Technical Specification

120–Byte for Batch Processing Versions 2.0.0 - 3.0.0 Revision 4.0
Addendum in Support of April 2009 Bank Card Regulations
Rev. 1

April 17, 2009

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Date 04/17/2009

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The following updates, additions, corrections have been incorporated in
120-Byte for Batch Processing Versions 2.0.0 - 3.0.0 Revision 4.0
Addendum In Support of April 2009 Bank Card Regulations Rev. 1

Page No(s)	Action	Description of Change
Extension Records		
2	Updated	Notes section in the International Maestro – MasterCard Authentication (EIM002) record to include the MARP Transaction Type information.
5	Updated	Notes section in the International Maestro – MasterCard Authentication (ESW001) record to include the MARP Transaction Type information.
Product Record: Partial Authorization		
8	Updated	Redemption Amount field to include note about MCC5542 and that the amount in the Redemption Amount field can be greater than the transaction amount.
APPENDIX D: INTERNATIONAL PROCESSING		
13, 16, 17	Updated	Appendix with following changes: • Removed Currency Code 703 (Slovak Koruna) • Removed bolding on Currency Codes 156, 208, 704
APPENDIX G: PARTIAL AUTHORIZATIONS		
31	Updated	Added note regarding fuel transactions to the International Maestro, MasterCard, MasterCard Diners, and Visa Partial Authorization detail table.
APPENDIX I: MASTERCARD SECURECODE		
41, 42	Updated	Appendix to include new section for Maestro Advanced Registration Program (MARP) processing requirements.
APPENDIX J: UK DOMESTIC MAESTRO SECURECODE		
47, 48	Updated	Appendix to include new section for Maestro Advanced Registration Program (MARP) processing requirements.

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Extension Record: International Maestro - MasterCard Authentication

```
        1         2         3         4         5         6         7         8         9
12345678901234567890123456789012345678901234567890123456789012345678901234567890123456
ANNNNNNAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAANNNNNNNNNNNNNNNNNNNNNAANNNNNNAAAAAAAAAAAAAAAAAAA
EIM002god10EAxmL4wH7108KtV0QkAQASHRx10
```

Position	Length	Data Type	Field Name	Comments
1	1	A	Extension Record Identifier	“E” Constant – Specifies this record as an extension record of the Chase Paymentech standard format.
2,3	2	A	Extension Record MOP Type	“IM” Constant
4,6	3	N	Extension Record Sequence Number	“002” Constant
7,38	32	A	Accountholder Authentication Value (AAV)	Unique transaction token generated by the Issuer and presented to the merchant each time an accountholder conducts an electronic transaction using MasterCard SecureCode. Left justified/blank filled **Notes:** Must be sent in Base 64 Encoding or the transaction will reject with Response Reason Code 245 (Missing or Invalid Secure Payment Data). This is the same format used by MasterCard when returning the AAV data to the merchant during the authentication step. **DO NOT MANIPULATE** this value in any way.
39,96	58	A	Reserved	Blanks

Continued on Next Page

Extension Record: International Maestro - MasterCard Authentication, (Continued)

Notes: This record can only be sent when MOP = IM or the transaction will reject with Response Reason Code 225 (Invalid Field Data).

See *Appendix I*: *MasterCard SecureCode* for product information.

Division level flag must be set in order to process MasterCard Authentication transactions, or the transaction will reject with Response Reason Code 246 (Merchant Not MasterCard SecureCode Enabled).

When using this record, the Transaction Type Field should be populated with the ECI value that the merchant received back from the merchant plug-in software.

When using this record, if the merchant is participating in the Maestro Advanced Registration Program (MARP) and chooses to use static AAV, the Transaction Type field should be populated with a “5.”

Extension Record: UK Domestic Maestro (Switch/Solo) Card

```
      1         2         3         4         5         6         7         8       12
12345678901234567890123456789012345678901234567890123456789012345678901234567890 . . . 0
AAANNNNNNNNNAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
ESW0010303                                                                          ↵
```

Position	Length	Data Type	Field Name	Comments
1	1	A	Extension Record Identifier	"E" Constant – Specifies this record as an extension record of the Chase Paymentech standard format.
2,3	2	A	Extension Record MOP Type	"SW" Constant
4,6	3	N	Extension Record Sequence Number	"001" Constant
7,10	4	N	Card Start Date	The day the card becomes active. (Optional) MMYY format **Notes:** The Card Start Date field should be submitted only when the card does not have an Issue Number. If the card displays ONLY a Start Date and no Issue Number, the Card Start Date field should contain a value and the Card Issue Number field must be blank. If the card displays both a Start Date and an Issue Number, the Card Start Date should be left blank and the Card Issue Number field must be populated. If both are sent, the Card Start Date is ignored.

Continued on next page

Extension Record: UK Domestic Maestro (Switch/Solo) Card, (Continued)

```
      1         2         3         4         5         6         7         8       12
12345678901234567890123456789012345678901234567890123456789012345678901234567890 . . . 0
AAANNNNNNNNNAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
ESW0010303                                                                          ↵
```

Position	Length	Data Type	Field Name	Comments
11,12	2	N	Card Issue Number	An incremental counter of either 1 or 2 characters defined by the issuing bank. (Optional) Right justified/blank filled **Notes:** If a card is lost, the bank issues a replacement card with the Card Issue Number being increased by one. The Card Issue Number must be submitted even when a Card Start Date exists. In addition, the Card Issue Number must be submitted exactly as shown on the card. **Example:** If the card displays “01”, submit “01” – NOT “1”. If the card displays “1”, submit “1”.
13, 44	32	A	Accountholder Authentication Value (AAV)	Unique transaction token generated by the Issuer and presented to the merchant each time an accountholder conducts an electronic transaction using UK Domestic Maestro SecureCode. (Optional) Left justified/blank filled **Notes:** Must be sent in Base 64 encoding or the transaction will reject with Response Reason Code 245 (Missing or Invalid Secure Payment Data). This is the same format used by UK Domestic Maestro when returning the AAV data to the merchant during the authentication step. **DO NOT MANIPULATE this value in any way.**
45,120	76	A	Reserved	Blanks

Continued on next page

Extension Record: UK Domestic Maestro (Switch/Solo) Card, (Continued)

Notes: This record must be sent when MOP = SW and the Action Code is not equal to RF or the transaction will reject with Response Reason Code 225 (Invalid Field Data).

See *Appendix J: UK Domestic Maestro* for product information.

Division level flag must be set in order to process UK Domestic Maestro SecureCode transactions, or the transaction will reject with Response reason Code 246 (Merchant Not SecureCode Enabled).

When using this record for authentication, the Transaction Type field should be populated with the ECI value that the merchant received back from the merchant plug-in software.

When using this record for authentication, if the merchant is participating in the Maestro Advanced Registration Program (MARP) and chooses to use static AAV, the Transaction Type field should be populated with a "5."

Product Record: Partial Authorization

```
        1         2         3         4         5         6         7         8      12
12345678901234567890123456789012345678901234567890123456789012345678901234567890 . . . 0
AAANNNANNNNNNNNNNNNNNNNNNNNNNNAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
PPB001Y                                                                          ↵
```

Position	Length	Data Type	Field Name	Comments
1	1	A	Product Record Identifier	"P" Constant – Specifies this record as a product record of the Chase Paymentech standard format.
2,3	2	A	Product Record Type	"PB" Constant
4,6	3	N	Product Record Sequence Number	"001" Constant
7	1	A	Partial Redemption Indicator Flag	Determines approval functionality for pre-paid/gift card authorizations. Valid values for **American Express**: Y – Transaction is not declined if authorization amount is greater than the current balance. N – Transaction is declined if authorization amount is greater than the current balance. Valid values for **Discover**: Y – The sale amount can be partially approved but the cash back amount cannot be partially approved. N – Merchant does not support partial authorization. Partial authorization not allowed for both sale amount and cash back amount.

Continued on next page

Product Record: Partial Authorization, (Continued)

```
        1         2         3         4         5         6         7         8      12
12345678901234567890123456789012345678901234567890123456789012345678901234567890 . . . 0
AAANNNANNNNNNNNNNNNNNNNNNNNNNNAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
PPB001Y                                                                              ↵
```

Position	Length	Data Type	Field Name	Comments
			Partial Redemption Indicator Flag, (Continued)	Valid values for **Discover** (continued): B – Both sale amount and cash back may be partially approved. The sale amount must be fully approved before the cash back amount can be partially approved. C – The sale amount must be fully approved before the cash back amount may be partially approved. X – Merchant may support partial auth, but the sale amount must be fully approved before the cash back amount can be approved. Neither the sale amount nor the cash back amount can be partially approved. Valid values for **International Maestro, MasterCard, MasterCard Diners, Visa**: Y – Attempt a partial authorization if allowed for the account. N – Do not attempt a partial authorization. Valid values for **MoneyPak**: Y – Attempt a partial authorization if allowed for the account. N – Do not attempt a partial authorization. Valid values for **RevolutionCard**: Y – Attempt a partial authorization. N – Do not attempt a partial authorization. **Note:** This field will be echoed back on output if sent on input, otherwise it will be blank.

Continued on next page

Product Record: Partial Authorization, (Continued)

```
        1         2         3         4         5         6         7         8      12
12345678901234567890123456789012345678901234567890123456789012345678901234567890 . . . 0
AAANNNANNNNNNNNNNNNNNNNNNNNNNNNAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
PPB001Y                                                                          ↵
```

Position	Length	Data Type	Field Name	Comments
8,19	12	N	Current Balance	Current balance 2 decimal implied/right justified/zero filled or blanks **Notes**: This field should be blank filled on the input file. **American Express** returns the current balance. **Discover** does not return the current balance. **International Maestro, MasterCard, MasterCard Diners and Visa** may return the current balance. **MoneyPak** does not return the current balance. **RevolutionCard** may return current balance.
20,31	12	N	Redemption Amount	Approved partial redemption amount. 2 decimal implied/right justified/zero filled or blanks **Notes:** This field should be blank filled on the input file. The output file will populate the redemption amount. If Partial Redemption Indicator Flag is set to 'N', this field will be zero filled. When MCC = 5542 and partial authorizations are enabled, this field can be greater than the amount of the transaction.
32,120	89	A	Reserved	Blanks

Continued on next page

Product Record: Partial Authorization, (Continued)

Notes: See *Appendix G: Partial Authorization* for more details on populating this record.

This record could be returned for a partial authorization capable transaction (i.e., via transaction division default of Partial Redemption Indicator Flag).

American Express Notes:

Sending the Partial Redemption Indicator Flag does **not** override the transaction division default.

American Express returns the current balance.

This record should not be sent unless the transaction division has been certified with American Express for Partial Authorization.

Discover Notes:

Sending the Partial Redemption Indicator Flag overrides the transaction division default.

Discover does not return the current balance.

MasterCard, MasterCard Diners and Visa Notes:

Sending the Partial Redemption Indicator Flag overrides the transaction division default.

If the account number is not partial authorization capable, the Partial Redemption Indicator Flag is ignored.

MasterCard, MasterCard Diners and Visa may return the current balance.

MoneyPak Notes:

Sending the Partial Redemption Indicator Flag overrides the transaction division default.

MoneyPak does not return the current balance.

RevolutionCard Notes:

Sending the Partial Redemption Indicator Flag overrides the division default.

APPENDIX D: INTERNATIONAL PROCESSING

Introduction

Chase Paymentech supports two types of international processing.

Multi-Currency Processing allows a merchant to collect payments from consumers and receive settlement proceeds in the same currency.

Cross-Currency Processing allows a merchant to collect payments from consumers in one currency and receive settlement proceeds in a different currency.

Contractual Agreement

The merchant is required to establish a separate contractual agreement with Chase Paymentech. Contractual agreements vary by country.

Division Numbers

Chase Paymentech assigns a unique Division Number to process each international currency. A single Division Number can support different transaction types and methods of payment in the same currency.

Zero Decimal Currency Example

Certain international currencies have zero decimals.

Since the amount field is two decimal implied:
to represent one Japanese Yen, (1=000000000100)
to represent one hundred Japanese Yen, (100=000000010000)

Continued on next page

Multi-Currency Processing

Multi-currency processing allows a merchant to collect payments from consumers and receive settlement proceeds in the same currency. This product is ideally suited for multi-national enterprises, or companies that have foreign currency requirements, desire to in-source foreign exchange management, or have foreign operations/obligations to fund.

Example: Merchant A markets a product/service in Australian Dollars, bills the consumer in Australian Dollars, and receives an Australian Dollar settlement from Chase Paymentech.

Presentment/Settlement Currencies	ISO Currency Code	Currency Decimals
Australian Dollar	036	2
British Pound	826	2
Canadian Dollar	124	2
Danish Krone	208	2
Euro	978	2
Hong Kong Dollar	344	2
Japanese Yen	392	0
New Zealand Dollar	554	2
Norwegian Krone	578	2
South African Rand	710	2
Swedish Krona	752	2
Swiss Franc	756	2
US Dollar	840	2

Continued on next page

Cross-Currency Processing

Cross currency processing allows a merchant to collect payments from consumers in one currency and receive settlement proceeds in a different currency. This product is ideally suited for merchants who are only domiciled in a single country (primarily the USA) and need to consolidate foreign currency settlement.

Example: Merchant B markets a product/service in Australian Dollars, bills the consumer in Australian Dollars, and receives a U.S Dollar settlement from Chase Paymentech.

Presentment Currencies

The following chart lists all presentment currencies, ISO Currency Codes, and Currency Decimals.

Note: Please contact your Chase Paymentech Representative for supported Methods of Payment and Settlement Currencies.

Presentment Currencies by Country	ISO Currency Codes	Currency Decimals
Algerian Dinar	012	2
Argentine Peso	032	2
Armenian Dram	051	2
Aruban Guilder	533	2
Australian Dollar	036	2
Azerbaijanian Manat	944	2
Bahamian Dollar	044	2
Bangladeshi Taka	050	2
Barbados Dollar	052	2
Belarussian Ruble	974	0
Belize Dollar	084	2
Bermudian Dollar	060	2
Bolivian Boliviano	068	2
Botswana Pula	072	2
Brazilian Real	986	2
British Pound	826	2
Brunei Dollar	096	2

Continued on next page

Presentment Currencies, (Continued)

Presentment Currencies by Country	ISO Currency Codes	Currency Decimals
Bulgarian Lev	975	2
Burundi Franc	108	0
CFA Franc BCEAO	952	0
CFA Franc BEAC	950	0
CFP Franc	953	0
Canadian Dollar	124	2
Cambodian Riel	116	2
Cape Verdi Escudo	132	2
Cayman Islands Dollar	136	2
Chilean Peso	152	2
Chinese Yuan Renminbi	156	2
Colombian Peso	170	2
Comoro Franc	174	0
Costa Rican Colon	188	2
Czech Koruna	203	2
Danish Krone	208	2
Djibouti Franc	262	0
Dominican Peso	214	2
East Caribbean Dollar	951	2
Egyptian Pound	818	2
El Salvador Colon	222	2
Estonian Kroon	233	2
Ethiopian Birr	230	2
Euro	978	2
Falkland Islands Pound	238	2

Continued on next page

Presentment Currencies, (Continued)

Presentment Currencies by Country	ISO Currency Codes	Currency Decimals
Fiji Dollar	242	2
Gambian Dalasi	270	2
Georgian Lari	981	2
Ghanaian Cedi	288	2
Gibraltar Pound	292	2
Guatemala Quetzal	320	2
Guinea Franc	324	2
Guinea-Bissau Peso	624	2
Guyanese Dollar	328	2
Haitian Gourde	332	2
Honduras Limpera	340	2
Hong Kong Dollar	344	2
Hungarian Forint	348	2
Iceland Krona	352	2
Indian Rupee	356	2
Israeli New Shekel	376	2
Jamaican Dollar	388	2
Japanese Yen	392	0
Kazakhstan Tenge	398	2
Kenyan Shilling	404	2
Kyrgyzstan Som	417	2
Laos Kip	418	0
Latvian Lats	428	2
Lebanese Pound	422	2
Lithuanian Litas	440	2
Macau Pataca	446	2

Continued on next page

Presentment Currencies, (Continued)

Presentment Currencies by Country	ISO Currency Codes	Currency Decimals
Malagasy Franc	450	0
Malawi Kwacha	454	2
Malaysian Ringgit	458	2
Maldive Rufiyaa	462	2
Mauritania Ouguiya	478	2
Mauritius Rupee	480	2
Mexican Peso	484	2
Moldovan Leu	498	2
Mongolia Tugrik	496	2
Moroccan Dirham	504	2
Mozambique Metical	943	2
Namibia Dollar	516	2
Nepalese Rupee	524	2
Netherlands Antillean Guilder	532	2
New Guinea Kina	598	2
New Zealand Dollar	554	2
Nicaraguan Cordoba Oro	558	2
Nigerian Naira	566	2
Norwegian Krone	578	2
Pakistan Rupee	586	2
Panamanian Balboa	590	2
Paraguay Guarani	600	0
Peruvian Nuevo Sol	604	2
Philippines Peso	608	2

Continued on next page

Presentment Currencies, (Continued)

Presentment Currencies by Country	ISO Currency Codes	Currency Decimals
Polish Zloty	985	2
Qatari Rial	634	2
Romania Leu	946	2
Russian Ruble	643	2
Rwanda Franc	646	0
St. Helena Pound	654	2
Samoan Tala	882	2
Sao Tome & Principe Dobra	678	2
Saudi Riyal	682	2
Seychelles Rupee	690	2
Sierra Leonean Leone	694	2
Singapore Dollar	702	2
Solomon Islands Dollar	090	2
Somali Shilling	706	2
South African Rand	710	2
South Korean Won	410	0
Sri Lanka Rupee	144	2
Swaziland Lilangeni	748	2
Swedish Krona	752	2
Swiss Franc	756	2
Taiwan Dollar (New)	901	2
Tanzanian Shilling	834	2
Thai Baht	764	2
Tonga Pa'anga	776	2
Trinidad & Tobago Dollar	780	2

Continued on next page

Presentment Currencies, (Continued)

Presentment Currencies by Country	ISO Currency Codes	Currency Decimals
Turkish Lira (New)	949	0
Uganda Shilling	800	2
Ukrainian Hryvnia	980	2
United Arab Emirates Dirham	784	2
Uruguayan Peso	858	2
US Dollar	840	2
Uzbekistan Sum	860	2
Vanuatu Vatu	548	0
Venezuelan Bolivar	862	2
Vietnamese Dong	704	2
Yemeni Rial	886	2
Zambia Kwacha	894	2
Zimbabwe Dollar	716	2

Note: Bold Presentment Currencies have test divisions available.

APPENDIX G: PARTIAL AUTHORIZATION

Introduction

Partial authorization functionality allows a merchant to receive an approval for a portion of the original amount when the full amount cannot be approved. Defaults for partial authorization handling are set at the division level. In some instances the defaults can be overridden at a transaction level. This appendix will provide the details for processing partial authorizations.

How It Works

Default Set Up for the Merchant's Transaction Division

Default settings are entered into the Chase Paymentech processing system to manage the outcome of a partial authorization request at the transaction division level. If the merchant's transaction division is set to a default to either allow or not allow a partial authorization, the default can be overridden at the transaction level for International Maestro, MasterCard, MasterCard Diners, Visa, Discover, and RevolutionCard. The division default cannot be overridden for American Express.

Conditional Deposits and Deposits

Partial authorizations cannot be performed on Conditional Deposit transactions.

If a Deposit transaction is re-authorized per Chase Paymentech's normal process for obtaining best interchange, a partial authorization will not be performed.

Continued on next page

American Express

For **American Express** the following chart lists conditions and results when populating the Partial Redemption Indicator Flag.

	REQUEST		REPLY		
Division Default	Partial Redemption Indicator Flag	Amount of Authorization	Response Reason Code	Current Balance	Redemption Amount
1	N		263		
1	Y or not sent	Greater than available balance	100		Populated with approved, authorized, amount
1	Y or not sent	Less than or equal to available balance	100		
2	Y		263		
2	N or not sent	Greater than available balance	Decline	Populated with available balance	
2	N or not sent	Less than or equal to available balance	100		
3	Y or not sent	Greater than available balance	100		Populated with approved, authorized amount
3	N	Greater than available balance	Decline	Populated with correct available balance	
3	Y or not sent	Less than or equal to available balance	100		
3	N	Less than or equal to available balance	100		
0	Y or N		263		

Continued on next page

American Express, (Continued)

American Express Division Default Keys:

1	Do partial authorization and return redemption amount if authorized amount > available balance.
2	Decline if the amount is > available balance and return current balance (Partial Authorization not allowed).
3	Merchant is able to support the actions of division defaults ‘1’ and ‘2’.
0	Division has not been certified with American Express for Partial Authorization

Note: If Partial Redemption Indicator Flag is not sent with the transaction the division default is used. If the division default is ‘3’, a partial authorization is attempted.

Continued on next page

Discover

For **Discover** the following charts list the conditions and results when populating the Partial Redemption Indicator Flag.

Notes: The sale amount must be fully approved before the cash back amount may be fully or partially approved.

If the S-record amount is greater than the available balance, then the Redemption Amount will be returned for transactions that are approved.

	Request		**Reply**		
	S-Record Amount				
Partial Redemption Indicator Flag / Division Default	Sale Amount	Cash Back Amount Requested	Response Reason Code	Redemption Amount	Cash Back Amount Approved
B / 1	Greater than or equal to available balance	Y	100	Populated with approved, authorized amount	Zero filled
Bal = $70.00	$80.00	$20.00		$70.00	$0.00
B / 1	Less than available balance	Y Plus sale amount is greater than available balance	100	Populated with approved, authorized amount	Populated with approved, authorized amount
Bal = $70.00	$60.00	$20.00		$60.00	$10.00
B / 1	Less than available balance	Y Plus sale amount is less than available balance	100		Populated with approved, authorized amount
Bal = $70.00	$40.00	$20.00			$20.00

Continued on next page

Discover, (Continued)

Discover Chart, (Continued)

Notes: The sale amount must be fully approved before the cash back amount may be fully or partially approved.

If the S-record amount is greater than the available balance, then the Redemption Amount will be returned for transactions that are approved.

	Request		**Reply**		
	S-Record Amount				
Partial Redemption Indicator Flag / Division Default	Sale Amount	Cash Back Amount Requested	Response Reason Code	Redemption Amount	Cash Back Amount Approved
B / 1	Less than available balance	Y Plus sale amount is equal to available balance	100		Populated with approved, authorized amount
Bal = $70.00	$50.00	$20.00			$20.00
B / 1	Less than or equal to available balance	N	100		
Bal = $70.00	$70.00				
B / 1	Greater than available balance	N	100	Populated with approved, authorized amount	
Bal = $70.00	$80.00			$70.00	

Continued on next page

Discover, (Continued)

Discover Chart, (Continued)

Notes: The sale amount must be fully approved before the cash back amount may be fully or partially approved.

If the S-record amount is greater than the available balance, then the Redemption Amount will be returned for the transactions that are approved.

	Request		**Reply**		
	S-Record Amount				
Partial Redemption Indicator Flag / Division Default	Sale Amount	Cash Back Amount Requested	Response Reason Code	Redemption Amount	Cash Back Amount Approved
C / 3	Greater than available balance	Y	Declined		Zero filled
Bal = $70.00	$80.00	$20.00			$0.00
C / 3	Equal to available balance	Y	100	Populated with approved, authorized amount	Zero filled
Bal = $70.00	$70.00	$20.00		$70.00	$0.00
C / 3	Less than available balance	Y	100		Populated with approved, authorized amount
Bal = $70.00	$40.00	$20.00			$20.00
C / 3	Less than available balance	Y Plus sale amount is greater than available balance	100	Populated with approved, authorized amount	Populated with approved, authorized amount
Bal = $70.00	$60.00	$20.00		$60.00	$10.00

Continued on next page

Discover, (Continued)

Discover Chart, (Continued)

Notes: The sale amount must be fully approved before the cash back amount may be fully or partially approved.

If the S-record amount is greater than the available balance, then the Redemption Amount will be returned for transactions that are approved.

	Request		**Reply**		
	S-Record Amount				
Partial Redemption Indicator Flag / Division Default	Sale Amount	Cash Back Amount Requested	Response Reason Code	Redemption Amount	Cash Back Amount Approved
C / 3	Less than or equal to available balance	N	100		
Bal = $70.00	$70.00				
C / 3	Greater than available balance	N	Declined		
Bal = $70.00	$80.00				

Continued on next page

Discover, (Continued)

Discover Chart, (Continued)

Notes: The sale amount must be fully approved before the cash back amount may be fully or partially approved.

If the S-record amount is greater than the available balance, then the Redemption Amount will be returned for transactions that are approved.

	Request		**Reply**		
	S-Record Amount				
Partial Redemption Indicator Flag / Division Default	Sale Amount	Cash Back Amount Requested	Response Reason Code	Redemption Amount	Cash Back Amount Approved
N / 0	Less than or equal to available balance	Y Plus Cash Back amount is less than or equal to available balance	100		Populated with approved, authorized amount
Bal = $70.00	$50.00	$20.00			$20.00
N / 0	Less than or equal to available balance	Y Plus Cash Back amount is greater than available balance	Declined		Zero filled
Bal = $70.00	$60.00	$20.00			$0.00
N / 0	Less than or equal to available balance	N	100		
Bal = $70.00	$70.00				
N / 0	Greater than available balance	N	Declined		
Bal = $70.00	$80.00				

Continued on next page

Discover, (Continued)

Discover Chart, (Continued)

Notes: The sale amount must be fully approved before the cash back amount may be fully or partially approved.

If the S-record amount is greater than the available balance, then the Redemption Amount will be returned for transactions that are approved.

	Request		**Reply**		
	S-Record Amount				
Partial Redemption Indicator Flag / Division Default	Sale Amount	Cash Back Amount Requested	Response Reason Code	Redemption Amount	Cash Back Amount Approved
Y / 2	Less than, greater than or equal to available balance	Y Plus sale amount is greater than available balance	100	Populated with approved, authorized amount	Zero filled
Bal = $70.00	$80.00	$20.00		$70.00	$0.00
Y / 2	Less than available balance	Y Plus sale amount is less than or equal to available balance	100		Populated with approved, authorized amount
Bal = $70.00	$50.00	$20.00			$20.00
Y / 2	Less than, or equal to available balance	N	100		
Bal = $70.00	$70.00				
Y / 2	Greater than available balance	N	100	Populated with approved, authorized amount	
Bal = $70.00	$80.00			$70.00	

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Discover, (Continued)

Discover Chart, (Continued)

Notes: The sale amount must be fully approved before the cash back amount may be fully or partially approved.

If the S-record amount is greater than the available balance, then the Redemption Amount will be returned for transactions that are approved.

	Request		**Reply**		
	S-Record Amount				
Partial Redemption Indicator Flag / Division Default	Sale Amount	Cash Back Requested	Response Reason Code	Redemption Amount	Cash Back Amount Approved
X / 4	Greater or equal to than available balance	Y	Decline		Zero filled
Bal = $70.00	$80.00	$20.00			$0.00
X / 4	Less than available balance	Y Plus sale amount is less than or equal to available balance	100		Populated with approved, authorized amount
Bal = $70.00	$50.00	$20.00			$20.00
X / 4	Less than available balance	Y Plus sale amount is greater than available balance	100	Populated with approved, authorized amount	Zero filled
Bal = $70.00	$60.00	$20.00		$60.00	$0.00

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Discover, (Continued)

Discover Chart, (Continued)

Notes: The sale amount must be fully approved before the cash back amount may be fully or partially approved.

If the S-record amount is greater than the available balance, then the Redemption Amount will be returned for transactions that are approved.

	Request		**Reply**		
	S-Record Amount				
Partial Redemption Indicator Flag / Division Default	Sale Amount	Cash Back Requested	Response Reason Code	Redemption Amount	Cash Back Amount Approved
X / 4	Greater than available balance	N	Decline		
Bal = $70.00	$80.00				
X / 4	Less than or equal to available balance	N	100		
Bal = $70.00	$70.00				

Continued on next page

Discover,
(Continued)

Discover Division Default Keys:

0	Merchant does not support partial authorization. Partial authorization not allowed for both sale amount and cash back amount.
1	Both sale amount and cash back may be partially approved. The sale amount must be fully approved before the cash back amount can be partially approved.
2	The sale amount can be partially approved but the cash back amount cannot be partially approved.
3	The sale amount must be fully approved before the cash back amount may be partially approved.
4	Merchant may support partial auth, but the sale amount must be fully approved before the cash back amount can be approved. Neither the sale amount nor the cash back amount can be partially approved.

Note: If Partial Redemption Indicator Flag is not sent with the transaction, the division default is used.

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International Maestro, MasterCard, MasterCard Diners, and Visa

For **International Maestro, MasterCard, MasterCard Diners,** and **Visa** the following chart lists the details when populating the Partial Redemption Indicator Flag.

	REQUEST	**REPLY**		
Partial Redemption Indicator Flag/ Division Default	Amount of Authorization	Response Reason Code	Current Balance	Redemption Amount
Y/1	Greater than available balance	100	May be populated with available balance (should be $0.00)	Populated with approved, authorized amount
N/1	Greater than available balance	Decline		
Y/1	Less than or equal to available balance	100	May be populated with available balance	
N/1	Less than or equal to available balance	100		
Y/0	Greater than available balance	100	May be populated with available balance (should be $0.00)	Populated with approved authorized amount
N/0	Greater than available balance	Decline		

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International Maestro, MasterCard, MasterCard Diners, and Visa, (Continued)

For **International Maestro, MasterCard, MasterCard Diners,** and **Visa** the following chart lists the details when populating the Partial Redemption Indicator Flag.

	REQUEST	REPLY		
Partial Redemption Indicator Flag/ Division Default	Amount of Authorization	Response Reason Code	Current Balance	Redemption Amount
Y/0	Less than or equal to available balance	100	May be populated with available balance	
N/0	Less than or equal to available balance	100		

Division Default Keys International Maestro, MasterCard, MasterCard Diners, and Visa:

1	Do partial authorization and return redemption amount if authorized amount > available balance.
0	Partial authorization not allowed – no return of current balance.

Notes: If Partial Redemption Indicator Flag is not sent with the transaction the division default is used.

If Visa, MasterCard, or MasterCard Diners returns a current balance on the authorization, it will be returned with the transaction response.

Fuel transactions (MCC = 5542) behave differently. Contact your Chase Paymentech Representative for further details.

For MasterCard fuel transactions where partial authorizations are enabled, the redemption amount can be greater than the amount of the transaction.

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MoneyPak For **MoneyPak** the following chart lists the details when populating the Partial Redemption Indicator Flag.

	REQUEST	REPLY		
Partial Redemption Indicator Flag/ Division Default	Amount of Authorization	Response Reason Code	Current Balance	Redemption Amount
Y/1	Greater than available balance	100		Populated with approved, authorized amount
N/1	Greater than available balance	Decline		
Y/1	Less than or equal to available balance	100		
N/1	Less than or equal to available balance	100		
Y/0	Greater than available balance	100		Populated with approved authorized amount
N/0	Greater than available balance	Decline		
Y/0	Less than or equal to available balance	100		
N/0	Less than or equal to available balance	100		

Division Default Keys MoneyPak:

1	Do partial authorization and return redemption amount if authorized amount > available balance.
0	Partial authorization not allowed – no return of current balance.

Note: If Partial Redemption Indicator Flag is not sent with the transaction the division default is used.

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Revolution Card

For **RevolutionCard** the following chart lists the details when populating the Partial Redemption Indicator Flag.

	REQUEST	REPLY		
Partial Redemption Indicator Flag/ Division Default	Amount of Authorization	Response Reason Code	Current Balance	Redemption Amount
Y/1	Greater than available balance	100	May be populated with available balance (should be $0.00)	Populated with approved, authorized amount
N/1	Greater than available balance	Decline		
Y/1	Less than or equal to available balance	100	May be populated with available balance	
N/1	Less than or equal to available balance	100		
Y/0	Greater than available balance	100	May be populated with available balance (should be $0.00)	Populated with approved authorized amount
N/0	Greater than available balance	Decline		
Y/0	Less than or equal to available balance	100	May be populated with available balance	
N/0	Less than or equal to available balance	100		

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Revolution Card, (Continued)

Division Default Keys RevolutionCard:

1	Do partial authorization and return redemption amount if authorized amount > available balance.
0	Partial authorization not allowed – no return of current balance.

Notes: If Partial Redemption Indicator Flag is not sent with the transaction the division default is used.

If Revolution Money returns a current balance on the authorization, it will be returned with the transaction response.

Fuel transactions (MCC = 5542) behave differently. Contact your Chase Paymentech representative for details.

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Transaction Types and Requirements

The following transaction requirements describe authorizations for Credit Card transactions.

Online

Request:

1. Online Processing Detail Record
    a. Action Code = AU
2. Format indicator
    a. Partial Authorization (PB)

Response:

1. Online Processing Return Format Record
2. Reply Format Indicator
    a. Partial Authorization (PB) (Optional)

Batch

Request:

1. Detail Record
    a. Action Code = AU
2. Product Record
    a. Partial Authorization (PPB001)

Response:

1. “S” Record Output
2. Product Record
    a. Partial Authorization (PPB001) (Optional)

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Transaction Types and Requirements, (Continued)

The following transaction requirements describe authorizations (both AU and PA) for RevolutionCard transactions.

Online

Request:

1. Online Processing Detail Record
    a. Action Code = AU or PA
    b. MOP = RC
2. Format Indicators
    a. Partial Authorization (PB)
    b. RevolutionCard (RC)
    c. Retail (RE) or Retail 3 (R3) - Required when Action Code = PA

Response:

1. Online Processing Return Format Record
2. Reply Format Indicator
    a. Partial Authorization (PB) (Optional)
    b. RevolutionCard (RC)

Batch

Request:

1. Detail Record
    a. Action Code = AU
2. Extension Record
    a. RevolutionCard (ERC001) (Optional)
3. Product Record
    a. Partial Authorization (PPB001)

Response:

1. "S" Record Output
2. Extension Record
    a. RevolutionCard (ERC001)
3. Product Record
    a. Partial Authorization (PPB001) (Optional)

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Transaction Types and Requirements, (Continued)

The following transaction requirements define MoneyPak transactions.

Online

Request:

1. Online Processing Detail Record
    a. Action Code = PA
    b. MOP = MP
2. Format Indicators
    a. Partial Authorization (PB)
    b. MoneyPak (MP)

Response:

1. Online Processing Return Format Record
2. Reply Format Indicator
    a. Partial Authorization (PB) (Optional)
    b. MoneyPak (MP) (Optional)

Batch

Request:

1. Detail Record
    a. Action Code = PA
2. Extension Record
    a. MoneyPak (EMP001) (Optional)
3. Product Record
    a. Partial Authorization (PPB001)

Response:

1. "S" Record Output
2. Extension Record
    a. MoneyPak (EMP001) (Optional)
3. Product Record
    a. Partial Authorization (PPB001) (Optional)

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Card Types / Supported Currencies	American Express, Discover, International Maestro, MasterCard, MasterCard Diners, MoneyPak, RevolutionCard, Visa / All currencies.
Response Reason Codes	See *Appendix A: Response Reason Code Description/Usage*
To Get Started	Contact your Chase Paymentech representative.

APPENDIX I: MASTERCARD SECURECODE

Introduction

MasterCard SecureCode is a solution designed to authenticate cardholders when paying online. SecureCode offers a mechanism for securing the Internet channel by strongly authenticating the cardholder at the point of interaction by providing a unique transaction-specific token that provides evidence that the cardholder originated the transaction. SecureCode uses MasterCard's Universal Cardholder Authentication Field (UCAF) infrastructure to communicate the authentication information among the cardholder, Issuer, merchant and Acquirer.

MasterCard SecureCode supports the 3-D Secure Protocol. MasterCard SecureCode requires merchants to install a 3-D Secure v1.0.2 compliant Merchant Server Plug-In software application.

International Maestro supports the same SecureCode features as MasterCard.

How It Works

The cardholder shops at a participating SecureCode Internet Merchant with no changes to the shopping or checkout. The cardholder selects the merchandise to be purchased and proceeds to the checkout. At the checkout, the cardholder may complete the purchase and payment information in a variety of ways, including self-entered, electronic wallet, merchant one-click, or using other checkout capabilities.

After the purchase and payment information is entered, the consumer hits the "buy" button and the Confirmation page goes back to the merchant.

The merchant plug-in (MPI) activates and checks its local cache and the MC Directory Server to determine if the customer card number is part of a participating MasterCard SecureCode BIN range. If so, a Verify Enrollment Request message will be sent from the MPI, to the MC Directory Server and forwarded to the Issuer Access Control Server (ACS) to determine if authentication is available for the cardholders account number. The MC Directory Server sends the Issuer ACS response to the MPI. If authentication is available, the message response provides the web address for the Issuer ACS where the cardholder authentication will begin. (If authentication is not available, the merchant server receives an "authentication not available" message and returns the transaction to the merchant's commerce server to proceed with a standard Authorization Request.)

The MPI sends a message and script directing the cardholder's browser to establish a session with the Issuer ACS to perform authentication. The in-line authentication window displays Issuer-specific and MC branding, transaction details – including merchant name and sale amount, and prompts the cardholder to enter their secure code (e.g. password). If the password is entered correctly, the transaction continues. The cardholder is allowed a limited number of password attempts, typically 3 to 5, as defined by the Issuer ACS. If unable to correctly enter the password, the cardholder may access the password hint that was established during registration. If the password is incorrectly entered more times than the Issuer limit, a failed Payer Authentication Response is returned to the merchant.

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How It Works, (Continued)

The Issuer ACS retrieves the authentication information and compares it against the data that was registered during the initial cardholder registration process. If the data matches, a success page is presented to the cardholder and the Issuer ACS sends a message through the browser to the merchant providing evidence of cardholder authentication, including a 28-byte AAV. This AAV is generated cryptographically using Issuer-specific secret keys that are synchronized with keys at the Issuer's authorization platform.

For a fully authenticated transaction, the merchant will send the AAV with Transaction Type 5 to Chase Paymentech.

If the MasterCard Authentication record is sent without the CAVV, the CAVV is not sent in Base 64 encoding, or is sent for a non-e-Commerce transaction, Response Reason Code 245 (missing or Invalid Secure Payment Data) will be returned.

Chase Paymentech will pass the AAV and Transaction Type to MasterCard with the authorization request. These fields are used during authorization processing to verify that authentication, or attempted authentication, was performed and to qualify for the e-Commerce Custom Payment Services.

Non-participating MasterCard SecureCode Issuers: Participating MasterCard SecureCode merchants that attempt to authenticate a cardholder and the Issuer is not participating in MasterCard SecureCode will not receive an AAV Merchants must pass these transactions with Transaction Type 6.

Activation During Shopping (ADS): Cardholders that are not enrolled in SecureCode may be presented with an enrollment window while shopping at a SecureCode merchant's website. Unlike the traditional enrollment process, ADS does not require the consumer to visit an enrollment web site before shopping. This type of enrollment takes place during the shopping process. When an eligible consumer goes to checkout, the card-issuing bank will ask a series of questions – similar to the traditional enrollment process. Providing the correct answers will result in both a successful enrollment and a successful authentication response returned to the merchant. The merchant must send the AAV they receive to Chase Paymentech, along with Transaction Type of 5. If the cardholder chooses to opt-out of enrollment during shopping, the Issuer will pass an AAV to the merchant. In this case, the merchant is not required to submit the AAV with the authorization, but must send Transaction Type of 6.

Non-Participating SecureCode Issuer: Participating SecureCode Merchants that attempt to authenticate a cardholder and the Issuer is not participating in SecureCode will not receive an AAV. Merchants must pass these transactions with Transaction Type of 6.

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Processing Requirements for Merchants Using International Maestro and Maestro Advanced Registration Program (MARP)

The Maestro Advanced Registation Program (MARP) allows enrolled merchants to accept Maestro cards for e-commerce transactions without using SecureCode for every transaction. However, merchants are required to perform a full authentication on the first transaction they perform for any individual cardholder. An enrolled MARP merchant is provided with a static Accountholder Authentication Value (AAV) for use with transactions that are processed without SecureCode authentication.

Once a merchant has registered in the MARP, all cardholders must go through the SecureCode process again, regardless of whether the cardholder has gone through SecureCode prior to the merchant's registration. After the cardholder has gone through SecureCode and has been approved, the cardholder is not required to go through SecureCode for subsequent transactions. The Method of Payment affected is IM (International Maestro).

For the first International Maestro e-commerce transaction, the merchant must request SecureCode authentication before submitting the transaction for authorization. If that transaction is subsequently authorized by the issuer, it is guaranteed to the merchant, regardless of whether the Issuer or cardholder participates in SecureCode.

The merchant populates the first SecureCode transaction as they do any SecureCode transaction.

Fully Authenticated Transactions

For the first transaction that is fully authenticated, the merchant populates:

1. Transaction Type field with "5" (ECI Indicator – Secure Electronic Commerce Transaction), and
2. AAV field with what was returned at authentication.

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Processing Requirements for Merchants Using International Maestro and Maestro Advanced Registration Program (MARP), (Continued)

Attempted Authentication Transactions

For the first transaction that is an attempted authentication, the merchant populates:

1. Transaction Type field with “6” (ECI Indicator – Non-Authenticated Electronic Commerce Transaction), and
2. AAV field with blanks.

If the first International Maestro e-commerce transaction for the cardholder who has registered with the merchant is authorized by the Issuer, the merchant can skip the SecureCode authentication on subsequent transactions by the same customer using the same International Maestro account.

Subsequent Transactions

For subsequent transactions, the merchant populates:

1. Transaction Type Field with “5” (ECI Indicator – Secure Electronic Commerce Transaction), and
2. AAV field with the assigned static AAV.

If a registered cardholder uses a different International Maestro account for a transaction, the merchant must request SecureCode authentication before submitting the transaction for authorization.

The merchant always has the option of requesting SecureCode authentication for any International Maestro transaction, in which case the transaction is governed by Maestro rules. If the transaction is subsequently authorized by the Issuer, it is guaranteed to the acquirer or its merchant, regardless of whether the Issuer or cardholder participates in SecureCode as determined by the merchant request.

Issuers may chargeback transactions that are processed using the static AAV.

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Merchant Requirements

The merchant must install a certified 3-D Secure Merchant Plug-in software application.

The merchant must verify that Merchant Plug-in will provide AAV in Base 64 encoding. If not, the merchant will have to convert to Base 64 before sending to Chase Paymentech.

In the settlement of a MasterCard SecureCode transaction, merchants are strongly encouraged to submit the MasterCard Authentication Extension Record. In the event that Chase Paymentech has to perform a new authorization, the authentication data (AAV) will be included in the new authorization. By doing so, the merchant will maintain the MasterCard SecureCode chargeback liability shift for authenticated transactions.

Merchants must map the MasterCard Electronic Commerce Indicator (ECI) they receive via their MPI to the appropriate Chase Paymentech Transaction Type:

Transaction Description	MasterCard ECI Returned in MPI	Chase Paymentech Transaction Type
Fully Authenticated	02	5
Attempted Authentication	01	6
Authentication Failed or Not Available	Absent	7

Test and certify with Chase Paymentech to become MasterCard SecureCode enabled.

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Merchant Guidelines	• Merchants are required to request authorization for all SecureCode e-Commerce transactions. • For International Maestro, it is highly recommended that merchants send SecureCode for e-Commerce transactions. • Merchants must supply the AAV on all authorization attempts. • Initial SecureCode authorization requests with AAVs older than 30 calendar days may be declined by the Issuer. • Subsequent authorization attempts must include the AAV. • Recurring payments should include AAV data for the initial authorization request only. Merchants must not provide authentication data in recurring payment authorizations as these are not considered e-Commerce transactions by MasterCard and subsequently are not eligible for MasterCard SecureCode processing.
Card Types / Supported Currencies	MasterCard, International Maestro / All currencies
Response Reason Codes	See *Appendix A: Response Reason Code Description/Usage*
To Get Started	Contact your Chase Paymentech Representative.

APPENDIX J: UK DOMESTIC MAESTRO SECURECODE

Introduction

UK Domestic Maestro SecureCode is a solution designed to authenticate cardholders when paying on-line. SecureCode offers a mechanism for securing the Internet channel by strongly authenticating the cardholder at the point of interaction by providing a unique transaction-specific token that provides evidence that the cardholder originated the transaction. SecureCode uses UK Domestic Maestro's Universal Cardholder Authentication Field (UCAF) infrastructure to communicate the authentication information among the cardholder, Issuer, merchant and Acquirer.

UK Domestic Maestro SecureCode supports the 3-D Secure Protocol (same as Verified by Visa). UK Domestic Maestro SecureCode requires merchants to install a 3-D Secure v1.0.2 compliant Merchant Server Plug-In software application.

How It Works

The cardholder shops at a participating SecureCode Internet Merchant with no changes to the shopping or checkout. The cardholder selects the merchandise to be purchased and proceeds to the checkout. At the checkout, the cardholder may complete the purchase and payment information in a variety of ways, including self-entered, electronic wallet, merchant one-click, or using other checkout capabilities.

After the purchase and payment information is entered, the consumer hits the "buy" button and the Confirmation page goes back to the merchant.

The merchant plug-in (MPI) activates and checks its local cache and the UK Domestic Maestro Directory Server to determine if the customer card number is part of a participating UK Domestic Maestro SecureCode BIN range. If so, a Verify Enrollment Request message will be sent from the MPI, to the UK Domestic Maestro Directory Server and forwarded to the Issuer Access Control Server (ACS) to determine if authentication is available for the cardholders account number. The UK Domestic Maestro Directory Server sends the Issuer ACS response to the MPI. If authentication is available, the message response provides the web address for the Issuer ACS where the cardholder can be authenticated. (If authentication is not available, the merchant server receives an "authentication not available" message and returns the transaction to the merchant's commerce server to proceed with a standard Authorization Request.)

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How It Works, (Continued)

The MPI sends a message and script directing the cardholder's browser to establish a pop-up session with the Issuer ACS. The pop-up window displays Issuer-specific and UK Domestic Maestro branding, transaction details – including merchant name and sale amount, and prompts the cardholder to enter their secure code (e.g. password). If the password is entered correctly, the transaction continues. The cardholder is allowed a limited number of password attempts, typically 3 to 5, as defined by the Issuer ACS. If unable to correctly enter the password, the cardholder may access the password hint that was established during registration. If the password is incorrectly entered more times than the Issuer limit, a failed Payer Authentication Response is returned to the merchant.

The Issuer ACS retrieves the authentication information and compares it against the data that was registered during the initial cardholder registration process. If the data matches, a success page is presented to the cardholder and the Issuer ACS sends a message through the browser to the merchant providing evidence of cardholder authentication, including a 28-byte AAV. This AAV is generated cryptographically using Issuer-specific secret keys that are synchronized with keys at the Issuer's authorization platform.

For a fully authenticated transaction, the merchant will send the AAV with Transaction Type 5 to Chase Paymentech.

If the UK Domestic Maestro Authentication record is sent or is sent for without the AAV, the AAV is not sent in Base 64 encoding, a non-e-Commerce transaction Response Reason Code 245 (missing or Invalid Secure Payment Data) will be returned.

Chase Paymentech will pass the AAV and Transaction Type to UK Domestic Maestro with the authorization request. These fields are used during authorization processing to verify that authentication, or attempted authentication, was performed and to qualify for the e-Commerce Custom Payment Services.

Non-participating UK Domestic Maestro SecureCode Issuers: Participating UK Domestic Maestro SecureCode merchants that attempt to authenticate a cardholder and the Issuer is not participating in UK Domestic Maestro SecureCode will not receive an AAV. Merchants must pass these transactions with Transaction Type 6.

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Processing Requirements for Merchants Using UK Domestic Maestro and Maestro Advanced Registration Program (MARP)

The Maestro Advanced Registation Program (MARP) allows enrolled merchants to accept Maestro cards for e-commerce transactions without using SecureCode for every transaction. However, merchants are required to perform a full authentication on the first transaction they perform for any individual cardholder. An enrolled MARP merchant is provided with a static Accountholder Authentication Value (AAV) for use with transactions that are processed without SecureCode authentication.

Once a merchant has registered in the MARP, all cardholders must go through the SecureCode process again, regardless of whether the cardholder has gone through SecureCode prior to the merchant's registration. After the cardholder has gone through SecureCode and has been approved, the cardholder is not required to go through SecureCode for subsequent transactions.

For the first UK Domestic Maestro e-commerce transaction, the merchant must request SecureCode authentication before submitting the transaction for authorization. If that transaction is subsequently authorized by the Issuer, it is guaranteed to the merchant, regardless of whether the Issuer or cardholder participates in SecureCode.

The merchant populates the first SecureCode transaction as they do any SecureCode transaction.

Fully Authenticated Transactions

For the first transaction that is fully authenticated, the merchant populates:

1. Transaction Type field with "5" (ECI Indicator – Secure Electronic Commerce Transaction), and
2. AAV field with what was returned at authentication.

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Processing Requirements for Merchants Using UK Domestic Maestro and Maestro Advanced Registration Program (MARP), (Continued)

Attempted Authentication Transactions

For the first transaction that is an attempted authentication, the merchant populates:

1. Transaction Type field with “6” (ECI Indicator – Non-Authenticated Electronic Commerce Transaction), and
2. AAV field with blanks.

If the first UK Domestic Maestro e-commerce transaction for the cardholder who has registered with the merchant is authorized by the Issuer, the merchant can skip the SecureCode authentication on subsequent transactions by the same customer using the same UK Domestic Maestro account.

Subsequent Transactions

For subsequent transactions, the merchant populates the transaction as follows:

1. Transaction Type Field with “5” (ECI Indicator – Secure Electronic Commerce Transaction), and
2. AAV field with the assigned static AAV.

If a registered cardholder uses a different UK Domestic Maestro account for a transaction, the merchant must request SecureCode authentication before submitting the transaction for authorization.

The merchant always has the option of requesting SecureCode authentication for any UK Domestic Maestro transaction, in which case the transaction is governed by Maestro rules. If the transaction is subsequently authorized by the Issuer, it is guaranteed to the acquirer or its merchant, regardless of whether the Issuer or cardholder participates in SecureCode as determined by the merchant request.

Issuers may chargeback transactions that are processed using the static AAV.

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Merchant Requirements

The merchant must install a certified 3-D Secure Merchant Plug-in software application.

The merchant must verify that Merchant Plug-in will provide AAV in Base 64 encoding. If not, the merchant will have to convert to Base 64 before sending to Chase Paymentech.

In the settlement of a UK Domestic Maestro SecureCode transaction, merchants are strongly encouraged to submit the UK Domestic Maestro Authentication Extension Record. In the event that Chase Paymentech has to perform a new authorization, the authentication data (AAV) will be included in the new authorization. By doing so, the merchant will maintain the UK Domestic Maestro SecureCode chargeback liability shift for authenticated transactions.

Merchants must map the UK Domestic Maestro Electronic Commerce Indicator (ECI) they receive via their MPI to the appropriate Chase Paymentech Transaction Type:

Transaction Description	UK Domestic Maestro ECI Returned in MPI	Chase Paymentech Transaction Type
Fully Authenticated	02	5
Attempted Authentication	01	6
Authentication Failed or Not Available	Absent	7

Test and certify with Chase Paymentech to become UK Domestic Maestro SecureCode enabled.

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Merchant Guidelines	• Merchants are required to request authorization for all SecureCode e-Commerce transactions. • Merchants must supply the AAV on all authorization attempts. • Initial SecureCode authorization requests with AAVs older than 30 calendar days may be declined by the Issuer. • Subsequent authorization attempts must include the AAV. • Recurring payments should include AAV data for the initial authorization request only. Merchants must not provide authentication data in recurring payment authorizations as these are not considered electronic commerce transactions by UK Domestic Maestro and subsequently are not eligible for UK Domestic Maestro SecureCode processing.
Card Types / Supported Currencies	UK Domestic Maestro/ British Pound
Response Reason Codes	See *Appendix A: Response Reason Code Description/Usage*
To Get Started	Contact your Chase Paymentech Representative.

END OF THE TECHNICAL SPECIFICATION

120-Byte for Batch Processing Versions 2.0.0 - 3.0.0 Revision 4.0 Addendum In Support of April 2009 Bank Card Regulations Rev. 1

04/17/2009