identifier) identifies the entity responsible for populating the digital commerce solutions indicators defined in subfield 2 (Digital Commerce Program Type), subfield 3 (Digital Commerce Program Type Details), and subfield 4 (Digital Commerce Check-In Details).

Values

Value	Description
0	Multi-Domain

Subfield 2 (Digital Commerce Program Type)

PDS 0020, subfield 2 (Digital Commerce Program Type) identifies the specific digital commerce program.

Attributes

Attribute	Description
Data Representation	an-1

Values

Value	Description
0	Multi-Program

Subfield 3 (Digital Commerce Program Type Details)

PDS 0020, subfield 3 (Digital Commerce Program Type Details) identifies the methods a program type and its subtype apply to validate cardholder presence.

Application notes

When a transaction belongs to a single program type, subfield 03 will contain two characters:

- The first character indicates the program type
- The second character indicates the program subtype

A value of zero in the second character indicates the absence of a subtype. For example, a subfield 03 value of 10 indicates the transaction type is Mastercard Merchant Presented QR: SRC (SQR) with no subtype.

For Mastercard QR: X QR and Mastercard QR: Pay by Link program types, two distinct subtypes will be applicable:

- A second character value of 1 will specify the subtype as Merchant Presented
- A second character value of 2 will specify the subtype as Consumer Presented

For example, a subfield 03 value of 61 indicates the transaction type is Mastercard QR: X QR and subtype is Merchant Presented. Similarly, a subfield 03 value of 62 indicates the transaction type is Mastercard QR: X QR and subtype is Consumer Presented.

When a transaction belongs to more than one program type:

- Subfield 02 will have a value of 0 (Multi-Program)
- Subfield 03 will have four characters to indicate each type and subtype the transaction belongs to

For example, a subfield 03 value of 3040 indicates the transaction type is both Biometric with no subtype and Next Gen Point-of-Interaction (POI) with no subtype.

For a full list of digital commerce solution indicators, refer to [MDES Technical Specifications for Dual and Single Message Systems](#).

Example field values

Example program	PDS 0020 representation	Comments
Transaction with SQR	<ul style="list-style-type: none"> • Subfield 1 = 1 (Mastercard) • Subfield 2 = 1 (SQR) • Subfield 3 = 10 (SQR) • Subfield 4 = Not present 	Sample values when the transaction belongs to a single program type
Transaction with XQR when the QR is Merchant presented	<ul style="list-style-type: none"> • Subfield 01 = 2 (Acquirer) • Subfield 02 = 6 (XQR) • Subfield 03 = 61 (XQR, Merchant Presented) • Subfield 04 = Not present 	Sample values when the transaction belongs to a single program type and sub-type
Transaction with Next Gen POI and In-store Biometric	<ul style="list-style-type: none"> • Subfield 1 = 1 (Mastercard) • Subfield 2 = 0 (Multi-Program) • Subfield 3 = 3040 (30 = Biometric, 40 = Next Gen POI) • Subfield 4 = Next Gen POI Check In details 	Sample values when the transaction belongs to more than one program type (Multi-Program)
Transaction with Click to Pay and Pay By Link QR when the QR is consumer presented	<ul style="list-style-type: none"> • Subfield 01 = 0 (Multi-Domain) • Subfield 02 = 0 (Multi-Program) • Subfield 03 = 2052 (20 = Click to Pay, 52 = Pay By Link QR, Consumer Presented) • Subfield 04 = Not Present 	Sample values when multiple program details are collected by multiple sources, like Click to Pay from Mastercard and Pay By Link QR, Consumer presented from the acquirer

Subfield 4 (Digital Commerce Check-In Details)

DE 48, subelement 48 (Digital Commerce Solutions Indicators), subfield 04 (Digital Commerce Check-In Details) is an open text field. This field identifies entity type, entity name and the methods a check-in entity applies to validate cardholder presence. All entities eligible for this subfield must be integrated with the Mastercard Next Gen POI API. This field may also include a reference number for tracking and reporting purpose.

IPM MPE

Mastercard will update the noncompressed and optimized versions of these Integrated Product Messages (IPM) Mastercard Parameter Extract (MPE) tables.

IPM MPE table

Table	Modified fields
IP0009T1: PDS Subfield Attributes	Subfield names

Transaction Investigator

Mastercard will update the Clearing Transaction Investigator tool to support this release announcement.

Single Message System specification changes

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

DE 48 (Additional Data: Private Use)

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Values

Value	Description
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DE 48, subelement 48, subfield 02 (Digital Commerce Program Type) identifies the specific digital commerce program.

Attributes

Attribute	Description
Data Representation	an-1

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Subfield 04 (Digital Commerce Check-In Details)

DE 48, subelement 48 (Digital Commerce Solutions Indicators), subfield 04 (Digital Commerce Check-In Details) is an open text field. This field identifies entity type, entity name and the methods a check-in entity applies to validate cardholder presence. All entities eligible for this subfield must be integrated with the Mastercard Next Gen POI API. This field may also include a reference number for tracking and reporting purpose.

Single Message Transaction Manager

Mastercard will update the Single Message Transaction Manager to support this release announcement.

Related documentation

Information relevant to this release announcement can be found in the documents available on the **Technical Resource Center** within Mastercard Connect®. Depending on timing, information provided in this release announcement may not be reflected in a manual until after the effective dates of this release announcement.

Announcements

For more information refer to:

- AN 6791 *Introducing Digital Commerce Solutions Indicators*, Release 23.Q4
- AN 6793 23.Q2 *Miscellaneous Core Systems Updates*, Release 23.Q2
- GLB 10404 *Standardizing Identification of QR Transactions*, Release 25.Q2
- GLB 11329 *Introducing In-Store Biometric Solutions Indicators*
- GLB 11362 25.Q4 *IPM Mastercard Parameter Extract Table Updates*, Release 25.Q4

Reference manuals

For information about Mastercard processing refer to:

- *IPM Clearing Formats*
- *Mastercard Network Processing Dual Message Authorization System Guide*
- *Mastercard Network Processing Single Message System Guide*

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 on the Technical Resource Center for the most up-to-date information.

[GLB 11248 Enhancing Digital Commerce Solutions Indicators](#), Customer Technical Conference, May 2025

Version history

Version history

Date	Description of change
15 July 2025	Provided clarified example field values for X QR programs
17 June 2025	Added Other media to Related documentation
15 April 2025	Initial publication date