



## Installation and Configuration Manual

# Mastercard Interface Configuration

03.52.30

27.07.2021

# Contents

<b>1</b>	<b>Configuring Way4 parameters to calculate IRD</b>	<b>5</b>
1.1	General principles of IRD calculation	5
1.2	Configuring Way4 to support calculation of IRD	6
1.2.1	Global parameters	6
1.2.2	Importing the standard configuration for calculating IRD	7
1.2.3	Registering BIN groups and importing BIN tables	8
1.2.4	Configuring routing contracts	9
1.2.5	Configuring routing	9
1.2.6	Configuring classifiers	13
1.2.7	Configuring the business calendar	15
1.2.8	IRD calculation criteria	16
<b>2</b>	<b>Settings for processing Mastercard MoneySend transactions</b>	<b>20</b>
2.1	SIC groups	20
2.2	Transaction types	21
2.3	Service setup	22
2.4	Other parameters	23
2.5	Transaction processing	23
<b>3</b>	<b>Configuring merchant contracts</b>	<b>24</b>
<b>4</b>	<b>Configuring the AAV validation type for EMV 3DS</b>	<b>25</b>
<b>5</b>	<b>Settings for compliance with Mastercard release requirements</b>	<b>26</b>
5.1	AN 2618 - Revised Commercial Refund Transaction Service Fee Calculation in the Europe Region	26
5.2	AN 2643 - Authorization of Purchase Returns	28
5.3	AN 2626 - Setting Currency Conversion Rates at the Time of Authorization	28
5.4	AN 2929 - Introduction of Cardholder Currency Indicator for Point-of-Interaction Currency Conversion	29
5.5	AN 2941 - Digital Remote Commerce Enhancements	30
5.6	AN 3831 - Mastercard Parameter Simplification for Commercial Refund Transactions in the Europe Region	31
5.7	AN 4022 - Money Transfer Sender and Receiver Data Enhancement	31
5.8	AN 4203 MoneySend and Funding Transaction Program Enhancements	32

5.9	AN 4224 New Merchant Country of Origin Identifier	32
-----	---	----

This document describes Way4 settings that are required for the ability to exchange information with Mastercard. The section "[Settings for compliance with Mastercard release requirements](#)" describes settings that are necessary to meet requirements for changes in operation that are set forth in Mastercard release documents.

The document is intended for Way4 users (bank or processing center employees) who are responsible for interaction with payment systems.

When working with the document, it is recommended to use the following resources from the OpenWay documentation series:

- Payment System Settlement in Way4
- "Way4 Global Parameters"
- "Importing Configurations using the Configuration Inspector Module"
- "Interchange Routing"
- "Way4 Client and Contract Classifiers"
- "Configuring Way4 for Smart Card Issuing"
- "Mastercard Interchange Interface"
- "Dictionaries"
- "Way4 Service Packages"
- "DB Manager Manual"

The following notation is used in the document:

- Screen form field labels are shown in *italics*.
- Screen form button labels are shown in square brackets; for example [Approve].
- Sequences for selecting user menu items are shown using arrows as follows: "Issuing → Contracts Input & Update".
- Sequences for selecting system menu items are shown using arrows as follows: "Database => Change password".
- Key combinations in DB Manager are shown in angular brackets, for example <Ctrl>+<F3>.
- Variables that differ for each local instance, for example, directory and file names, as well as file paths, are shown in angular brackets; for example, <OWS\_HOME>.



Warnings about potentially hazardous situations or actions.



Information about important features, additional options, or the best use of certain system functions.

# 1 Configuring Way4 parameters to calculate IRD

This section describes settings that must be made by the acquirer to calculate Mastercard IRD (Interchange Rate Designator). IRD is a two-character code corresponding to the Mastercard interchange fee charged as a result of a transaction (see the payment system document "GCMS Reference Manual").

## 1.1 General principles of IRD calculation

The payment system requires that acquirers calculate an IRD (Interchange Rate Designator). All presentments and secondary transaction documents exported by the acquirer to Mastercard must contain this indicator.

Way4 provides technology for the acquire to automatically calculate a Mastercard IRD.



When implementing the technology for calculating IRD, it is recommended to use the script `db\datax\config\MC_IRD_AREA_CFG.sql` from the Way4 distribution. This script updates data in region tables (AREA, AREA\_TREE) and, if necessary, can be further used in technology for calculating IRD. For information about region support, see the document "Way4 Dictionaries".

Starting from version 03.51.30, criteria for calculating IRD is automatically generated only on the basis of Member Parameter Extract (MPE) files imported from Mastercard. To use this functionality, use Configuration Inspector to import a special format file and make the corresponding settings (see ["Configuring import of IRD criteria from MPE files"](#)).

After importing the configuration, make the following additional settings:

- Generate BIN groups that are created according to a geographic attribute (region, country).
- For the "MC\_NOSTRO" contract, register card routing subcontracts based on imported Service Packages according to the acquirer's and issuer's geographic attribute. Standard Service Packages are used to process interregional transactions (acquirer and issuer are in different regions), intra-regional transactions (acquirer and issuer are in the same region) and transactions made in the same country (acquirer and issuer are in the same country).
- Configure routing for the generated BIN groups.
- If the bank is EMV and/or PayPass certified, the values of the corresponding classifiers must be defined for the "MC\_NOSTRO" contract.

After all settings have been made, based on the selected criteria, a Mastercard IRD will be defined automatically when posting a document for a transaction (see the section "[IRD calculation criteria](#)"). The result of calculation (the IRD) will be put into the TARGET\_FEE\_CODE field of the DOC table.

## 1.2 Configuring Way4 to support calculation of IRD

To configure Way4, do as follows:

1. Set global parameters (or make sure they have been set), see "[Global parameters](#)")
2. Using Configuration Inspector, import configuration files containing configured Service Packages and a file that makes it possible to automatically generate criteria from Mastercard MPE files (see "[Configuring import of IRD criteria from MPE files](#)").
3. Register BIN groups and import the BIN table (see "[Registering BIN groups and importing BIN tables](#)").
4. Register routing contracts (see "[Configuring routing contracts](#)").
5. Configure routing for registered BIN groups (see "[Configuring routing](#)").
6. For EMV and/or PayPass certified banks, configure classifiers (see "[Configuring classifiers](#)").

### 1.2.1 Global parameters

To support calculation of IRD, the following global parameters must be set in the "Additional Global Parameters" form (Full → Configuration Setup → Main Tables → Additional Global Parameters):

- MC\_CALC\_IRD with the "Y" value. This parameter enables IRD calculation mode. The global parameter's value can be redefined in a financial institution using a tag with the same name in the *Special Parms* field.
- MC\_CALC\_IRD\_CHECK\_RATES\_UTD – parameter that makes it possible to enable a check for Mastercard's current FX rates when calculating IRD. The default value is "N", the check is not made, Way4 uses the last FX rate that was imported.
- MC\_CPI\_GROUPS with the value "M=CIR,MSI;". This parameter is used to import BIN tables with consideration of BIN groups registered in Way4 (see the section "[Registering BIN groups and importing BIN tables](#)").
- MC\_MPE\_IRD\_CRITERIA with the numeric codes of countries in which the bank provides acquiring services.
- IPS\_DELIVER\_TIME\_E – interval (in hours) from the time document processing was started to the completion of transaction message export to Mastercard; the default value is "0". This parameter is used together with the parameter IPS\_CUT\_OFF\_TIME\_GMT\_E (for more information, see the document "Way4 Global Parameters").
- IPS\_CUT\_OFF\_TIME\_GMT\_E specifies the time (GMT) by which transaction messages must be exported to Mastercard; the parameter's format is <HHMM>, the default value is "1400". This parameter is used together with the parameter IPS\_DELIVER\_TIME\_E (for more information, see the document "Way4 Global Parameters").

## 1.2.2 Importing the standard configuration for calculating IRD

To implement IRD calculation, use Configuration Inspector to import the file with the configuration of Service Packages for routing contracts (see the section "[Importing Service Packages](#)") and a special configuration file for importing criteria from MPE files (see the section "[files](#)" (see "[Configuring import of IRD criteria from MPE files](#)").

Configuration files are located in the "<OWS\_HOME>\db\datax\config\" directory or are provided by OpenWay.



Configuration files must be imported for each Mastercard release. Changes related to the next release will be applied only after the corresponding record has been created in the "IPS Release Changes" table and has become effective (see the section "Support of payment system release requirements" of the document "Interchange Routing").

### 1.2.2.1 Importing Service Packages

The MC\_IRD\_CFG\_SP\_CC.txt file contains the standard configuration of Service Packages for card routing contracts.

For Service Packages set up in the standard configuration, the following naming system is used:

- All Service Package names have the prefix "STD-STD MC".
- Routing contract Service Package names contain the abbreviation "BSA" (Business Service Arrangements).
- All Service Package names contain the region/country codes of the acquirer and issuer:
  - "AP" – "Asia-Pacific"
  - "CA" – "Canada"
  - "US" – "United States"
  - "EA" – "Middle East, Africa"
  - "EU" – "Europe"
  - "LA" – "Latin America and the Caribbean"
  - "IR" – any region for the acquirer
  - "GL" – any region for the issuer
  - "<XX>" – country designation, where "XX" is a two-letter country code.



Note that the Service Package configuration file provided contains settings for the financial institution with the code (Branch Code) "0001". If standard settings must be imported to another financial institution, the import process can be parametrized. For more information, see the description of the "INSTITUTION\_MAPPING" parameter in the document "Importing Configurations using the Configuration Inspector Module". After the import procedure has been completed, approve the imported Service Packages.

### 1.2.2.2 Configuring import of IRD criteria from MPE files

To calculate IRD based on criteria from imported Mastercard MPE files, the configuration from the special file MC\_IRD\_CFG\_CFG\_CC.txt. must be imported.

This file should be put into the "<OW\_WORK>\Data\" directory.



Before importing the standard configuration, it is necessary to delete the previous configuration. To do so, execute the following command:  
delete from ird\_fee\_desc where channel='E' and prog\_type='CONFIG';

A configuration is imported using the menu item "Full → Configuration Setup → Copy Configuration Import → Configuration File Import".

For more information about importing a configuration, see the document "Importing Configurations using the Configuration Inspector Module".

After the import procedure has been executed, analyze Process Log records that correspond to import of the configuration.



MPE file import is described in the document "Mastercard Interchange Interface".

### 1.2.3 Registering BIN groups and importing BIN tables

Mastercard BIN groups are generated by geographic attribute only (region, country).

In the "BIN Groups" form (Full → Configuration Setup → Routing → BIN Groups) for Mastercard register the BIN groups shown in the table.

*Configuring BIN groups*

Name	Channel	Group Code	Priority
Name	Channel	Group Code	Priority
MC <Country*> Cirrus/Maestro Issuer	Mastercard (IPM)	MCxxxM**	0
MC <Country*> Issuer	Mastercard (IPM)	MCxxxS**	0
MC Asia Pacific Cirrus/Maestro Issuer	Mastercard (IPM)	MRCM	0
MC Asia Pacific Issuer	Mastercard (IPM)	MRCS	0
MC Canada Cirrus/Maestro Issuer	Mastercard (IPM)	MRAM	0
MC Canada Issuer	Mastercard (IPM)	MRAS	0
MC Europe Cirrus/Maestro Issuer	Mastercard (IPM)	MRDM	0



Name	Channel	Group Code	Priority
Name	Channel	Group Code	Priority
MC Europe Issuer	Mastercard (IPM)	MRDS	0
MC LAC Cirrus/Maestro Issuer	Mastercard (IPM)	MRBM	0
MC LAC Issuer	Mastercard (IPM)	MRBS	0
MC MEA Cirrus/Maestro Issuer	Mastercard (IPM)	MREM	0
MC MEA Issuer	Mastercard (IPM)	MRES	0
MC USA Cirrus/Maestro Issuer	Mastercard (IPM)	MR1M	0
MC USA Issuer	Mastercard (IPM)	MR1S	0

\*) Country name

\*\*) Instead of "xxx", specify a three-letter country code, for example "DNK" (for Denmark).

After registering BIN groups, import the Mastercard BIN table. For more information about loading BIN table, see the section "Importing the BIN table" of the document "Mastercard Interchange Interface".



For the BIN table import pipe (MPE Import) to include new BIN groups in import, configure the global parameter MC\_CPI\_GROUPS, assigning it the value "M=CIR,MSI;".

## 1.2.4 Configuring routing contracts

For the Mastercard NOSTRO contract (see the section "NOSTRO contracts" of the document "Payment system settlement in Way4"), register subordinate card contracts for routing. All Service Packages with the "STD-STD MC BSA" prefix in their names that were imported using Configuration Inspector will be used for these contracts.

These contracts should be used when configuring routing for new BIN groups.

## 1.2.5 Configuring routing

When configuring routing for newly created BIN groups (see the section "[Registering BIN groups and importing BIN tables](#)") in the "Routing for <group name>" form (Full → Configuration Setup → Routing → BIN Groups → [Routing]), for each BIN group specify the subordinate card contract set up using the imported Service Package. For more information about registering Interchange routing contracts linked to a BIN group, see the section "Configuring BIN Groups" of the document "Interchange Routing".

Tables showing the correspondence of Service Packages (contracts) to BIN groups are shown below.

*Configuring routing for BIN groups (acquirer region is Europe)*

BIN Group	Service Pack
MC Asia Pacific Cirrus/Maestro Issuer	STD-STD MC BSA EU GL Inter-Regional Maestro Europe Acq
MC Asia Pacific Issuer	STD-STD MC BSA EU AP Inter-Regional Europe Acq Asia Pacific Iss
MC Canada Cirrus/Maestro Issuer	STD-STD MC BSA EU GL Inter-Regional Maestro Europe Acq
MC Canada Issuer	STD-STD MC BSA EU CA Inter-Regional Europe Acq Canada Iss
MC Europe Cirrus/Maestro Issuer	STD-STD MC BSA EU EU Intra-Regional Maestro Europe Acq
MC Europe Issuer	STD-STD MC BSA EU EU Intra-Regional Europe Acq
MC LAC Cirrus/Maestro Issuer	STD-STD MC BSA EU GL Inter-Regional Maestro Europe Acq
MC LAC Issuer	STD-STD MC BSA EU LA Inter-Regional Europe Acq LAC Iss
MC MEA Cirrus/Maestro Issuer	STD-STD MC BSA EU EA Inter-Regional Maestro Europe Acq MEA Iss
MC MEA Issuer	STD-STD MC BSA EU EA Inter-Regional Europe Acq MEA Iss
MC USA Cirrus/Maestro Issuer	STD-STD MC BSA EU GL Inter-Regional Maestro Europe Acq
MC USA Issuer	STD-STD MC BSA EU US Inter-Regional Europe Acq USA Iss

*Configuring routing for BIN groups (acquirer region is Middle East, Africa)*

BIN Group	Service Pack
MC Asia Pacific Cirrus/Maestro Issuer	STD-STD MC BSA IR GL Inter-, Intra – Regional Intra-Country Maestro Standard
MC Asia Pacific Issuer	STD-STD MC BSA EA AP Inter-Regional MEA Acq Asia Pacific Iss
MC Canada Cirrus/Maestro Issuer	STD-STD MC BSA IR GL Inter-, Intra – Regional Intra-Country Maestro Standard
MC Canada Issuer	STD-STD MC BSA EA CA Inter-Regional MEA Acq Canada Iss
MC Europe Cirrus/Maestro Issuer	STD-STD MC BSA EA EU Inter-Regional Maestro MEA Acq Europe Iss
MC Europe Issuer	STD-STD MC BSA EA EU Inter-Regional MEA Acq Europe Iss

BIN Group	Service Pack
MC LAC Cirrus/Maestro Issuer	STD-STD MC BSA IR GL Inter-, Intra – Regional Intra-Country Maestro Standard
MC LAC Issuer	STD-STD MC BSA EA LA Inter-Regional MEA Acq LAC Iss
MC MEA Cirrus/Maestro Issuer	STD-STD MC BSA IR GL Inter-, Intra – Regional Intra-Country Maestro Standard
MC MEA Issuer	STD-STD MC BSA EA EA Intra-Regional MEA Acq
MC USA Cirrus/Maestro Issuer	STD-STD MC BSA IR GL Inter-, Intra – Regional Intra-Country Maestro Standard
MC USA Issuer	STD-STD MC BSA EA US Inter-Regional MEA Acq USA Iss

*Configuring routing for BIN groups (acquirer region is Asia Pacific)*

BIN Group	Service Pack
MC Asia Pacific Cirrus/Maestro Issuer	STD-STD MC BSA IR GL Inter-, Intra – Regional Intra-Country Maestro Standard
MC Asia Pacific Issuer	STD-STD MC BSA AP AP Intra-Regional Asia Pacific Acq
MC Canada Cirrus/Maestro Issuer	STD-STD MC BSA IR GL Inter-, Intra – Regional Intra-Country Maestro Standard
MC Canada Issuer	STD-STD MC BSA AP CA Inter-Regional Asia Pacific Acq Canada Iss
MC Europe Cirrus/Maestro Issuer	STD-STD MC BSA AP EU Inter-Regional Maestro Asia Pacific Acq Europe Iss
MC Europe Issuer	STD-STD MC BSA AP EU Inter-Regional Asia Pacific Acq Europe Iss
MC LAC Cirrus/Maestro Issuer	STD-STD MC BSA IR GL Inter-, Intra – Regional Intra-Country Maestro Standard
MC LAC Issuer	STD-STD MC BSA AP LA Inter-Regional Asia Pacific Acq LAC Iss
MC MEA Cirrus/Maestro Issuer	STD-STD MC BSA IR GL Inter-, Intra – Regional Intra-Country Maestro Standard

BIN Group	Service Pack
MC MEA Issuer	STD-STD MC BSA AP EA Inter-Regional Asia Pacific Acq MEA Iss
MC USA Cirrus/Maestro Issuer	STD-STD MC BSA IR GL Inter-, Intra – Regional Intra-Country Maestro Standard
MC USA Issuer	STD-STD MC BSA AP US Inter-Regional Asia Pacific Acq USA Iss

*Configuring routing for BIN groups (acquirer region is Latin America and the Caribbean)*

BIN Group	Service Pack
MC Asia Pacific Cirrus/Maestro Issuer	STD-STD MC BSA IR GL Inter-, Intra – Regional Intra-Country Maestro Standard
MC Asia Pacific Issuer	STD-STD MC BSA LA AP Inter-Regional LAC Acq Asia Pacific Iss
MC Canada Cirrus/Maestro Issuer	STD-STD MC BSA IR GL Inter-, Intra – Regional Intra-Country Maestro Standard
MC Canada Issuer	STD-STD MC BSA LA CA Inter-Regional LAC Acq Canada Iss
MC Europe Cirrus/Maestro Issuer	STD-STD MC BSA IR GL Inter-, Intra – Regional Intra-Country Maestro Standard
MC Europe Issuer	STD-STD MC BSA LA EU Inter-Regional LAC Acq Europe Iss
MC LAC Cirrus/Maestro Issuer	STD-STD MC BSA IR GL Inter-, Intra – Regional Intra-Country Maestro Standard
MC LAC Issuer	STD-STD MC BSA LA LA Intra-Regional LAC Acq
MC MEA Cirrus/Maestro Issuer	STD-STD MC BSA IR GL Inter-, Intra – Regional Intra-Country Maestro Standard
MC MEA Issuer	STD-STD MC BSA LA EA Inter-Regional LAC Acq MEA Iss
MC USA Cirrus/Maestro Issuer	STD-STD MC BSA IR GL Inter-, Intra – Regional Intra-Country Maestro Standard
MC USA Issuer	STD-STD MC BSA LA US Inter-Regional LAC Acq USA Iss



For the BIN groups "MC <Country> Cirrus/Maestro Issuer" and "MC <Country> Issuer", the same Service Packages can be used as for the groups "MC <Region> Cirrus/Maestro Issuer" and "MC <Region> Issuer" (for example, "MC Europe Cirrus/Maestro Issuer" and "MC Europe Issuer"), if among the imported Service Packages there are no Packages for intraregional transactions (for example, "STD-STD MC BSA RU RU Intra-Country Russia Acq").

## 1.2.6 Configuring classifiers

Contract classifiers are used when configuring the standard configuration's Service Packages (for more information, see the document "Way4 Client and Contract Classifiers").

Accordingly, for the standard configuration's Service Packages to be used correctly, the following classifiers must be configured:

- Classifier for EMV certified banks.
- Classifier for PayPass certified banks.

For banks that are certified for EMV but not PayPass, the following settings are required:

1. Configure a classifier.

In the "User Classifiers" dictionary (Full → Configuration Setup → Common Handbooks → User Classifiers), register the classifier "Mastercard Acquirer EMV Certification":

User Classifiers												<< < > >>			1 of 1		x			
	Name	Code	Group Code	Category	Default Value	Applies To	Client Cat	Contract Cat	Product Cat	Role	Add Info	On Off Mode	Domain Code							
➔	Mastercard Acquirer EMV Certification	MC_EMV_CERT	Interchange	Status	2 Acquirer is not certified (OK)	Main Contract	Accountant		Bank Accounting	Primary										
Ins Del Query Validate Values Mapping																				
Values for Mastercard Acquirer EMV Certification														<< < > >>			1 of 2		b	x
	Weight Factor	Name	Code	Result Event Code	Is OK Value	Add Info	Is Active	Date From	Date To											
➔	2	Acquirer is not certified	N		Yes		Yes	00/00/0000	00/00/0000											
	1	Acquirer is certified	Y		Yes		Yes	00/00/0000	00/00/0000											
Ins Del Query																				

*Configuring a classifier for EMV Certified Members*

2. Configure the NOSTRO contract.

In the "MC IRD Classifiers" form (Mastercard → MC. IRD Configuration → MC IRD Classifiers), assign the following classifier value to the "MC\_NOSTRO" contract:

MC IRD Classifiers										<< < > >>		1 of 1	
	Contract #	Contract Name	Liab Category	Contract Type	Open	Status	Curr	Credit Limit	Available				
→	001-MC_NOSTRO	001-MC Nostro		Bank Account	29/03/2018	Account OK	USD	0,00	0,00				

---

Set Contract Classifier

**Classifier:** Mastercard Acquirer EMV Certification

**Value:** 1 Acquirer is certified (OK)

**Reason:**

**Date From:** 00/00/0000

**Date To:** 00/00/0000

*Assigning a classifier value for a EMV Certified Members NOSTRO contract*

For PayPass certified banks, the following settings are required:

1. Configure a classifier.

In the "User Classifiers" dictionary (Full → Configuration Setup → Common Handbooks → User Classifiers) register the classifier "Mastercard Acquirer PayPass Certification":

User Classifiers												<< < > >>		1 of 1		
	Name	Code	Group Code	Category	Default Value	Applies To	Client Cat	Contract Cat	Product Cat	Role	Add Info	On Off Mode	Domain Code			
→	Mastercard Acquirer PayPass Certification	MC_CTL5_CERT	Interchange	Status	2 Acquirer is not certified (OK)	Main Contract	Accountant		Bank Accounting	Primary						

---

Values for Mastercard Acquirer PayPass Certification

	Weight Factor	Name	Code	Result Event Code	Is OK Value	Add Info	Is Active	Date From	Date To
→	2	Acquirer is not certified	N		Yes		Yes	00/00/0000	00/00/0000
	1	Acquirer is certified	Y		Yes		Yes	00/00/0000	00/00/0000

*Configuring a classifier for PayPass Certified Members*

2. Configure the NOSTRO contract.

In the "MC IRD Classifiers" form (Mastercard → MC. IRD Configuration → MC IRD Classifiers), assign the following classifier value to the "MC\_NOSTRO" contract:

Contract #	Contract Name	Liab Category	Contract Type	Open	Status	Curr	Credit Limit	Available
001-MC_NOSTRO	001-MC Nostro		Bank Account	29/03/2018	Account OK	USD	0,00	0,00

Assigning a classifier value for a PayPass Certified Members NOSTRO contract

## 1.2.7 Configuring the business calendar

The use of business calendars in Way4 is described in the section "Business Calendar" of the document "Way4 dictionaries".

When calculating IRD, a business calendar is used to determine the value of the "Timeliness" parameter (see the section "IRD calculation criteria").

If the bank calculates IRD using MPE files imported from Mastercard, (see the section "Configuring import of IRD criteria from MPE files"), the Mastercard business calendar is imported to Way4 from these files.

If these settings cannot be made for the default business calendar, register a new business calendar type, "Mastercard" in the "Calendar Types" form (Full → Configuration Setup → Main Tables → Calendar Types).

Registering a business calendar type

Specify this type in the *Calendar Type* field of the "Business Calendar" form (Full → Configuration Setup → Main Tables → Business Calendar) when configuring the business calendar:

## Configuring a business calendar

### 1.2.8 IRD calculation criteria

IRD calculation criteria received from MPE files are stored in a special database table. To access criteria, select the menu item "OpenWay → Mastercard → MC. IRD Configuration → MC IRD Criteria".

This command displays the "MC IRD Criteria" form.

MC IRD Criteria																						<< >>		1 of 32108	X
BSA	IPS Release #	IPS Release # To	Priority	Card Program Id	Product Id	Trans Type	Function Code	Processing Code	Trans Attr	Original Trans Attr	Timeliness	Approval Code	EMV Compliance Ind	PayPass Enabled Ind	Service Code	CAB	Min Trans Amount	Max Trans Amount	Trans Curr	MC Assigned	Special Restrictions	Doc Tag	Restrictions		
1/01015.4			20	720DMC	MCD.MDG.A1240	200	20				0				0001		0.00	0.00			PRD_TYPE=1	PTD=C01			
1/01015.4			20	720MCC	MCC.MCE.A1240	200	20				0				0001		0.00	0.00			PRD_TYPE=1	PTD=C01			
1/01015.4			21	720MCC	MCD.MDG.A1240	200	20				0				0001		0.00	0.00			PRD_TYPE=2	PTD=C01			
1/01015.4			24	580MCC	MCC.MCE.A1240	200	30		++AI Ecomm		0				A001.E		0.00	0.00			PRD_TYPE=1.AIR_ND				
1/01015.4			24	580MCC	MCC.MCE.A1240	200	18		++AI Ecomm		0				A001.E		0.00	0.00			PRD_TYPE=1.AIR_ND				
1/01015.4			24	580DMC	MCD.MDG.A1240	200	18		++AI Ecomm		0				A001.E		0.00	0.00			PRD_TYPE=1.AIR_ND				
1/01015.4			24	580DMC	MCD.MDG.A1240	200	30		++AI Ecomm		0				A001.E		0.00	0.00			PRD_TYPE=1.AIR_ND				
1/01015.4			24	580MCC	MCC.MCE.A1240	200	20		++AI Ecomm		0				A001.E		0.00	0.00			PRD_TYPE=1				
1/01015.4			24	580DMC	MCD.MDG.A1240	200	20		++AI Ecomm		0				A001.E		0.00	0.00			PRD_TYPE=1				
Ins	Del	Query																							

#### Table of IRD criteria

Each record in this form contains a set of transaction parameters and an IRD value that corresponds to these parameters. The IRD value is automatically selected by Way4 according to transaction parameters when processing a document for a transaction.

The "MC IRD Criteria" form contains the following fields:

- **BSA** – <Business Service Arrangements type>/<Business Service ID>, for example, "1/010201";
- **IPS Release #** - payment system release number from which the criteria become effective, for example "13.2".
- **IPS Release # To** – payment system release number until which the criteria are effective.
- **IRD** – IRD value saved in the TARGET\_FEE\_CODE field of the DOC table, and also as the value of the "MRC\_IRD" tag specified in the ADD\_INFO field of the DOC table and used to calculate tariffs.
- **Priority** – criterion priority; when selecting from several options, the criterion with a greater value in this field is used.
- **Card Program Id** – list of card program IDs, separated by commas, for example "MCC".
- **Product Id** – list of card product IDs (GCMS Product ID) separated by commas, for example "MCF", "MCP", "MNF".
- **Trans Type** – transaction type (Message Type ID); this field contains the value "1240" corresponding to the first presentment.
- **Function Code** – three-digit code (DE 24 data element) determining the specific purpose of a transaction message; together with the *Trans Type* field, this field determines the transaction type for which the criteria is used – First Presentment.
- **Processing Code** – transaction type (Cardholder Transaction Type) from the DE 3 data element, field N°1 (subfield 1).
- **Trans Attr** – drop-down list to specify transaction conditions.
- **Original Trans Attr** – reserved for forward compatibility.
- **Timeliness** – maximum number of days between the transaction date and date of sending the transaction message to the payment system.
- **Approval Code** – the value in this field can be "Y", "N" (or an empty value) which specifies whether an authorization code (DE 38 data element) is required to define IRD.
- **EMV Compliance Ind** – the value in this field can be "Y", "N" or an empty value; indicates whether the terminal that was used for the transaction must be EMV compliant in order to define IRD.



- *PayPass Enabled Ind* – the value in this field may be "Y", "N" or "M" (Mobile PayPass); used to specify that the card participating in the transaction supports Mastercard PayPass technology.
- *Service code* – list of card products, separated by commas; this field is used to specify card compatibility with EMV.
- *CAB* – list of SIC groups (Card Acceptor Business) with the "MC\_CAB" classification marker; commas are used to separate values.
- *Min Trans Amount* – minimum transaction amount in the currency that is specified in the *Trans Curr* field.
- *Max Trans Amount* – maximum transaction amount in the currency that is specified in the *Trans Curr* field.
- *Trans Curr* – currency in which transaction amount limits are calculated.
- *MC Assigned Id* – the "Y" value in this field means that to select a criterion the transaction message must contain a Mastercard Assigned ID.
- *Special Restrictions* – conditions for selecting a criterion are entered in this field using special tags (see the table).
- *Doc Tag Restrictions* – additional conditions for selecting IRD; tags (with values) that a document's ADD\_INFO field must contain for this criterion to be selected can be specified in this field.

#### Tags used when filling in the Special Restrictions field

Tag	Format	Description	Possible values
IN_GROUP	IN_GROUP=<val1>,<val2>,...;	The merchant must belong to one of the specified SIC groups for the criterion to be selected.	List of SIC groups with the "MC_IRD" classification attribute.
IN	IN=<val1>,<val2>,...;	The merchant's SIC code must be specified as a value of the tag for the criterion to be selected.	List of SIC codes
EXCLUDE	EXCLUDE=<val1>,<val2>,...;	The merchant must not belong to one of the specified SIC groups for the criterion to be selected.	List of SIC groups with the "MC_IRD" classification attribute.

Tag	Format	Description	Possible values
EXCLUDE_SIC	EXCLUDE_SIC=<val1>,<val2>,...	The merchant's SIC code must not be specified as the tag value for the criterion to be selected.	List of SIC codes
PRD_TYPE	PRD_TYPE=<value>;	Card product type (Product type), Product Type ID field from the MPE table IP0052T1.	1=Consumer (individual) 2=Commercial (legal entity) 3=Both (both values).
PRD_ADD	PRD_ADD=<val1>,<val2>,...	An additional condition for selecting the criterion is that the card participating in the transaction must belong to the card products specified as the tag value.	List of card product IDs (GCMS Product ID) with commas used to separate the values.
PRD_DEL	PRD_DEL=<val1>,<val2>,...	An additional condition for selecting the criterion is that the card participating in the transaction must not belong to the card products specified as the tag value.	List of card product IDs (GCMS Product ID) with commas used to separate the values.
AIR_IND	AIR_IND=<val>;	Special tag that cannot be edited.	N/Y
FROM_IRD	FROM_IRD=NULL;	Special tag that cannot be edited.	NULL

If necessary, existing records can be edited and new ones registered in the "MC IRD Criteria" form.



Note that changes made in the "MC IRD Criteria" form are not saved after importing criteria from MPE files.

## 2 Settings for processing Mastercard MoneySend transactions

This section describes Way4 settings to support the Mastercard MoneySend service.

This service is supported by online conversion of authorization documents for money transfer transactions into financial documents (presentments) and by making credit "holds". In this case, documents from clearing files that correspond to these transactions must be imported as acknowledgements, for reconciliation (see the section "Specifics of recording Fast Funds/Money Send transactions in NOSTRO contract accounts" of the document "Payment System Settlement in Way4").

To implement this functionality, the following must be configured:

- [SIC groups](#)
- [Transaction types](#)
- [Service setup](#)
- [Other parameters](#) – global parameters and parameters of pipes for importing clearing information.

### 2.1 SIC groups

To support the Mastercard MoneySend service, register a new group in the "SIC Groups" dictionary (Full → Configuration Setup → Main Tables → SIC Groups):

SIC Groups			<< < > >>		1 of 1	X
Name	Group Code	Classifier Type				
MasterCard MoneySend	MS	MC				
Ins	Del	Query	Normalize	SIC Codes	Parents	Sub Groups

*Adding a SIC group*

In this SIC group, register the corresponding SIC codes:

SIC Codes for MasterCard MoneySend							<< < > >>		1 of 3	b	X
Name	Code	Group Code	Use in Bank	Custom Code	Limit Code						
6536 MasterCard MoneySend Intracountry	6536	P	No								
6537 MasterCard MoneySend Intercountry	6537	P	No								
6538 MasterCard MoneySend Funding Transaction	6538	U	No								
Query	Normalize	Direct Groups	All Groups								

*Adding SIC codes*

To support the Mastercard MoneySend service, register a new group in the "SIC Groups" dictionary (Full → Configuration Setup → Main Tables → SIC Groups):

SIC Groups			<< < > >>	1 of 1	x
Name	Group Code	Classifier Type			
MasterCard MoneySend	MS	MC			
Ins	Del	Query	Normalize	SIC Codes	Parents
			Sub Groups		

### Adding a SIC group

In this SIC group, register the corresponding SIC codes:

SIC Codes for MasterCard MoneySend				<< < > >>		1 of 3		b x	
	Name	Code	Group Code	Use in Bank	Custom Code	Limit Code			
➔	6536 MasterCard MoneySend Intracountry	6536	P	No					
	6537 MasterCard MoneySend Intercountry	6537	P	No					
	6538 MasterCard MoneySend Funding Transaction	6538	U	No					
Query		Normalize		Direct Groups		All Groups			

### Adding SIC codes

## 2.2 Transaction types

To support the Mastercard MoneySend service, register the "Notif Prs Credit Item" transaction type in the "Transactions – All" dictionary (Full → Configuration Setup → Transaction Types → Transactions – All):

Transactions - All													<< < > >>		1 of 1		X
Service Class	Source	Target	Name	DR/CR	Previous	Chain Type	Is Authorized	Is Required	Category	RBS Code	RBS Rev Code	Dispute Class	Trans Type ID				
Transaction	Device	Card	Notif Prs Credit Item	None	CH Payment	Annex	Never	No	Individual	ND2	nd2		NpP-2S-				
Ins	Del	Query	Actions...	SubTypes	Msg Types	Reasons	Requirements	Msg Dict									

### Registering a transaction type

For this transaction type, click on the [Msg Types] button and register a message type with the code "124020028A":

Msg Types for Notif Prs Credit Item										<< < > >>			1 of 1		b	x
	Channel	Name	Code	Category	Is Authorization	Trans Type	Msg Details	Service Class	Format Code							
➔	MasterCard (PM)	Notif CH Payment Fast Funds	124020028A	Advice	Fin	Notif Prs Credit Item		Transaction								
Ins Del		Query														

### Registering a message type

For the transaction type that was registered, configure the following transaction subtypes:

SubTypes for Notif Prs Credit Item								<< < > >>	1 of 4	b	x
	Source Cat	Target Cat	Source Type	Target Type	Source Acc Type	Target Acc Type	Triggered Event	Fee Algorithm Options	Name		
➔	Device	Card	MasterCard Acq	Our EuroCard/MasterCard	Inc Suspense	Dispute			Notif Prs Credit Item		
	Device	Card	EuroCard Acq	Our EuroCard/MasterCard	Inc Suspense	Dispute			Notif Prs Credit Item		
	Device	Card	MasterCard Acq	Our Cirrus/Maestro	Inc Suspense	Dispute			Notif Prs Credit Item		
	Device	Card	EuroCard Acq	Our Cirrus/Maestro	Inc Suspense	Dispute			Notif Prs Credit Item		
Ins Del		Query									

### Configuring transaction subtypes

To support the Mastercard MoneySend service, register the "Notif Prs Credit Item" transaction type in the "Transactions – All" dictionary (Full → Configuration Setup → Transaction Types → Transactions – All):

Transactions - All													<< < > >>			1 of 1		X
	Service Class	Source	Target	Name	DR/CR	Previous	Chain Type	Is Authorized	Is Required	Category	RBS Code	RBS Rev Code	Dispute Class	Trans Type ID	^			
→	Transaction	Device	Card	Notif Prs Credit Item	None	CH Payment	Annex	Never	No	Individual	ND2	nd2		NpP-2S-	▼			
Ins	Del	Query	Actions...	SubTypes	Msg Types	Reasons	Requirements	Msg Dict										

### Registering a transaction type

For this transaction type, click on the [Msg Types] button and register a message type with the code "124020028A":

Msg Types for Notif Prs Credit Item										<< < > >>		1 of 1	b	x
	Channel	Name	Code	Category	Is Authorization	Trans Type	Msg Details	Service Class	Format Code					
➔	MasterCard (IPM)	Notif CH Payment Fast Funds	124020028A	Advice	Fin	Notif Prs Credit Item		Transaction						
Ins Del Query														

### Registering a message type

For the transaction type that was registered, configure the following transaction subtypes:

SubTypes for Notif Prs Credit Item								<< < > >>		1 of 4		b x	
	Source Cat	Target Cat	Source Type	Target Type	Source Acc Type	Target Acc Type	Triggered Event	Fee Algorithm Options	Name				
★	Device	Card	MasterCard Acq	Our EuroCard/MasterCard	Inc Suspense	Dispute			Notif Prs Credit Item				
	Device	Card	EuroCard Acq	Our EuroCard/MasterCard	Inc Suspense	Dispute			Notif Prs Credit Item				
	Device	Card	MasterCard Acq	Our Cirrus/Maestro	Inc Suspense	Dispute			Notif Prs Credit Item				
	Device	Card	EuroCard Acq	Our Cirrus/Maestro	Inc Suspense	Dispute			Notif Prs Credit Item				
Ins Del		Query											

### Configuring transaction subtypes

## 2.3 Service setup

The Mastercard MoneySend service is supported with conversion of authorization documents into financial ones and setting a credit "hold" until funds are posted to accounts. To do so, the following Target services must be configured in the Service Packages of card contracts for our cards:

Target for 001-Our Priv EC/MC											<< < > >>		1 of 2	b	x
Source Type	Transaction Type	Fee Dir	Base	%	Min	Name	Fee Account	Account Type	Contract Type	Service Details				Is Ready	
MasterCard Acq	CH Payment	None	0.00	0.00	0.00	CH Payment (MasterCard Acq)	Cash Fees Passive USD	CI Deposit	Our EuroCard/MasterCard	DOC_MODE=SMS;DOC_TAG=PTID;DOC_TAG_VALUE=C07,C52,C53,C54,C55,C56,C57,C67; PENDING=Y;				Ready	
EuroCard Acq	CH Payment	None	0.00	0.00	0.00	CH Payment (EuroCard Acq)	Cash Fees Passive USD	CI Deposit	Our EuroCard/MasterCard	DOC_MODE=SMS;DOC_TAG=PTID;DOC_TAG_VALUE=C07,C52,C53,C54,C55,C56,C57,C67; PENDING=Y;				Ready	
<															>
Ins Del Query Duplicate Full Info Custom Fee History															

### Configuring card contract Target services

In the Service Details field of these Services, the following value must be specified:

"DOC\_MODE=SMS;DOC\_TAG=PTID;DOC\_TAG\_VALUE=C07,C52,C53,C54,C55,C56,C57; PENDING=Y;"

"MasterCard MoneySend" must be specified in the S/C Group field of the "Full Info for <name of Service>" form for these Services.



Note that in card contract Service Packages, there may be permissive Services with the "CH Payment" transaction type and an empty value in *Service Details* and *SIC Group* fields for transactions that are not related to the Mastercard MoneySend service. In this case, specify a positive value different than zero in the *Priority* field of Services for Mastercard MoneySend transactions.

## 2.4 Other parameters

To convert Mastercard MoneySend transaction documents imported from a clearing file into acknowledgements (Chain Type=Acknowledgement), set the value of the global parameter MC\_FAST\_FUNDS to "Y", and check that the USE\_PAYMENT\_TRANSACTION = N parameter **is not present** for pipes to import clearing information.

## 2.5 Transaction processing

Mastercard MoneySend transactions are processed according to the aforementioned settings as follows:

1. Based on a Mastercard MoneySend authorization message received from the payment system, a document with Source Code = "01000P" is generated in the Way4 database.
2. Using the card contract's Service (see [Service setup](#)"), the authorization document is converted into a financial one. The "DOC\_MODE=SMS;" tag is specified in this document's Add\_Info field. Before this document is processed by the document processing procedure, the card contract's amount available is increased by a credit "hold" that is created by the "PENDING=Y;" tag of the card contract's Service.
3. The Mastercard MoneySend transaction's financial document is processed by the document processing procedure. This results in the credit "hold" being release, and funds are shown in the contract's current account.
4. After the clearing file has been imported to Way4, a document for the Mastercard MoneySend transaction with Source Code = "124020028A" is generated in the database.
5. This clearing document is processed during the document processing procedure. When processing a document, a search is made for a financial document generated online from an authorization document. If this document is found, processing of the clearing document with the "Notif Prs Credit Item" transaction type is successfully completed with the "Successfully completed" response code.
6. If the original financial document is not found when processing the clearing document, processing of a document with the "Notif Prs Credit Item" transaction type will be terminated. A warning message "Presentment not found for fast funds notification, converting to presentment" will be generated. The clearing document's transaction type will be changed to "CH Payment". The next time the document processing procedure is run, the clearing document will be processed with consideration of the new parameters.

### 3 Configuring merchant contracts

To configure the merchant ID assigned by the payment system, add a line for "MasterCard Assigned ID" to the "Device Params Add Info Types" dictionary (Full → Configuration Setup → Merchant Device Setup → Device Params Add Info Types):

Device Params Add Info Types						<div>&lt;&lt; &lt; &gt; &gt;&gt;</div>		18 of 18		<div>✕</div>
	Name	Code	Initial Count	Max Count	Payment System	Type	Is Ready			
→	Master Card Assigned ID	MC_ASSIGNED_ID	0	0	MasterCard	Device Parm to Doc	Ready			
<div>InsDelQueryCheck</div>										

#### *Adding a new type of additional information*

In merchant contract forms (MasterCard → MC. Merchant Management → MasterCard Acquiring Contracts) for which the MasterCard Assigned ID must be specified, click the [Add Params] button. In the *Add Info Type* field of the "Add Params for ..." form that opens, select the value "MasterCard Assigned ID" from the drop-down list and in the *String Parameter* field, specify the value provided by the payment system:

AddParms for TEST_ACQ_CLIENT			<< < > >>		1 of 1	b	x
	Add Info Type	String Parameter	Date Parameter				
→	Master Card Assigned ID	Test value	00/00/0000				
Ins		Del	Query				

#### *Setting the value of the MasterCard Assigned ID parameter*



MasterCard Assigned ID is specified in contract parameters according to Mastercard requirements. This value is provided to the acquirer by Mastercard. The bank is not allowed to independently specify MasterCard Assigned ID.



Note that MasterCard Assigned ID can be specified not only for merchant account contracts, but for device child contracts as well.



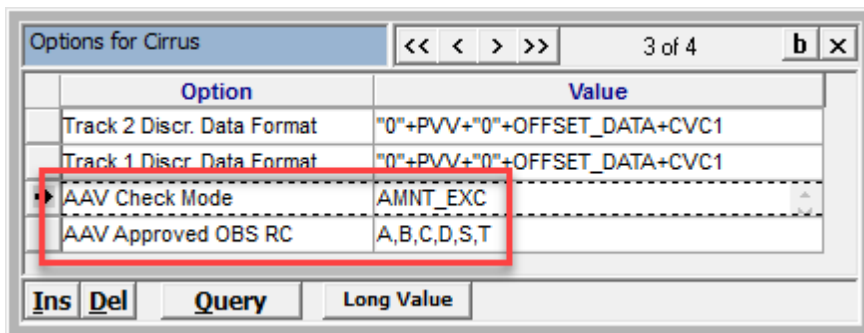
## 4 Configuring the AAV validation type for EMV 3DS

To support the Mastercard Identity Check Program, it is necessary to configure additional parameters.

To do so, select the required financial institution in the "Bank Production Parameters" form (Full → Configuration Setup → Card Production Setup → Bank Production Parameters) and click [Validation].

In the "Validation for <financial institution name>" form that opens, select the required product and click [Options].

In the "Options for <product name>" form, add a record for the "AAV Check Mode" parameter:



Option	Value
Track 2 Discr. Data Format	"0"+PVV+"0"+OFFSET_DATA+CVC1
Track 1 Discr. Data Format	"0"+PVV+"0"+OFFSET_DATA+CVC1
AAV Check Mode	AMNT_EXC
AAV Approved OBS RC	A,B,C,D,S,T

### Card validation additional parameters

The "AAV Check Mode" parameter can have the following values:

- "DEF" – for additional validation, the authorization system uses PAN and Directory Server Transaction ID (transaction's unique identifier that is used to compare authentication and authorization data).
- "AMNT" – in addition to the method that is used when "DEF" is specified, when calculating the check value, the authentication amount and currency are used. For validation during authorization, the amount and currency are taken from the authentication document, or from the authorization document if there is no authentication document.
- "AMNT\_EXC" (recommended) – in addition to the method that is used when "AMNT" is specified, it is checked that the authorization currency matches the currency from authentication document and the authorization amount does not exceed the authentication amount.

The ability has been added to configure a list of codes for AAV prevalidation results which must not lead to unconditional rejection of an authorization request.

This is done using the "AAV Approved OBS RC" parameter specified in the "Options for <product name>" form.

As the parameter's value, specify a list of codes for prevalidation results that must be interpreted as success.

For more information, see the section "Validation Parameters" of the document "Configuring Way4 for Smart Card Issuing".

## 5 Settings for compliance with Mastercard release requirements

This section describes settings necessary to comply with Mastercard requirements for changes in operation that are set forth in the payment system's documents. These settings are given in YYYY\_XX\_MC\_Requirements.pdf documents provided by OpenWay for the corresponding Mastercard release.

### 5.1 AN 2618 - Revised Commercial Refund Transaction Service Fee Calculation in the Europe Region

Acquirers with the separately licensed Fee Prediction feature must do as follows:

1. Add the following to registered tariff types (Tariffs → Tariff Types & Tariff Domains → Tariff Types):

Tariff Types							<< < > >>	1 of 2	X
Tariff Role	Name	Code	Can Be Personalized by Application	Tariff Type Group	Search Rules	Default Is Active			
Service	Refund Transaction Service Fee	MC_EU_REFUND	Yes			Yes			
Threshold	Refund Transaction Service Fee Multiplier	MC_EU_REFUND_MULTIPLIER	Yes		TARIFF_TYPE_EXT_TAG=EXT_TARIFF_ID_MULT	Yes			
Ins	Del	Query							

These tariff types must have the following parameters:

- *Tariff Role* – "Service"
- *Code* – "MC\_EU\_REFUND"
- *Name* – "Refund Transaction Service Fee"
- *Can Be Personalized by Application* – "Yes"

and

- *Tariff Role* – "Threshold"
- *Code* – "MC\_EU\_REFUND\_MULTIPLIER"
- *Name* – "Refund Transaction Service Fee Multiplier"
- *Can Be Personalized by Application* – "Yes"
- *Search Rules* – "TARIFF\_TYPE\_EXT\_TAG=EXT\_TARIFF\_ID\_MULT;"

2. Add a new tariff to the tariff domain (Tariffs → Tariff Types & Tariff Domains → Tariff Domains → [Tariff]):

Tariff Domains											<< < > >>			1 of 1		✕						
Name		Code		Apply Rules		Category																
✚ MC Interchange Fee											MC_IF		Global									
Ins		Del	Query		Actions...		Tariff		Preferred		Sub Domains											
Tariff for MC Interchange Fee																<< < > >>			1 of 1		b	✕
Tariff Role		Tariff Type		Name		If Limit Tariff		If Preference Type		If Currency		If Event Type		Apply Rules		Tariff Code Ext		Tariff Type Extension		Priority		
✚		Refund Transaction Service Fee Multiplier		Refund Transaction Service Fee Multiplier General												MCUREFMULTI		MCUREFMULTI		100		
Ins		Del	Query																			

### Tariff parameters:

- *Tariff Role* – "Threshold"
- *Tariff Type* – "Refund Transaction Service Fee Multiplier"
- *Tariff Code Ext* – "MCEUREFMULTI"
- *Tariff Type Extension* – "MCEUREFMULTI"
- *Priority* – "100"

Configure additional parameters for the tariff that was added (Tariffs → Tariff Data Input by Domain List → [Tariff] → [Threshold]):

Tariff Data Input by Domain List										<< < > >>		1 of 1		✕	
Name	Code	Parent Domain	Apply Rules												
MC Interchange Fee	MIC_F														
<div>Ins Del Query Tariff Preferred Sub Domains</div>															
Tariff for MC Interchange Fee										<< < > >>		1 of 1		b ✕	
Tariff Domain	Tariff Role	Tariff Type	Name	If Limit Tariff	If Preference Type	If Currency	If Event Type	Apply Rules	Tariff Code Ext	Tariff Type Extension	Priority	Is Ready			
MC Interchange Fee	Threshold	Refund Transaction Service Fee	Refund Transaction Service Fee						MCEUREFMULTI	MCEUREFMULTI	100	Ready			
<div>Ins Del Query Approve Threshold</div>															
Threshold for Refund Transaction Service Fee Multiplier General										<< < > >>		1 of 1		b ✕	
Start Date	Threshold Amount	Currency	Threshold Percentage	Apply Mode	Is Ready										
13/10/2019	0.00		100.00%	From Tariff	Ready										
<div>Ins Del Query Cancel</div>															

### Tariff additional parameters:

- *Threshold Amount* – "0"
- *Threshold Percentage* – "100"
- *Apply Mode* – "From Tariff"

- In Service Packages for routing contracts (see the section "Configuring Service Packages" of the document "Way4 Fee Prediction Mastercard"), configure a custom fee for Target Services for credit operations. For more information about custom fees, see the section "Custom fee" of the document "Way4 Service Packages".

If Additional Service Packages are used in routing contract Service Packages, a custom fee for Target Services should also be configured in these Additional Service Packages.

A custom fee for credit operations to calculate interchange fees is set up using the following values:

- *Fee Tariff* – "Refund Transaction Service Fee"
- *Fee Code* – Interchange Fee code that will be shown in accounting entries, for example, "FP"
- *Service Details* – specify the following value in this field:
  - "TARIFF\_TYPE\_EXT\_TAG=EXT\_TARIFF\_ID;" when tariff structure is loaded from MPE files
  - when tariff structure is loaded from files provided by OpenWay, this field is not filled in
- *Account Type, Fee Contract, Fee Account* – fields for defining the correspondence of accounts for recording interchange fees.

4. In the *Fee Algorithm Options* field for credit transaction subtypes (Configuration Setup → Transaction Types → Transactions-- All → [Sub Types]), check for the tag SAVE\_TGT\_FEE=XF\_FEE\_PREDICTION;. If this tag is found, its value must be changed to SAVE\_TGT\_FEE=MC\_EU\_REFUND;.
5. Add the name of the "T\_TRF\_MC\_EU\_REFUND\_AMOUNT" tag to the value of the global parameter AMOUNT\_FORMAT\_FOR\_DOC\_TAG, adding it to the existing value, separated by a comma.

## 5.2 AN 2643 - Authorization of Purchase Returns

For subtypes of "Credit" transactions with Target Type = "Cirrus/Maestro" or Target Type = "Mastercard" set the tag "ACQ\_ONLINE=A;" in the *Fee Algorithm Options* field:

SubTypes for Credit							
Source Cat	Target Cat	Source Type	Target Type	Source Acc Type	Target Acc Type	Triggered Event	Fee Algorithm Options
Device	Card	Our POS	Cirrus/Maestro	Merchant Receivable	Outg Suspense		ACQ_ONLINE=A;
Device	Card	Our POS	Mastercard	Merchant Receivable	Outg Suspense		ACQ_ONLINE=A;
Device	Card	Our Imprinter	Mastercard	Merchant Receivable	Outg Suspense		ACQ_ONLINE=A;

## 5.3 AN 2626 - Setting Currency Conversion Rates at the Time of Authorization

Acquirers' sponsor banks should set "true" for the SEND\_CONVERSION\_DATE parameter in Transaction Switch configuration files for host-to-host connections with acquirers. This is required to transmit the new data element "DE 16" to an affiliate bank. Before enabling this parameter, ensure that the affiliate bank is ready to accept messages in the new format.

To comply with the requirements of this document, acquirers that calculate an interchange fee for each transaction (Fee Prediction) must add the following row to the "IPS Release Changes" form (Full → Configuration Setup → Main Tables → IPS Release Changes):

IPS Release Changes							<< < > >>	1 of 1	X
Payment System	Target	Release Number	Article Number	Member ID	Date From	Is Ready			
Mastercard	Clearing	20Q2	AN2626		11/08/20	Ready			
<div> <div>Ins</div> <div>Del</div> <div>Query</div> <div>Check</div> </div>									

The value in the *Date From* field must be specified according to the payment system's requirements.

For more information about the "IPS Release Changes" form, see the section "Support of payment system release requirements" of the document "Interchange Routing".

The payment system will notify banks of the date and time when the new requirements become effective.

To comply with the requirements of this document, the settings of all custom fees that are used for calculating an interchange fee (Fee Prediction) should be changed in routing contract Service Packages.

In the *Service Details* field of the "Full Info..." form for a custom fee for Fee Prediction, add the following tags: CONV\_CHANNEL;FX\_DATE\_TAG=MC\_RATE\_DATE;

Full Info for BS: Retail (Our POS) - ELCAP Custom Fee: PP		
<b>Transaction Parameters</b> Contra FI Subtype Sett Curr Trans Curr Condition Max Amount Min Amount Max Amt Curr Preference SIC Group Expiry Period Transaction Type Extension Priority	<b>Tariff</b> Fee Dir Fee Curr Fee Base Fee Min Fee Max Fee % FX Rate Type FX Type Increase % Fee Tariff Limit Tariff VD Tariff	<b>Posting</b> Fee Code Floor Limit Value Days Service Allowed Service Details Account Type Account Curr Contract Type Fee Contract Fee Account Ready

For more information about configuring custom fees for Fee Prediction, see the section "Configuring Service Packages" of the document "Way4 Fee Prediction Mastercard".

## 5.4 AN 2929 - Introduction of Cardholder Currency Indicator for Point-of-Interaction Currency Conversion

Acquirer banks with the separately licensed dynamic currency conversion (DCC) feature must do as follows:

1. Add two records to the "Tags Mapping" form (Full → Configuration Setup → Merchant Device Setup → Tags Mapping):

Tags Mapping				<< < > >>	2 of 2	X
	Matched Tags	Unmatched Tags	Priority	Result Tags		
	CH_CURR_IND=C;		0	CCI=C;		
→	CH_CURR_IND=T;		0	CCI=T;		

2. Configure prohibiting Services for "DCC Info Inquiry for Retail" operations for the Mastercard DCC Service Package:

- For "DCC Info Inquiry for Retail (Our POS)" – if DCC is configured for a POS terminal:
  - Allowed=Never
  - Trans Conditions = <<All Face to Face>>
  - Service Details = DOC\_TAG=CCI;DOC\_TAG\_VALUE=C,T;
- For "DCC Info Inquiry for ATM (our ATM)" – if DCC is configured for an ATM:
  - Allowed=Never
  - Trans Conditions = <<All ATM>>
  - Service Details = DOC\_TAG=CCI;DOC\_TAG\_VALUE=C,T;

These Services can be configured as part of an Additional Service Package and must have the highest priority.

## 5.5 AN 2941 - Digital Remote Commerce Enhancements

Add the following row to the "IPS Release Changes" form (Full → Configuration Setup → Main Tables → IPS Release Changes):

IPS Release Changes							<< < > >>	1 of 1	X
	Payment System	Target	Release Number	Article Number	Member ID	Date From	Is Ready		
→	Mastercard	Online	20Q2	AN2941		11/08/20	Ready		

The value in the *Date From* field must be specified according to the payment system's requirements.

For more information about the "IPS Release Changes" form, see the section "Support of payment system release requirements" of the document "Interchange Routing".

The payment system will notify banks of the date and time when the new requirements become effective.

## 5.6 AN 3831 - Mastercard Parameter Simplification for Commercial Refund Transactions in the Europe Region

Add the following row to the "IPS Release Changes" form (Full → Configuration Setup → Main Tables → IPS Release Changes):

IPS Release Changes						<div>&lt;&lt; &lt; &gt; &gt;&gt;</div>		1 of 1		<div>X</div>
	Payment System	Target	Release Number	Article Number	Member ID	Date From	Is Ready			
➔	Mastercard	Clearing	20Q2	AN3831		17/07/20	Ready			
<div><div>Ins</div><div>Del</div><div>Query</div><div>Check</div></div>										

The value in the *Date From* field must be specified according to the payment system's requirements.

For more information about the "IPS Release Changes" form, see the section "Support of payment system release requirements" of the document "Interchange Routing".

The payment system will notify banks of the date and time when the new requirements become effective.

## 5.7 AN 4022 - Money Transfer Sender and Receiver Data Enhancement

Add the following row to the "IPS Release Changes" form (Full → Configuration Setup → Main Tables → IPS Release Changes):

IPS Release Changes							<< < > >>		1 of 1		X
	Payment System	Target	Release Number	Article Number	Member ID	Date From	Is Ready				
→	Mastercard	Online	20Q4	AN4022		03/11/20	Ready				
<div>InsDelQueryCheck</div>											

The value in the *Date From* field must be specified according to the payment system's requirements.

For more information about the "IPS Release Changes" form, see the section "Support of payment system release requirements" of the document "Interchange Routing".

The payment system will notify banks of the date and time when the new requirements become effective.

## 5.8 AN 4203 MoneySend and Funding Transaction Program Enhancements

Acquirers that perform card-to-card transfers must configure Mastercard card transaction subtypes for the transaction type CH Debit (Full → Configuration Setup → Transaction Types → Transactions – All → [SubTypes]):

Transactions - All													<< < > >>			1 of 1	X
Service Class	Source	Target	Name	DR/CR	Previous	Chain Type	Is Authorized	Is Required	Category	RBS Code	RBS Rev Code	Dispute Class					
Transaction	Device	Card	CH Debit	Debit		Original	May be	Yes	Individual	TA	Ita	Non-ATM Dispute					
													>				
Ins Del Query Actions... SubTypes Msg Types Reasons Requirements Msg Dict																	
SubTypes for CH Debit													<< < > >>			1 of 8	b X
Source Cat	Target Cat	Source Type	Target Type	Source Acc Type	Target Acc Type	Triggered Event	Fee Algorithm Options			Name							
Device	Card	Our POS	Mastercard	Merchant Receivable	Outg Suspense		SIC=6538;PTID_F07=4829;PTID_F08=4829;PTID_F52=4829;PTID_F53=4829;PTID_F54=4829;PTID_C59=4829;PTID_F61=4829;PTID_F64=4829;PTID_F55=4829;PTID_F65=4829;			CH Debit							
Device	Card	Our POS	Cirrus/Maestro	Merchant Receivable	Outg Suspense		SIC=6538;PTID_F07=4829;PTID_F08=4829;PTID_F52=4829;PTID_F53=4829;PTID_F54=4829;PTID_C59=4829;PTID_F61=4829;PTID_F64=4829;PTID_F55=4829;PTID_F65=4829;			CH Debit							
Device	Card	Our POS	Our Cirrus/Maestro	Merchant Receivable	CH Current/Credits		SIC=6538;PTID_F07=4829;PTID_F08=4829;PTID_F52=4829;PTID_F53=4829;PTID_F54=4829;PTID_C59=4829;PTID_F61=4829;PTID_F64=4829;PTID_F55=4829;PTID_F65=4829;			CH Debit							
Device	Card	Our POS	Our Mastercard	Merchant Receivable	CH Current/Credits		SIC=6538;PTID_F07=4829;PTID_F08=4829;PTID_F52=4829;PTID_F53=4829;PTID_F54=4829;PTID_C59=4829;PTID_F61=4829;PTID_F64=4829;PTID_F55=4829;PTID_F65=4829;			CH Debit							
Device	Card	Our ATM	Mastercard	Merchant Receivable	Outg Suspense		SIC=6538;PTID_F07=4829;PTID_F08=4829;PTID_F52=4829;PTID_F53=4829;PTID_F54=4829;PTID_C59=4829;PTID_F61=4829;PTID_F64=4829;PTID_F55=4829;PTID_F65=4829;			CH Debit							
Device	Card	Our ATM	Cirrus/Maestro	Merchant Receivable	Outg Suspense		SIC=6538;PTID_F07=4829;PTID_F08=4829;PTID_F52=4829;PTID_F53=4829;PTID_F54=4829;PTID_C59=4829;PTID_F61=4829;PTID_F64=4829;PTID_F55=4829;PTID_F65=4829;			CH Debit							
Device	Card	Our ATM	Our Cirrus/Maestro	Merchant Receivable	CH Current/Credits		SIC=6538;PTID_F07=4829;PTID_F08=4829;PTID_F52=4829;PTID_F53=4829;PTID_F54=4829;PTID_C59=4829;PTID_F61=4829;PTID_F64=4829;PTID_F55=4829;PTID_F65=4829;			CH Debit							
Device	Card	Our ATM	Our Mastercard	Merchant Receivable	CH Current/Credits		SIC=6538;PTID_F07=4829;PTID_F08=4829;PTID_F52=4829;PTID_F53=4829;PTID_F54=4829;PTID_C59=4829;PTID_F61=4829;PTID_F64=4829;PTID_F55=4829;PTID_F65=4829;			CH Debit							
													>				
Ins Del Query																	

Add the following tags to the *Fee Algorithm Options* field for the selected transaction subtypes:

PTID\_F07=4829;PTID\_F08=4829;PTID\_F52=4829;PTID\_F53=4829;PTID\_F54=4829;PTID\_C59=4829;PTID\_F61=4829;PTID\_F64=4829;PTID\_F55=4829;PTID\_F65=4829;

## 5.9 AN 4224 New Merchant Country of Origin Identifier

A parameter with the code "ORIG\_MERCH\_COUNTRY" must added to the "Device Parms Add Info Types" form (Full → Configuration Setup → Merchant Device Setup → Device Parms Add Info Types):

Device Parms Add Info Types						<< < > >>		1 of 1		X
	Name	Code	Initial Count	Max Count	Payment System	Type	Is Ready			
→	Merchant Country of Origin Identifier	ORIG_MERCH_COUNTRY	0	0	MasterCard	Device Parm to Doc	Ready			
Ins Del		Query		Check						

This parameter must be specified in a merchant contract's additional parameters (MasterCard → MC. Merchant Management → MasterCard Acquiring Contracts →[AddParms]) or device contract's additional parameters (MasterCard → MC. Merchant Management → MasterCard Acquiring Contracts →[Devices]→[AddParms]) for those merchants/devices to which it is necessary to transmit the identifier Merchant Country of Origin. A numeric country code in ISO format should be specified as the parameter's value.