



developer guide

# POST-Transactions

heidelpay payment platform

The complete solution for eCommerce

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### Document history

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## 1 General

This document describes how to submit transactions to heidelpay's payment-system using the POST-interface provided to developers.

**Please be aware of possible certification requirements for your platform**

**(e.g. PCI DSS for credit card processing)**

**if you decide for integrating your solution using POST-integration**

**sync-POST => PCI certification maybe required**

**async-POST => no PCI certification required**

In the latest there have been cases involving even very large companies storing information about credit-cards who have been denied by acquirers to do so any longer !!  
Contact heidelpay's support if you plan for POST-integration.

## 2 Post Parameter Integrator Messaging

### 2.1 Introduction

The POST Integrator has two basic layers:

- Processing of POST requests and responses
- Transmission of POST parameters

The POST Integrator specification allows for processing of multiple payments methods. Following payment methods are currently supported:

#### **Bank Transfer Methods**

- Direct Debit DD
- Credit Transfer CT
- Prepayment PP
- Invoice IV

#### **Card Payment Methods**

- Credit Card CC
- Debit Card DC

#### **Online Payment Methods (upcoming)**

- Micro Payment MP
- Online Bank Transfer OT

#### **Other Methods**

- Wallet WT
- Risk Management RM

In order to transmit, encrypt and decrypt the following options are currently available:

- Https POST Interface

### 2.2 General Structure

The complete POST Integrator specification was designed to be as easy understandable and polymorphic as possible. That means that all payment methods reuse the same tag set and coding scheme with very minor modifications. The integration of an additional payment method just requires the change of the value of the code attribute of the Payment tag and possibly the addition of a specific tag within the Account tag. No further modifications are mandatory.

## 2.3 Common ID and Coding Scheme

The POST Integrator has a common scheme for IDs and codes for all payment methods. There are three different types:

- Unique IDs
- IDs
- Codes

Unique IDs (UID) have always 32 alphanumeric digits and are used to uniquely identify the physical sender, the channel, the user login, a single transaction, a specific account or customer. IDs have the format 0000.0000.0000 and are used to represent the short ID for a transaction (non unique).

Codes are used for payment or risk management methods, types, status and reason values. All codes are given within the attribute „code“ of the specific tag. They have a hierarchical structure:

Method code format: AA e.g. DD (Direct Debit) or RM (=Risk Mngmt.)

Type code format: AA e.g. DB (Debit) or BL (=Blacklist)

Status code format: 00 e.g. 90 (NEW) or 10 (=NEGATIVE)

Reason code format: 00 e.g. 00 (Successf. P.) or 80 (Acct. in Blacklist)

In order to identify a specific payment or risk management type, the method and type code are concatenated:

Payment / Validator (RM) codes have the format: AA.AA e.g. DD.DB or RM.BL

Every processing result is determined by the processing code and return code. The processing code is simply a concatenation of the method, type, status and reason code:

Processing codes have the format: AA.AA.00.00 e.g. DD.DB.90.00

The codes of very specific messages which help to interpret a specific processing code are given within the return tag:

Return codes have the format: 000.000.000 e.g. 000.100.000

## 2.4 Request Sample

```
REQUEST.VERSION=1.0
SECURITY.SENDER=123a456b789c123d456e789f012g345
USER.LOGIN=123456781234567812345678abcdabcd
USER.PWD=geheim
TRANSACTION.MODE=LIVE
TRANSACTION.RESPONSE=SYNC
TRANSACTION.CHANNEL=546a456b789c123d456e789f012g821
IDENTIFICATION.TRANSACTIONID=MerchantAssignedID
IDENTIFICATION.SHOPPERID=customerid12345
IDENTIFICATION.INVOICEID=20090100012
PAYMENT.CODE=DD.DB
```

```
PRESENTATION.AMOUNT=1.00
PRESENTATION.CURRENCY=EUR
PRESENTATION.USAGE=Order Number 1234
ACCOUNT.HOLDER=Joe Doe
ACCOUNT.NUMBER=618495000
ACCOUNT.BANK=70070024
ACCOUNT.COUNTRY=DE
NAME.GIVEN=Joe
NAME.FAMILY=Doe
ADDRESS.STREET=Leopoldstr. 1
ADDRESS.ZIP=80798
ADDRESS.CITY=München
ADDRESS.STATE=BY
ADDRESS.COUNTRY=DE
CONTACT.EMAIL=info@provider.com
CONTACT.IP=123.123.123.123
```

## 2.5 Response Sample

The HTTPS Post response repeats some information of the request and adds additional parameters to it. The most important additions are the TRANSACTION.UNIQUEID, TRANSACTION.SHORTID and the Processing group parameters.

```
RESPONSE.VERSION=1.0
SECURITY.SENDER=123a456b789c123d456e789f012g345
TRANSACTION.MODE=LIVE
TRANSACTION.RESPONSE=SYNC
TRANSACTION.CHANNEL=546a456b789c123d456e789f012g821
IDENTIFICATION.TRANSACTIONID=MerchantAssignedID
IDENTIFICATION.UNIQUEID=h987i654j321k098l765m432n210o987
IDENTIFICATION.SHORTID=1234.5678.9876
IDENTIFICATION.SHOPPERID=customerid12345
IDENTIFICATION.INVOICEID=20090100012
PROCESSING.CODE=DD.DB.90.00
PROCESSING.TIMESTAMP=2003-02-12 14:58:07
PROCESSING.RESULT=ACK
PROCESSING.STATUS.CODE=90
PROCESSING.STATUS=NEW
PROCESSING.REASON.CODE=00
PROCESSING.REASON=Successful Processing
PROCESSING.RETURN.CODE=000.000.000
PROCESSING.RETURN=Transaction succeeded
PAYMENT.CODE=DD.DB
PRESENTATION.AMOUNT=1.00
PRESENTATION.CURRENCY=EUR
PRESENTATION.USAGE=Order Number 1234
CLEARING.AMOUNT=1.00
CLEARING.CURRENCY=EUR
CLEARING.DESRIPTOR=1234.1234.1234 - Order Number 1234
RISKMANAGEMENT.PROCESS=AUTO
AGGREGATION.RM.AG=true
AGGREGATION.RM.AG.STATUS.CODE=90
AGGREGATION.RM.AG.STATUS=SUCCESS
AGGREGATION.RM.AG.REASON.CODE=90
AGGREGATION.RM.AG.REASON=Risk Management Score is 90
VALIDATOR.RM.AC=true
```



```
VALIDATOR.RM.AC.STATUS.CODE=00
VALIDATOR.RM.AC.STATUS=SUCCESS
VALIDATOR.RM.AC.REASON.CODE=00
VALIDATOR.RM.AC.REASON=Account Validation Successful
VALIDATOR.RM.BC=true
VALIDATOR.RM.BC.STATUS.CODE=00
VALIDATOR.RM.BC.STATUS=SUCCESS
VALIDATOR.RM.BC.REASON.CODE=00
VALIDATOR.RM.BC.REASON=Bank Code Validation Successful
```

## 2.6 Methods and Types

Payment Methods and Types are the most central elements of a request, because they determine the behaviour and the mandatory elements of the request.

In order to build or parse a specific method or type code, there is an easy scheme for all occurrences. All type codes come from the same general set of codes and are totally polymorphic. That means e.g. that the payment code for a direct debit (DD) transaction of type refund (RF):

```
PAYMENT.CODE=DD.RF
```

is the same for a credit card (CC) transaction of type refund (RF), except the preceding method code:

```
PAYMENT.CODE=CC.RF
```

The complete set of method codes is listed below. If you would like to know more about a specific payment or risk management method please refer to the respective business whitepaper.

| Method                        | Code | Description  |
|-------------------------------|------|--|
| <b>Bank Transfer Methods</b>  |      |  |
| Direct Debit                  | DD   | The merchant collects money from the end customer account. This requires generally the approval of the end customer in any form  |
| Credit Transfer               | CT   | The merchant transfers money to the bank account of the customer or to any other bank account. This method is mainly used for payout or cash management purposes.  |
| Prepayment                    | pp   | The end customer gets all the necessary credit transfer details and transfers money to the bank account of the merchant. The incoming money is matched and subsequently the goods or services are delivered to the end customer. |
| Invoice                       | IV   | Similar to Prepayment but with the difference that the goods or services are delivered to the end customer before the money receipt. This is common in the B2B sector  |
| <b>Card Payment Methods</b>   |      |  |
| Credit Card                   | CC   | The credit card of the end customer is debited with the payment amount. In regular intervals the end customer receives an invoice from the issuing institute of the credit card.   |
| Debit Card                    | DC   | The debit card of the end customer is debited with the payment amount. The customer must have deposited money on his debit card or his bank account before the transaction is authorized.  |
| <b>Online Payment Methods</b> |      |  |
| Wallet Payment                | VA   | The micro payment account of the end customer is debited with the payment amount. Common wallet providers are e.g. paypal, Firstgate or T-pay.   |
| <b>Online Payment Methods</b> |      |  |

|                 |    |   |
|-----------------|----|---|
| Online Transfer | OT | The end customer performs an online credit transfer with the homebanking interface of his bank. The merchant receives an acknowledge as soon as the authorisation of the credit transfer was successful. Examples are IDEAL(NL), Giropay(DE) or EPS(AT) |
| Other Methods   |    |   |
| User Account    | UA | A registered user in the system. Typically a Virtual Account and other payment methods will be attached to it.  |
| Virtual Account | VA | The end customer credits a virtual account within the merchant shop and sequentially debits this account. The account can be credited with all above payment methods and is generally debited with micro payment amounts.                               |
| Risk Management | RM | If certain Risk Management checks should be performed without any relation to a real payment process, the prefix RM can be used.  |
| Collection      | CL | In case of chargebacks a disputed transaction can be forwarded to a collection institute.   |

All payment methods use a subset of 8 available payment types. The naming of the standard payment types always references to the account of the end customer. In order to understand the available payment types it is useful to have a look at the resulting cash flow on the merchant account, which is generated by these payment types:

| Merchant Account      |              |
|-----------------------|--------------|
| Debit                 | Credit       |
| Credit (CD)           | Debit (DB)   |
| Refund (RF)           | Rebill (RB)  |
| Chargeback (CB)       | Receipt (RC) |
| Cashflow neutral      |              |
| Preauthorisation (PA) |              |
| Reversal (RV)         |              |
| Reconciliation (RL)   |              |

A detailed description of the behaviour of these payment types plus all recurring and risk management types can be found in the below table:

| Type             | Code | Description   |
|------------------|------|---|
| Payment Types    |      |   |
| Preauthorization | PA   | Performs all risk management validations and stores the complete payment processing data for later retrieval. For credit card transactions the payment amount is additionally reserved on the credit card of the end customer (in case the underlying acquirer supports this functionality). A following Capture (CP) or Credit (CD) with reference to the Preauthorisation (PA) will trigger the actual booking. |
| Debit            | DB   | Debits the account of the end customer and credits the virtual account of the merchant.   |
| Capture          | CP   | Captures a prior preauthorized (PA) amount.   |
| Credit           | CD   | Credits the account of the end customer and debits the virtual account of the merchant.   |

|                |    |  |
|----------------|----|--|
| Reversal       | RV | Reverses an already processed Debit (DB) or Credit (CD) transaction. As consequence the end customer will never see any booking on his statement. A Reversal is just possible until a connector specific cut-off time. Some connectors don't support Reversals.  |
| Refund         | RF | Credits the account of the end customer with a reference to a prior Debit (DB) or Credit (CD) transaction. This can be done in order to refund an already processed Debit transaction or credit again an already processed Credit transaction. The end customer will always see two bookings on his statement. A Refund is always possible and is supported by all connectors.   |
| Rebill         | RB | Debits the account of the end customer with a reference to a prior Debit (DB) transaction. This is normally used to rebill an already processed Debit (DB) transaction in case of a chargeback or to add additional products to an already processed order.  |
| Chargeback     | CB | A negative booking on the merchant account, which is generally triggered by a return of a Debit (DB) or Rebill (RB) transaction by the end customer/bank.  |
| Receipt        | RC | A positive booking on the merchant account, which is generally triggered by a return of a Credit (CD) or Refund (RF) transaction by the bank or by a credit transfer of an end customer to the merchant's bank account. This kind of receipt is used especially in conjunction with prepayment or invoice transactions.  |
| Reconciliation | RL | In order to verify that a Credit (CD), Debit (DB), Refund (RF) or Rebill (RB) transaction was really booked to the bank account or correctly processed to the acquirer the system automatically generates Reconciliation (RL) transactions whenever it can determine the success of the standard types by parsing special back channel files. Reconciliation is an optional feature, which can be activated to ensure total consistency. Please consult your sales contact, if you would like to apply this functionality. |

#### Registration Types

|                |    |   |
|----------------|----|---|
| Registration   | RG | Initial registration of an account and/or customer. Later Debit (DB) or Credit (CD) transactions can always reference to a valid registration. Through this process no sensible end customer account information has to be stored within the merchant system. A registration can optionally also contain recurring rules in order to generate future Debit (DB) or Credit (CD) transactions automatically. For some countries a PDF mandate is produced as part of the direct debit registration process. |
| Reregistration | RR | If the registration data of an account or customer is changing, a reregistration of this data can be performed.   |
| Deregistration | DR | In order to deactivate a prior registration, a deregistration transaction can be submitted to the system. All following Debit (DB) or Credit (CD) transactions which reference to the registration will be rejected as soon as the deregistration has been acknowledged.  |
| Confirmation   | CF | If the registration is used for the automatic creation of PDF direct debit mandates, the receipt of an undersigned copy of such a mandate „confirms“ the registration. This Confirmation (CF) transaction is either generated automatically by the system or by a manual entry process.   |

#### Scheduling Types

|            |    |   |
|------------|----|---|
|            | SD | Schedules upcoming payment transactions of the same type and amount. Generally one or more SD transactions are used to define a subscription pattern. The exact execution parameters and cancellation notice restrictions are given within the Job tag group. |
| Reschedule | RS | Reschedules a prior scheduled job while the job is already running. Generally used to change the execution or cancellation notice parameters of a specific subscription.  |

|            |    |   |
|------------|----|---|
| Deschedule | DS | Cancels a running job. The cancellation notice does first take effect after the period defined within the Notice tag has elapsed. |
|------------|----|---|

## 2.7 Statuses and Reasons

All status codes are listed below:

| Status              | Code |
|---------------------|------|
| NEW                 | 90   |
| WAITING             | 80   |
| REJECTED_VALIDATION | 70   |
| REJECTED_RISK       | 65   |
| REJECTED_BANK       | 60   |
| NEUTRAL             | 40   |
| SUCCESS             | 00   |

The combination of status and reason code is always unique and is generally used for more than one payment or risk management type.

## 2.8 Header

The header group of the HTTPS Post parameters holds transmission and security related information.

### Request:

```
REQUEST.VERSION=1.0
SECURITY.SENDER=123a456b789c123d456e789f012g345
```

### Response:

```
RESPONSE.VERSION=1.0
SECURITY.SENDER=123a456b789c123d456e789f012g345
```

| Parameter       | Data type    | Length | Mandatory ? | Description  |
|-----------------|--------------|--------|-------------|--|
| REQUEST.VERSION | Alphanumeric | 3      | Mand.       | The VERSION parameter indicates a major release. The HTTPS Post parameter scheme changes in such way that the preceding one is not compatible anymore with the new one. Therefore the VERSION parameters in the request and response message have to be increased. |
| SECURITY.SENDER | Alphanumeric | 32     | Mand.       | Each Server which sends requests to the system has an own sender unique ID. The sender UID is no logical business orientated subdivision   |

|  |  |  |  |  |
|--|--|--|--|--|
|  |  |  |  | like the channel ID, but refers to physical installations of software. Please provide here the value you have received from the customer support department. |
|--|--|--|--|--|

## 2.9 Transaction

The Transaction group contains all information required to process a transaction.

```
TRANSACTION.MODE=LIVE
TRANSACTION.RESPONSE=SYNC
TRANSACTION.CHANNEL=546a456b789c123d456e789f012g821
```

The Transaction group has three parameters which determine the processing of the transaction.

| Value for TRANSACTION.MODE     | Description  |
|--------------------------------|--|
| INTEGRATOR_TEST                | Transaction is just send to the Integrator and not to the Validator (Risk Management) or Connector modules. Used to test compliance against the Integrator module.   |
| CONNECTOR_TEST                 | Transaction enters the Integrator module, accesses the Validator modules (Risk Management) and then goes to the Connector. The Connector operates in test mode.  |
| LIVE                           | Transaction enters the Integrator module, accesses the Validator modules (Risk Management) and then goes to the Connector. The Connector operates in live mode.  |
| Value for TRANSACTION.RESPONSE | Description  |
| SYNC                           | Transaction is processed in the synchronous mode, which means the client will get in the direct response the result of the processing.   |
| ASYN                           | Transaction is processed in the asynchronous mode (also known as batch mode). The direct response will just acknowledge the receipt of the transaction. The result of the processing is delivered back as indirect response over another asynchronous communication channel like a SFTP repository or a POST call back method.   |
| Value for TRANSACTION.CHANNEL  | Description  |
| Format: 32 alphanumeric digits | <p>The channel ID is a unique key for the identification of the unit which sends transactions into the system. Every merchant can have multiple channels for different purposes.</p> <p>Possible division criteria are for example different shops, organizational units, customer groups or countries. The channel ID doesn't refer to physical installations of the software like the sender ID but is a logical business orientated subdivision.</p> <p>Different channels help to analyze the entirety of transactions and to provide different system configurations for a nonuniform transaction base. The channel IDs are assigned by the account management.</p> |

## 2.10 User

The User group contains the information about the user sending the request.

```
USER.LOGIN=12343214123432141234321412343214
USER.PWD=geheim
```

| USER Parameter | Data type    | Length | Mandatory ? | Description   |
|----------------|--------------|--------|-------------|---|
| USER.LOGIN     | Alphanumeric | 32     | Mand.       | User Id of the sending user.<br>This user must be configured<br>with SEND rights. |
| USER.PWD       | Alphanumeric | 5...16 | Mand.       | Password of the sending user  |

## 2.11 Identification Group

The identification group contains all IDs which are used for the identification of the transaction:

```
IDENTIFICATION.TRANSACTIONID
IDENTIFICATION.UNIQUEID
IDENTIFICATION.SHORTID
IDENTIFICATION.REFERENCEID
IDENTIFICATION.SHOPPERID
IDENTIFICATION.INVOICEID
```

In the request the merchant can provide a Transaction ID for own matching purposes. For transaction types which require a reference to a former transaction (Capture, Reversal, Refund) a Reference ID has to be provided. The Shopper ID is used to group transactions of a certain shopper.

### Request:

```
IDENTIFICATION.TRANSACTIONID=MerchantAssignedID
IDENTIFICATION.REFERENCEID=r123i654j321k098l765m432n21e456
IDENTIFICATION.SHOPPERID=shopper000321
```

While processing the system generates a universal unique ID. This Unique ID must be used for all automated matching and search purposes. The Reference ID is the Unique ID of the referenced transaction. To provide an ID which is shorter and easy to enter manually, the Short ID is provided. The Short ID is used for the descriptor of the transaction and to search manually for transactions in the management platform. The Short ID doesn't guarantee universal uniqueness, however the probability for non-uniqueness is very low.

### Response:

```
IDENTIFICATION.TRANSACTIONID=MerchantAssignedID
IDENTIFICATION.UNIQUEID=h987i654j321k098l765m432n210o987
IDENTIFICATION.SHORTID=1234.5678.9876
IDENTIFICATION.REFERENCEID=r123i654j321k098l765m432n21e456
IDENTIFICATION.SHOPPERID=shopper000321
```

| Parameter<br>IDENTIFICATION  | Data type      | Length | Mandatory<br>? | Description   |
|------------------------------|----------------|--------|----------------|---|
| IDENTIFICATION.TRANSACTIONID | Alphanumeric   | 0..256 | Optional       | Id assigned by the merchant. Uniqueness in the system or even just within the channel is not checked.   |
| IDENTIFICATION.UNIQUEID      | Alphanumeric   | 32     | Mand.          | Only ID where the uniqueness within the system is absolutely guaranteed. Has to be used for all automated matching and reference purposes.  |
| IDENTIFICATION.SHORTID       | Numeric / Dots | 14     | Mand.          | ID which is used for manual entry and search purposes. The likelihood for uniqueness is very high, but not guaranteed.  |
| IDENTIFICATION.INVOICEID     | Alphanumeric   | 0..256 | Optional       | Id assigned by the merchant to assign it to a certain invoice. Typically this invoice id is the id the merchant also communicates to the shopper for a certain invoice  |
| IDENTIFICATION.SHOPPERID     | Alphanumeric   | 0..256 | Optional       | Id assigned by the merchant to assign it to a certain shopper. Typically the user id or customer id of the shopper within the merchant's shop is sent in here. It can be used to search for all transactions of one shopper in the analysis backend tool. |
| IDENTIFICATION.REFERENCEID   | Alphanumeric   | 32     | Cond.<br>Mand. | References to the Unique ID of another transaction. Only needed for the submission of following transaction types: Capture, Reversal and Refund. Chargeback and Deposit transactions contain the Reference ID in the response message.                    |

## 2.12 Payment Group

The Payment group determines which payment method and type to use and provides all monetary payment details of the transaction. Furthermore it contains the description of the transaction by means of the USAGE and DESCRIPTOR parameters.

PAYMENT.CODE=DD.DB

If you want to use certain payment methods, please ensure that the applied Channel ID has been activated for these methods by the account management. Depending on the chosen payment method, there are specific types available:

|                           | Bank transfer |    |    |    | Card payment |     | Online |    | Other |    |
|---------------------------|---------------|----|----|----|--------------|-----|--------|----|-------|----|
|                           | DD            | CT | PP | IV | CC           | DC  | MP     | OT | VA    | RM |
| <b>Payment types</b>      |               |    |    |    |              |     |        |    |       |    |
| Preauthorization (PA)     | x             | x  | x  | x  | x            | x   | x      | x  | x     | x  |
| Debit (DB)                | x             |    |    |    | x            | x   | x      | x  | x     |    |
| Credit (CD)               |               | x  |    |    |              |     | x      |    | x     |    |
| Reversal (RV)             | x             | x  |    |    | x            | x   |        |    | x     |    |
| Refund (RF)               | x             | x  | x  | x  | x            | x   | x      | x  | x     |    |
| Rebill (RB)               | x             |    |    |    | (x)          | (x) |        |    |       |    |
| Chargeback (CB)           | x             |    |    |    | x            |     |        | x  |       |    |
| Receipt (RC)              | x             | x  | x  | x  |              |     | x      | x  |       |    |
| <b>Registration Types</b> |               |    |    |    |              |     |        |    |       |    |
| Registration (RG)         | x             | x  | x  | x  | x            | x   |        | x  | x     |    |
| Confirmation (CF)         | x             |    |    |    |              |     |        |    |       |    |
| Reregistration (RR)       | x             | x  | x  | x  | x            | x   |        | x  | x     |    |
| Deregistration (DR)       | x             | x  | x  | x  | x            | x   |        | x  | x     |    |

A detailed description of the payment types can be found in the respective chapters. The following table gives a basic overview:

| TYPE Name        | Description  |
|------------------|--|
| Debit            | Debits the credit card or bank account of the end customer. (CF +)   |
| Credit           | Credits the bank account of the end customer. (CF -)   |
| Preauthorisation | Reserves a certain amount on the credit card of the end customer. This amount can be captured later. Certain Acquirers call this transaction type also reservation. (CF neutral)             |
| Reversal         | Reverses the transaction before the clearing cut off time of the processor or bank. A reversed transaction does not appear on the statement of the end customer. (CF -)                      |
| Refund           | After the cut off time has expired a customer can only be refunded by executing a Refund transaction. The amount of the Refund transaction can also be less than the original amount. (CF -) |
| Chargeback       | If a debit transaction of a credit card or direct debit account is returned for any reason, a Chargeback is loaded into the system. (CF -)   |
| Receipt          | If a credit transfer transaction is returned by the bank or if the end customer makes a payment to the clearing account, a Receipt is created. (CF +)  |



In the request the Payment group has to include the Presentation tag, while the response gives back the Presentation tag as well as the Clearing tag. The Clearing tag contains all data as the end customer obtains it on his credit card or bank statement.

#### Request:

```
PAYMENT.CODE=DD.DB  
PRESENTATION.AMOUNT=1.00  
PRESENTATION.CURRENCY=EUR  
PRESENTATION.USAGE=Order Number 1234
```

#### Response:

```
PAYMENT.CODE=DD.DB  
PRESENTATION.AMOUNT=1.00  
PRESENTATION.CURRENCY=EUR  
PRESENTATION.USAGE=Order Number 1234  
CLEARING.AMOUNT=1.00  
CLEARING.CURRENCY=EUR  
CLEARING.DESRIPTOR=1234.1234.1234 - Order Number 1234  
CLEARING.BANKNAME=Royal Bank of Scotland  
CLEARING.FXRATE=0.500000  
CLEARING.FXSOURCE=FTX  
CLEARING.FXDATE=2003-02-12
```

All parameters within the Presentation group are mandatory:

| Parameter<br>PRESENTATION | Data type    | Length  | Mandatory<br>? | Description   |
|---------------------------|--------------|---------|----------------|---|
| PRESENTATION.AMOUNT       | #0.00        | 1..10,2 | Mand.          | Presentation Amount in currency of the Currency parameter. The dot is used as decimal separator.  |
| PRESENTATION.CURRENCY     | Alpha        | 3       | Mand.          | Currency code according to the ISO 4217 specification plus the currency "PTS" for Points (e.g. used for loyalty programs).  |
| PRESENTATION.USAGE        | Alphanumeric | 0..128  | Mand.          | Provides the dynamic part of the descriptor, which appears on the end customer's statement. Enables the end customer to associate the transaction on the statement to the online transaction. |

The BANKNAME parameter just appears for direct debit or credit transfer transactions in countries where the name of the clearing bank can be retrieved. The FX ... parameters within the CLEARING group are just given if a currency conversion had to take place.

| Parameter<br>CLEARING | Data type | Length  | Mandatory<br>? | Description  |
|-----------------------|-----------|---------|----------------|--|
| CLEARING.AMOUNT       | #0.00     | 1..10,2 | Mand.          | Settlement amount on the end customer's account in currency of the CURRENCY parameter. |

|                    |              |         |                |  |
|--------------------|--------------|---------|----------------|--|
|                    |              |         |                | The dot is used as decimal separator.  |
| CLEARING.CURRENCY  | Alpha        | 3       | Mand.          | Currency code according to the ISO 4217 specification plus the currency "PTS" for Points (e.g. used for loyalty programs).   |
| CLEARING.DESRIPTOR | Alphanumeric | 14..256 | Mand.          | Appears on the statement of the end customer. The Descriptor is a concatenation of the Short ID, system defined text and the USAGE parameter. Enables the end customer to associate the transaction on the statement with the online transaction.                                  |
| CLEARING.BANKNAME  | Alpha        | 0..64   | Cond.<br>Mand. | Name of the end customer's bank for direct debit and credit transfer transactions. The BANKNAME parameter just appears in countries where this name can be retrieved.  |
| CLEARING.FXRATE    | #0.000000    | 1..6,6  | Cond.<br>Mand. | If the currency provided in PRESENTATION parameters is not equal to the currency of the end customer's account, Direct Debit and Credit Transfer transactions have to be converted. The applied Foreign Exchange Rate is shown with a precision of 6 decimal places after the dot. |
| CLEARING.FXSOURCE  | Alphanumeric | 0..256  | Cond.<br>Mand. | The Source of the applied Foreign Exchange Rate.   |
| CLEARING.FXDATE    | Date         | 10      | Cond.<br>Mand. | The applied rates are fixed rates of the applied Foreign Exchange Source for a certain date.   |
| CLEARING.BALANCE   | #0.00        | 1..10,2 | Optional       | Returns the remaining balance on the account. This field is only set for accounts (e.g. loyalty cards) that support this feature.  |

Please note that in case of a chargeback the presentation amount is the amount given by the bank and not by the merchant.

## 2.13 Account Group

The Account group holds all information regarding a credit card or bank account. Many parameters depend on the chosen payment method. The credit card account parameters look like this:

```
ACCOUNT.HOLDER=Joe Doe
ACCOUNT.NUMBER=1234 1234 1234 1234
ACCOUNT.BRAND=VISA
ACCOUNT.EXPIRY_MONTH=09
```

```
ACCOUNT.EXPIRY_YEAR=2005
ACCOUNT.VERIFICATION=1233
```

The direct debit account parameters are shown below:

```
ACCOUNT.HOLDER=Joe Doe
ACCOUNT.NUMBER=618495000
ACCOUNT.BANK=70070024
ACCOUNT.COUNTRY=DE
```

For a complete list of all possible values and more specific length restrictions see the later chapters about the different payment methods:

| Parameter<br>ACCOUNT | Data type     | Length  | Mandatory<br>?   | Description  |
|----------------------|---------------|---------|------------------|--|
| ACCOUNT parameters   | Data Type     | Length  | Mand. / Optional | Description  |
| ACCOUNT.HOLDER       | Alpha         | 4..128  | Mand.            | Holder of the credit card or bank account. If it can be assumed that end customer is the holder of the account this field can be concatenated from the given and family name of the NAME parameters. |
| ACCOUNT.NUMBER       | Alpha numeric | 3..64   | Cond. Mand.      | Numer of the credit card or domestic bank account. Includes also possible check digits.  |
| ACCOUNT.BRAND        | Alpha         | 3..10   | Cond. Mand.      | Name of the credit card brand.   |
| ACCOUNT.EXPIRY_MONTH | Numeric       | 2       | Cond. Mand.      | Expiration month of the credit card.   |
| ACCOUNT.EXPIRY_YEAR  | Numeric       | 4       | Cond. Mand.      | Expiration year of the credit card.  |
| ACCOUNT.VERIFICATION | Numeric       | 3..4    | Cond. Mand.      | The verification number of the credit card (CVV2, CVC2, FDBC).   |
| ACCOUNT.BANKNAME     | Alpha numeric | 0..255  | Cond. Mand.      | Especially of interest for Online Transfer methods to determine which bank was chosen.   |
| ACCOUNT.BANK         | Alpha numeric | 0..12   | Cond. Mand.      | The domestic code of the bank which holds the direct debit or credit transfer account.   |
| ACCOUNT.IBAN         | Alpha numeric | 15..28  | Cond. Mand.      | International Bank Account Number. Can be provided instead of the domestic NUMBER parameter if available.  |
| ACCOUNT.BIC          | Alpha numeric | 8 or 11 | Cond. Mand.      | Bank Identifier Code (SWIFT). Can be provided instead of the domestic BANK parameter if available.   |
| ACCOUNT.COUNTRY      | Alpha         | 2       | Cond. Mand.      | Country code according to the ISO 3166-1 specification.  |
| ACCOUNT.LIMIT        | #0.00         | 1..10,2 | Cond. Mand.      | Maximum preauthorization (PA) or debit (DB) amount for a single transaction on a specific account.   |

|                          |               |         |             |   |
|--------------------------|---------------|---------|-------------|---|
|                          |               |         |             | Generally this tag is optional, yet certain direct debit schemes require the declaration of a limit (e.g. Norway).  |
| ACCOUNT.IDENTIFICATION   | Alpha numeric | 1..16   | Cond. Mand. | Certain direct debit processes require a custom identification number. Currently used for Norway, Belgium and Italy.  |
| ACCOUNT.REGISTRATION_URL | Alpha numeric | 10..256 | Cond. Mand. | Especially used for paper based direct debit schemes in order to give the end customer a URL where he can to download the corresponding paper mandate, which he can fill in and sign. |

## 2.14 Customer Group

The customer group contains all customer specific information like name, address and contact details. The NAME and ADDRESS group are used basically for risk management purposes while the CONTACT group is important for collection, call back validations and transmission of the mandate templates for direct debit countries which require a written confirmation.

The IDENTIFICATION group contains very specific customer information, which is necessary for some advanced risk management checks or dedicated direct debit schemes (e.g. domiciliation bancaria in Spain).

```
NAME.SALUTATION=Mr
NAME.TITLE=Dr
NAME.GIVEN=Joe
NAME.FAMILY=Doe
NAME.COMPANY=SampleCompany
ADDRESS.STREET=Leopoldstr. 1
ADDRESS.ZIP=80798
ADDRESS.CITY=München
ADDRESS.STATE=BY
ADDRESS.COUNTRY=DE
CONTACT.PHONE=+49-89-1234566
CONTACT.MOBILE=+49-172-1234566
CONTACT.EMAIL=info@provider.com
CONTACT.IP=123.123.123.123
CUSTOMER.IDENTIFICATION.PAPER=PASSPORT
CUSTOMER.IDENTIFICATION.VALUE=D00143434
```

| Parameter       | Data type    | Length | Mandatory ? | Description                      |
|-----------------|--------------|--------|-------------|----------------------------------|
| NAME            |              |        |             |                                  |
| NAME.SALUTATION | Alpha        | 1..20  | Optional    |                                  |
| NAME.TITLE      | Alphanumeric | 1..20  | Optional    | Title of the end customer.       |
| NAME.GIVEN      | Alpha        | 2..40  | Mandatory   | Given name of the end customer.  |
| NAME.FAMILY     | Alpha        | 2..40  | Mandatory   | Family name of the end customer. |

|                |              |       |          |  |
|----------------|--------------|-------|----------|--|
| NAME.SEX       | Alpha        | 1     | Optional | Sex of the shopper, „M“ for male or „F“ for female |
| NAME.BIRTHDATE | Alphanumeric | 10    | Optional | Date in the format yyyy-MM-dd, e.g. 1970-09-12     |
| NAME.COMPANY   | Alphanumeric | 2..40 | Optional | Company name of the end customer.                  |
|                |              |       |          |  |
|                |              |       |          |  |
|                |              |       |          |  |
|                |              |       |          |  |
|                |              |       |          |  |
|                |              |       |          |  |
|                |              |       |          |  |

| Parameter<br>ADDRESS | Data type    | Length | Mandatory<br>? | Description   |
|----------------------|--------------|--------|----------------|---|
| ADDRESS.STREET       | Alphanumeric | 5..50  | Mandatory      | Street and house number of the end customer.                            |
| ADDRESS.ZIP          | Alphanumeric | 1..10  | Mandatory      | ZIP code of the city of the end customer.                               |
| ADDRESS.CITY         | Alpha        | 2..30  | Mandatory      | City where the end customer lives.                                      |
| ADDRESS.STATE        | Alpha        | 2..10  | Optional       | State of the city of the end customer. Not required for many countries. |
| ADDRESS.COUNTRY      | Alpha        | 2      | Mandatory      | Country code according to the ISO 3166-1 specification.                 |

| Parameter<br>CONTACT | Data type       | Length | Mandatory<br>? | Description   |
|----------------------|-----------------|--------|----------------|---|
| CONTACT.PHONE        | Alphanumeric    | 8..25  | Optional       | Used for risk management and collection. Has to start with a digit or a '+', at least 7 and max 25 chars long |
| CONTACT.MOBILE       | Alphanumeric    | 10..25 | Optional       | Used for risk management and collection. Has to start with a digit or a '+', at least 7 and max 25 chars long |
| CONTACT.EMAIL        | Alphanumeric    | 6..128 | Mandatory      | Used for risk management, collection and transmission of direct debit mandates.                               |
| CONTACT.IP           | 000.000.000.000 | 15     | Optional       | IP number of end customer. Used for statistics and collection.  |
|                      |                 |        |                |   |

| Parameter<br>IDENTIFICATION   | Data type          | Length | Mandatory<br>?     | Description            |
|-------------------------------|--------------------|--------|--------------------|------------------------|
| CUSTOMER.IDENTIFICATION.PAPER | IDCARD<br>PASSPORT | 5..12  | Cond.<br>Mandatory | Type of identity paper |

|                                   |                  |       |                        |                          |
|-----------------------------------|------------------|-------|------------------------|--------------------------|
|                                   | TAXSTATE<br>MENT |       | y                      |                          |
| CUSTOMER.IDENTIFICATIO<br>N.VALUE | Alphanume<br>ric | 8..64 | Cond.<br>Mandator<br>y | Number of identity paper |

## 2.15 Recurrence Group (Manual Recurrence)

Recurring transactions are flagged with the RECURRENCE parameter.  
For initial transaction (containing CVV code) send the following parameter:

```
RECURRENCE.MODE="INITIAL"
```

All recurring transactions (without a CVV code) are sent with this parameter:

```
RECURRENCE.MODE="REPEATED"
```

| Parameter<br>RECURRENCE | Data type        | Length | Mandatory<br>? | Description                       |
|-------------------------|------------------|--------|----------------|-----------------------------------|
| RECURRENCE.MODE         | Alphanume<br>ric | 0..64  | Mandator<br>y  | One of "INITIAL" or<br>"REPEATED" |

This tag will only take effect if the used Merchant Account is supporting recurring transaction and is configured for recurring transactions in the hIP.  
Please check with your account manager if the used acquirer is supporting recurring transactions!

## 2.16 Criterion Group

The CRITERION group gives the freedom to add additional customized attributes to the transaction, which are not available by the standard set of HTTPS Post parameters.  
With the help of these freely definable „Criteria“ a customised statistics and analysis can be performed on the base of the transactions which have these parameters included.  
Possible examples are the turnover of different affiliates, age groups or any other imaginable value or subdivision which should be available in the analysis front end later.

```
CRITERION.Affiliate=ExternalShopXY
CRITERION.Age=30-40
CRITERION.known=yes
CRITERION.CustomerID=1234567
```

The Criterion group has a purely statistical and informative value and should not be confused with the Channel ID. The Channel ID is the central reference for all kinds of configuration information of the payment process as well as for the pricing and billing process.  
Also the Channel ID can exclusively be assigned by the customer support department, while the different Criteria can be defined dynamically by the merchant, without any consultation of the payment service provider.

| Parameter and name<br>CRITERION | Data type | Length | Mandatory<br>? | Description |
|---------------------------------|-----------|--------|----------------|-------------|
|---------------------------------|-----------|--------|----------------|-------------|

|                  |              |         |          |  |
|------------------|--------------|---------|----------|--|
| CRITERION.<AN32> | Alphanumeric | 0..1024 | Optional | Freely definable value for a specific criterion. The value can be entered in the analysis platform to retrieve all transactions with this criterion value.<br>If several differently named criteria have the same values, also the name of the criteria must be provided in the web front end in order to retrieve the right transactions (see below). |
|------------------|--------------|---------|----------|--|

| Value for <AN32> | Description  |
|------------------|--|
| AN32             | Freely definable name for a specific criterion. The same name must be entered in the analysis platform to retrieve all transactions which have this criterion. |

## 2.17 Authentication Group

This group allows the merchant to send in any kind of Authentication information that authenticates the transaction itself like 3-D-Secure, SMS-identification and the like.

Currently this group is used to send in authentication information gathered from a Verified by Visa (VbV) or Mastercard Secure Code (MSC) request performed by a merchant himself.

See the document "Asynchronous Workflow" for more details about 3-D-Secure processes.

```

AUTHENTICATION.TYPE=3DSecure
AUTHENTICATION.RESULT_INDICATOR=05
AUTHENTICATION.PARAMETER.VERIFICATION_ID=AAACAgSRBklmQCFgMpEGAAAAA
AUTHENTICATION.PARAMETER.VERIFICATION_TYPE=2
AUTHENTICATION.PARAMETER.XID=CAACCVVUlwCXUyhQNlSXAAAAA

```

The Authentication group has one value to determine the type of Authentication.

| Values for AUTHENTICATION.TYPE | Description   |
|--------------------------------|---|
| 3DSecure                       | Use this value for the type if the authentication was a 3DSecure process. |

| Parameter AUTHENTICATION         | Data type     | Length | Mandatory ? | Description   |
|----------------------------------|---------------|--------|-------------|---|
| AUTHENTICATION.PARAMETER. <AN32> | Alpha-numeric | 1..32  | Cond.       | Value of Parameter of the specified Authentication type.  |
| AUTHENTICATION.RESULT_INDICATOR  | Alpha-numeric | 1..128 | Optional    | Contains the result of the Authentication process. For 3D-Secure this must be one of the following (ECI-Value):<br>01 = MASTER_3D_ATTEMPT |

|  |  |  |  |   |
|--|--|--|--|---|
|  |  |  |  | 02 = MASTER_3D_SUCCESS<br>05 = VISA_3D_SUCCESS<br>06 = VISA_3D_ATTEMPT<br>07 = DEFAULT_E_COMMERCE |
|--|--|--|--|---|

| Values for<br><AN32> | Description                                     |
|----------------------|---|
| Alphanumeric 1..32   | Freely definable name for a specific parameter. |

## 2.18 Processing Group

The processing group contains a summary of the result of the complete processing. The structure of the status and reason codes is hierarchical while the return code is an independent, internal value which is used for very specific return messages. Any merchant side matching should be performed on the processing code or status and reason codes.

```
PROCESSING.CODE=DD.DB.90.00
PROCESSING.TIMESTAMP=2003-02-12 14:58:07
PROCESSING.RESULT=ACK
PROCESSING.STATUS.CODE=90
PROCESSING.STATUS=NEW
PROCESSING.CONFIRMATION_STATUS=CONFIRMED
PROCESSING.REASON.CODE=00
PROCESSING.REASON=Successful Processing
PROCESSING.RETURN.CODE=000.000.000
PROCESSING.RETURN=Transaction succeeded
PROCESSING.RISK_SCORE=-20
```

The result derives from the status of the transaction, which means that a transaction which has the status REJECTED or FAILED has the result NOK, while all other statuses result in an ACK. For each status there are one or several reasons.

| Parameter<br>PROCESSING | Data type   | Length | Mandatory<br>? | Description   |
|-------------------------|-------------|--------|----------------|---|
| PROCESSING.CODE         | AA.AA.00.00 | 11     | Mandatory      | The processing code of a transaction. It's a simple concatenation of method, type, status and reason code. It provides the context within a status or reason has appeared and contains together with the return code all information about the processing of a transaction. |
| PROCESSING.TIMESTAMP    | Timestamp   | 19     | Mandatory      | Date and time when the transaction was processed.   |
| PROCESSING.RESULT       | ACK, NOK    | 3      | Mandatory      | In the case of the status REJECTED or FAILED the result is NOK (Not OK). In all other cases the result is ACK (Acknowledge).  |



|                                |                    |        |           |  |
|--------------------------------|--------------------|--------|-----------|--|
| PROCESSING.STATUS.CODE         | 00                 | 2      | Mandatory | The status code of a transaction. See the appendices for a complete list.  |
| PROCESSING.STATUS              | Alphanumeric       | 0..16  | Mandatory | Status message which belongs to the Status code (e.g. NEW, REJECTED ...). Please use the code and not the message for matching purposes.   |
| PROCESSING.CONFIRMATION_STATUS | CONFIRMED, PENDING | 0..20  | Optional  | In case of a response to a Registration (RG) or Reregistration (RR) request, this status message tells if the registration was auto-confirmed immediately (CONFIRMED) or is waiting (PENDING) for a confirmation. A debit request (DB) can only be sent in, if the Registration was confirmed. |
| PROCESSING.REASON.CODE         | 00                 | 2      | Mandatory | The reason code of a transaction. Every status has one or several reasons..  |
| PROCESSING.REASON              | Alphanumeric       | 0..64  | Mandatory | Reason message which belongs to the Reason code. (e.g. Successful Processing, Account Validation, Bank Code Validation ...). Please use the code and not the message for matching purposes.  |
| PROCESSING.RETURN.CODE         | 0000.0000.0000     | 11     | Mandatory | The return id of a transaction.  |
| PROCESSING.RETURN              | Alphanumeric       | 0..256 | Mandatory | Return message which belongs to the Return code (e.g. Validation Algorithm DE102 failed, ...). Please do not match on return messages.   |
| PROCESSING.RISK_SCORE          | Numeric            |        | Optional  | Contains the risk score for the executed transaction (for a payment transaction the score of the corresponding RM.RI transaction). This value is only returned if risk operations (e.g. blacklist, velocity checks ...) were executed.   |

### 2.18.1 Asynchronous Response Processing Group

**ATTENTION:** Please be aware that not all asynchronous processes can fully be covered with the POST Transaction integration. Most of them are only possible with XML Integration. Please contact your account manager for more details!

For asynchronous response messages additional parameters are part of the response message that contain the redirect information for the merchant.

PROCESSING.REDIRECT.URL= [https://www.mybank.com/3D\\_validation](https://www.mybank.com/3D_validation)

```
PROCESSING.REDIRECT.PARAM.TermUrl=https://terminalurl.org/payment/3D_
response
PROCESSING.REDIRECT.PARAM.PAReq=m123n456o789p876q543r22323145346576
PROCESSING.REDIRECT.PARAM.MD=24358432975908324758904327589434
```

Depending on the type of the asynchronous process (i.e. Online Bank Transfer, Verified By VISA, Mastercard Securecode, ...) the Redirect group contains a number of different parameters. Typically the merchant redirects the end user's browser to the PROCESSING.REDIRECT\_URL and passes the other parameters in this subgroup as parameters to the PROCESSING.REDIRECT\_URL. Please refer to the document "Asynchronous Workflow" for an explanation how these parameters must be processed by the merchant to fulfill the workflow requirements of the asynchronous process.

| Parameter<br>REDIRECT                | Data type         | Length | Mandatory<br>? | Description  |
|--------------------------------------|-------------------|--------|----------------|--|
| PROCESSING.<br>REDIRECT_URL          | Alphanumeric, URL | 2048   | Mandatory      | URL that must be called by the merchant in order to proceed. The merchant redirects the browser to this URL. |
| PROCESSING.<br>REDIRECT.PARAM.<AN32> | Alphanumeric      | 4096   | Optional       | Any kind of parameter needed for the workflow. Each Parameter needs to be posted to the URL.                 |

| Values for<br><AN32> | Description                                     |
|----------------------|---|
| Alphanumeric 1..32   | Freely definable name for a specific parameter. |

## 2.19 Connector Group

Within the Connector group information about the connector which was selected for processing of the transaction is given back. This is especially used in conjunction with Prepayment (PP) or Invoice (IV) transactions, where the end customer needs to know to which bank account he has to direct his payment. Furthermore it is necessary to identify the receiving bank account in the context of mandate registrations (DD.RG).

```
CONNECTOR.ACCOUNT.HOLDER= Internal Account Holder
CONNECTOR.ACCOUNT.NUMBER=618495000
CONNECTOR.ACCOUNT.BANK=70070024
CONNECTOR.ACCOUNT.IBAN= DE82700202700666898869
CONNECTOR.ACCOUNT.BIC= HYVEDEMM
CONNECTOR.ACCOUNT.COUNTRY=DE
```

| Parameter<br>CONNECTOR   | Data type    | Length | Mandatory<br>? | Description   |
|--------------------------|--------------|--------|----------------|---|
| CONNECTOR.ACCOUNT.HOLDER | Alpha        | 4..128 | Mand.          | Holder of the bank account. This is generally a company name.               |
| CONNECTOR.ACCOUNT.NUMBER | Alphanumeric | 3..64  | Cond. Mand.    | Account number of the processing bank account. Includes also possible check |

|                           |               |         |             |  |
|---------------------------|---------------|---------|-------------|--|
|                           |               |         |             | digits.  |
| CONNECTOR.ACCOUNT.BANK    | Alpha-numeric | 0..12   | Cond. Mand. | The domestic code of the bank which holds the direct debit or credit transfer account.                                 |
| CONNECTOR.ACCOUNT.IBAN    | Alpha-numeric | 15..28  | Cond. Mand. | International Bank Account Number. This number can be used by foreign customers to make cross-border credit transfers. |
| CONNECTOR.ACCOUNT.BIC     | Alpha-numeric | 8 or 11 | Cond. Mand. | Bank Identifier Code (SWIFT). This bank code can be used by foreign customers to make cross-border credit transfers.   |
| CONNECTOR.ACCOUNT.COUNTRY | Alpha         | 2       | Cond. Mand. | Country code according to the ISO 3166-1 specification.  |

## 2.20 Frontend Group – Web Payment Frontend and 3DSecure Processes

If the Post Parameter Integrator is used in conjunction with the heidelpay CheckOut (hCO) optional parameters can be added to steer the appearance of the hCO pages. Most of these parameters override the default settings which have been made in the Business Intelligence Platform (BIP) and are therefore optional. Contrary to the standard Post Parameter integration the response to the request is not the payment result but a URL to start the hCO process. In case the "FRONTEND.ENABLED" parameter is set to true, the initial request is something like an authentication request to securely retrieve the URL to start hCO. The second response parameter POST.VALIDATION gives information if the request was successful or a validation error occurred. See A Appendix A (POST.VALIDATION Codes) for more details about this parameter.

Please consult the hCO -documentation to learn more about the different options and employment scenarios of heidelpay's hCO.

**Request:**

```
FRONTEND.ENABLED=true  
FRONTEND.SESSIONID=112j451kjsd90a8ur342j5098uf09vfug43jfmalefj  
FRONTEND.MODE=DEFAULT  
FRONTEND.ONEPAGE=true  
FRONTEND.POPUP=true  
FRONTEND.LANGUAGE=EN
```

**Immediate Synchronous Response:**

```
FRONTEND.REDIRECT_URL=https://test-  
heidelpay.hpcgw.net/frontend/startPayment.prc;jsessionid=435e34398e83  
23aef  
  
POST.VALIDATION=ACK
```

**Asynchronous Response after the end user has submitted his payment details:**

```
RESPONSE.VERSION=1.0  
SECURITY.SENDER=123a456b789c123d456e789f012g345  
TRANSACTION.MODE=LIVE  
TRANSACTION.RESPONSE=SYNC  
TRANSACTION.CHANNEL=9876.5432.1023  
  
IDENTIFICATION.TRANSACTIONID=MerchantAssignedID  
IDENTIFICATION.UNIQUEID=h987i654j321k098l765m432n210o987  
IDENTIFICATION.SHORTID=1234.5678.9876  
  
PROCESSING.CODE=DD.DB.90.00  
PROCESSING.TIMESTAMP=2003-02-12 14:58:07  
PROCESSING.RESULT=ACK  
PROCESSING.STATUS.CODE=90  
PROCESSING.STATUS=NEW  
PROCESSING.REASON.CODE=00  
PROCESSING.REASON=Successful Processing  
PROCESSING.RETURN.CODE=000.000.000  
PROCESSING.RETURN=Transaction succeeded  
  
PAYMENT.CODE=DD.DB  
  
PRESENTATION.AMOUNT=1.00  
PRESENTATION.CURRENCY=EUR  
PRESENTATION.USAGE=Order Number 1234  
  
CLEARING.AMOUNT=1.00  
CLEARING.CURRENCY=EUR  
CLEARING.DESRIPTOR=1234.1234.1234 - Order Number 1234
```

| Parameter<br>FRONTEND | Data type                          | Length | Mandatory<br>? | Description   |
|-----------------------|------------------------------------|--------|----------------|---|
| FRONTEND.ENABLED      | true, false                        | 5      | Optional       | Switches the hCO on or off.   |
| FRONTEND.REDIRECT_URL | URL                                | 256    | Optional       | Is part of the response if FRONTEND.ENABLED=true. It is the URL to start the HCO. The merchant has to redirect to this URL to start the HCO.  |
| FRONTEND.SESSIONID    | Alphanumeric                       | 1024   | Optional       | Possibility to provide a session ID, which is delivered back in the POST response message (asynchronous). Can be useful at the end of the payment process to reload the correct session for the end user.   |
| FRONTEND.MODE         | DEFAULT, VT, WPF_LIGHT, POST_ASYNC | 16     | Optional       | DEFAULT: user has to enter user information, address and payment data WPF_LIGHT: like DEFAULT, but HCO works without JavaScript (with limited functionality!) VT: Virtual Terminal, end user also enters merchant data (Channel, Amount ...) on a separate tab POST_ASYNC: Post request is handled asynchronously, see document "heidelpay-Developer guide-hCO_en" for details. |
| FRONTEND.POPUP        | true, false                        | 5      | Optional       | Indicates whether the HCO appears in a popup window or embedded in the merchant's page. Default value is configured in the BIP.   |
| FRONTEND.HEIGHT       | Alpha-numeric                      |        | Optional       | Height of the HCO in pixel. If not specified the height is 600px. Examples are 360, 370px, 380pt, 90%...  |
| FRONTEND.FORM_WIDTH   | Alpha-numeric                      |        | Optional       | Width of the payment form in pixel. If not specified the width is 100% of the frame the form is embedded in. Examples are 360, 370px, 380pt, ...  |
| FRONTEND.CLOSING_TIME | numeric                            |        | Optional       | Time in seconds until the popup closes. Only used if FRONTEND.POPUP=true. Default is 20 seconds.  |

|                         |              |     |          |   |
|-------------------------|--------------|-----|----------|---|
| FRONTEND.REDIRECT_TIME  | numeric      |     | Optional | Time in seconds until the embedded frontend page redirects back to the merchant's site. Only used if FRONTEND.POPUP=false. Default is 20 seconds. Important! If FRONTEND.POPUP=true, this time is always 0 seconds.       |
| FRONTEND.RESPONSE_URL   | URL          | 256 | Optional | URL to post the processing result to. Either for HCO responses, asynchronous 3D Secure response messages, Notifications of Confirmations of Registrations or responses for POST_ASYNC.                                    |
| FRONTEND.SUPPORT_NUMBER | alphanumeric | 256 | Optional | Support number that a shopper can call if the payment was not successful or the shopper has a question about the payment transaction. Appears on the final payment page.  |
| FRONTEND.SUPPORT_EMAIL  | Alphanumeric | 256 | Optional | Support email address that a shopper can call if the payment was not successful or the shopper has a question about the payment transaction. Appears on the final payment page.   |
| FRONTEND.SHOP_NAME      | alphanumeric | 50  | Optional | Name of the shop that appears on the HCO screens. Default value is configured in the BIP.   |
| FRONTEND.NEXT_TARGET    | alphanumeric | 256 | Optional | Target location for the next page on the merchant's site after payment process is finished. Default value is configured in the BIP.   |
| FRONTEND.LINK.x.KIND*   | alphanumeric | 10  | Optional | Kind of link, can be one of CUSTOM, HELP, PRIVACY, TERMS, DISCLAIMER, IMPRINT, COPYRIGHT  |
| FRONTEND.LINK.x.NAME*   | alphanumeric | 50  | Optional | Name of the link as shown on the HCO. Only used when FRONTEND.LINK.x.KIND =CUSTOM   |
| FRONTEND.LINK.x.LINK*   | url          | 256 | Optional | Link to the document that is shown when the user clicks on the link. The link is automatically extended with a parameter called "lang". Possible values for "lang" are the Language ISO 3166 Codes (en, de, fr, es, ...). |
| FRONTEND.LINK.x.AREA*   | alphanumeric | 20  | Optional | Area where the link is displayed, can be one of EMBEDDED_CHECKBOX, STATUSBAR  |

|                                  |              |     |          |   |
|----------------------------------|--------------|-----|----------|---|
| FRONTEND.LINK.x.ALIGN*           | alphanumeric | 10  | Optional | Alignment of links in STATUSBAR. Can be one of LEFT, CENTER, RIGHT  |
| FRONTEND.LINK.x.POPUP_WIDTH *    | numeric      | 4   | Optional | Width of popup  |
| FRONTEND.LINK.x.POPUP_HEIGHT*    | numeric      | 4   | Optional | Height of popup   |
| FRONTEND.JSCRIPT_PATH            | alphanumeric | 255 | Optional | Path to a Javascript file. If this file contains a method called init(), this method will be called when the payment screen is loaded. See Document "hCO" for more details. |
| FRONTEND.PM.x.METHOD*            | alphanumeric | 2   | Optional | Payment Method Code <sup>1</sup>  |
| FRONTEND.PM.x.ENABLED*           | true, false  | 5   | Optional | True if payment method should be available, false otherwise   |
| FRONTEND.PM.x.SUBTYPES_DISABLED* | alphanumeric | 255 | Optional | Subtypes of payment method that should not be shown even if configured in the backend <sup>2</sup><br>Ignored if FRONTEND.PM.x.ENABLED is false                             |
| FRONTEND.PM.x.SUBTYPES *         | alphanumeric | 255 | Optional | Subtypes of payment method to be available <sup>2</sup> Ignored if FRONTEND.PM.x.ENABLED is false   |
| FRONTEND.BUTTON.x.NAME           | alphanumeric | 10  | Optional | Name of the Button to be configured. Must be one of PAY, CANCEL or CLOSE  |
| FRONTEND.BUTTON.x.TYPE           | alphanumeric | 10  | Optional | Type of the by NAME specified button. Must be one of BUTTON or IMAGE  |
| FRONTEND.LANGUAGE                | alphanumeric | 2   | Optional | ISO Language Code (Default "de") - Must be UPPER CASE!  |

\* x is a number from 1...n

<sup>1</sup> one of CC, DD, PP, IV, CT, DC

<sup>2</sup> depends on the payment method. For DD and CT this is the country code, can be DE, AT, CH, NO, NL, ES, IT, GB, ... for CC one of Visa, Master, Amex, Diners

## 3 Direct Debit Transactions

For the payment method Direct Debit following transaction types can be used:

- Debit
- Reversal
- Refund

When a direct debit is returned either by the bank (rejection) or by the end customer (revocation) a chargeback is initiated, which is delivered back as a response HTTPS Post response:

- Chargeback

For all transactions replace the following parameters with your test or live parameters:

```
SECURITY.SENDER  
USER.LOGIN  
USER.PWD  
TRANSACTION.CHANNEL
```

See document "heidelpay-Integration Basics" for more details.

### 3.1 Debit

#### Request:

```
REQUEST.VERSION=1.0  
SECURITY.SENDER=123a456b789c123d456e789f012g345  
USER.LOGIN=123456781234567812345678abcdabcd  
USER.PWD=geheim  
  
TRANSACTION.MODE=LIVE  
TRANSACTION.RESPONSE=SYNC  
TRANSACTION.CHANNEL=546a456b789c123d456e789f012g821  
IDENTIFICATION.TRANSACTIONID=MerchantAssignedID  
  
PAYMENT.CODE=DD.DB  
PRESENTATION.AMOUNT=1.00  
PRESENTATION.CURRENCY=EUR  
PRESENTATION.USAGE=Order Number 1234  
  
ACCOUNT.HOLDER=Joe Doe  
ACCOUNT.NUMBER=618495000  
ACCOUNT.BANK=70070024  
ACCOUNT.COUNTRY=DE  
  
NAME.GIVEN=Joe  
NAME.FAMILY=Doe  
ADDRESS.STREET=Leopoldstr. 1  
ADDRESS.ZIP=80798  
ADDRESS.CITY=München  
ADDRESS.STATE=BY  
ADDRESS.COUNTRY=DE  
CONTACT.EMAIL=info@provider.com
```



CONTACT.IP=123.123.123.123

## Response:

RESPONSE.VERSION=1.0

SECURITY.SENDER=123a456b789c123d456e789f012g345

TRANSACTION.MODE=LIVE

TRANSACTION.RESPONSE=SYNC

TRANSACTION.CHANNEL=546a456b789c123d456e789f012g821

IDENTIFICATION.TRANSACTIONID=MerchantAssignedID

IDENTIFICATION.UNIQUEID=h987i654j321k098l765m432n210o987

IDENTIFICATION.SHORTID=1234.5678.9876

PROCESSING.CODE=DD.DB.90.00

PROCESSING.TIMESTAMP=2003-02-12 14:58:07

PROCESSING.RESULT=ACK

PROCESSING.STATUS.CODE=90

PROCESSING.STATUS=NEW

PROCESSING.REASON.CODE=00

PROCESSING.REASON=Successful Processing

PROCESSING.RETURN.CODE=000.000.000

PROCESSING.RETURN=Transaction succeeded

PAYMENT.CODE=DD.DB

PRESENTATION.AMOUNT=1.00

PRESENTATION.CURRENCY=EUR

PRESENTATION.USAGE=Order Number 1234

CLEARING.AMOUNT=1.00

CLEARING.CURRENCY=EUR

CLEARING.DESRIPTOR=1234.1234.1234 - Order Number 1234

AGGREGATION.RM.AG=true

AGGREGATION.RM.AG.STATUS.CODE=90

AGGREGATION.RM.AG.STATUS=SUCCESS

AGGREGATION.RM.AG.REASON.CODE=90

AGGREGATION.RM.AG.REASON=Risk Management Score is 90

VALIDATOR.RM.AC=true

VALIDATOR.RM.AC.STATUS.CODE=00

VALIDATOR.RM.AC.STATUS=SUCCESS

VALIDATOR.RM.AC.REASON.CODE=00

VALIDATOR.RM.AC.REASON=Account Validation Successful

VALIDATOR.RM.BC=true

VALIDATOR.RM.BC.STATUS.CODE=00

VALIDATOR.RM.BC.STATUS=SUCCESS

VALIDATOR.RM.BC.REASON.CODE=00

VALIDATOR.RM.BC.REASON=Bank Code Validation Successful

## 3.2 Risk Management

The risk management is currently exclusively configured by the system.

## 3.3 Reversals

## 3.4 Chargebacks

A HTTPS Post with chargeback transactions can be transmitted either by a scheduled job or by a request with the Query group (version 1.0.9). Please note, that a chargeback transaction is a new transaction of its own with a new Unique ID. The given Reference ID refers to the Unique ID of the transaction which was returned. The Presentation amount is the amount given back by the bank and not the amount which was presented for the original transaction.

```
TRANSACTION.MODE=LIVE
TRANSACTION.RESPONSE=ASYNC
TRANSACTION.CHANNEL=9876.5432.1023

USER.LOGIN=123456781234567812345678abcdabcd
USER.PASSWORD=geheim

IDENTIFICATION.TRANSACTIONID=MerchantAssignedID
IDENTIFICATION.UNIQUEID=h987i654j321k098l765m432n210o987
IDENTIFICATION.SHORTID=1234.5678.9876
IDENTIFICATION.REFERENCEID=m123n456o789p876q543r210s123t456

PROCESSING.CODE= DD.CB.00.00
PROCESSING.TIMESTAMP=2003-02-12 14:58:07
PROCESSING.RESULT=ACK
PROCESSING.STATUS.CODE=00
PROCESSING.STATUS=SUCCESS
PROCESSING.REASON.CODE=00
PROCESSING.REASON=Successful Processing
PROCESSING.RETURN.CODE=000.000.000
PROCESSING.RETURN=Transaction succeeded

PAYMENT.CODE=DD.CB
PRESENTATION.AMOUNT=1.00
PRESENTATION.CURRENCY=EUR
PRESENTATION.USAGE=1234.1234.1234 - Order Number 1234

CLEARING.AMOUNT=1.00
CLEARING.CURRENCY=EUR
CLEARING.DESRIPTOR=1234.1234.1234 - Order Number 1234
```

## 4 Credit Transfer Transactions

A credit transfer (CT) transaction is a standard bank transfer transaction, which credits the bank account of the end customer and debits the merchant account.

### Credit Transfer Transaction Types

- Credit
- Reversal
- Receipt

#### 4.1 Credit

Description will be added soon.

#### 4.2 Risk Management

#### 4.3 Reversal

Description will be added soon.

#### 3.4 Receipt

Description will be added soon.

## 5 4 Credit Card Transactions

### Credit Card Transaction Types

- Debit
- Preauthorisation
- Capture
- Reversal
- Refund
- Chargeback

For all transactions replace the following parameters with your test or live parameters:

```
SECURITY.SENDER  
USER.LOGIN  
USER.PWD  
TRANSACTION.CHANNEL
```

See document "heidelpay-Integration Basics" for more details.

### 5.1 Complete Sample

#### Request:

```
REQUEST.VERSION=1.0  
SECURITY.SENDER=123a456b789c123d456e789f012g345  
USER.LOGIN=123456781234567812345678abcdabcd  
USER.PWD=geheim  
  
TRANSACTION.MODE=LIVE  
TRANSACTION.RESPONSE=SYNC  
TRANSACTION.CHANNEL=546a456b789c123d456e789f012g821  
  
IDENTIFICATION.TRANSACTIONID=MerchantAssignedID  
  
PAYMENT.CODE=CC.DB  
PRESENTATION.AMOUNT=1.00  
PRESENTATION.CURRENCY=EUR  
PRESENTATION.USAGE=Order Number 1234  
  
ACCOUNT.HOLDER=Joe Doe  
ACCOUNT.NUMBER=1234 1234 1234 1234  
ACCOUNT.BRAND=VISA  
ACCOUNT.EXPIRY_MONTH=02  
ACCOUNT.EXPIRY_YEAR=2003  
ACCOUNT.VERIFICATION=123  
  
NAME.GIVEN=Joe  
NAME.FAMILY=Doe  
NAME.SALUTATION=Herr  
NAME.TITLE=Dr
```

NAME.COMPANY=SampleCompany  
  
ADDRESS.STREET=Leopoldstr. 1  
ADDRESS.ZIP=80798  
ADDRESS.CITY=München  
ADDRESS.STATE=BY  
ADDRESS.COUNTRY=DE  
  
CONTACT.EMAIL=info@provider.com  
CONTACT.PHONE=+49-89-1234566  
CONTACT.MOBILE=+49-172-1234566  
CONTACT.IP=123.123.123.123  
  
CRITERION.AFFILIATE=ExternalShopXY  
CRITERION.AGE=30-40  
CRITERION.KNOWN=YES  
CRITERION.CUSTOMERID=1234567

### Response:

RESPONSE.VERSION=1.0  
SECURITY.SENDER=123a456b789c123d456e789f012g345  
TRANSACTION.MODE=LIVE  
TRANSACTION.RESPONSE=SYNC  
TRANSACTION.CHANNEL=546a456b789c123d456e789f012g821  
  
IDENTIFICATION.TRANSACTIONID=MerchantAssignedID  
IDENTIFICATION.UNIQUEID=h987i654j321k098l765m432n210o987  
IDENTIFICATION.SHORTID=1234.5678.9876  
  
PROCESSING.CODE=CC.DB.90.00  
PROCESSING.TIMESTAMP=2003-02-12 14:58:07  
PROCESSING.RESULT=ACK  
PROCESSING.STATUS.CODE=90  
PROCESSING.STATUS=NEW  
PROCESSING.REASON.CODE=00  
PROCESSING.REASON=Successful Processing  
PROCESSING.RETURN.CODE=000.000.000  
PROCESSING.RETURN=Transaction succeeded  
  
PAYMENT.CODE=DD.DB  
PRESENTATION.AMOUNT=1.00  
PRESENTATION.CURRENCY=EUR  
PRESENTATION.USAGE=Order Number 1234  
  
CLEARING.AMOUNT=1.00  
CLEARING.CURRENCY=EUR  
CLEARING.DESRIPTOR=1234.1234.1234 - Order Number 1234  
  
RISKMANAGEMENT.PROCESS=AUTO  
  
AGGREGATION.RM.AG=true  
AGGREGATION.RM.AG.STATUS.CODE=00  
AGGREGATION.RM.AG.STATUS=SUCCESS  
AGGREGATION.RM.AG.REASON.CODE=90  
AGGREGATION.RM.AG.REASON=Risk Management Score is 90  
  
VALIDATOR.RM.AC=true  
VALIDATOR.RM.AC.STATUS.CODE=00

```
VALIDATOR.RM.AC.STATUS=SUCCESS
VALIDATOR.RM.AC.REASON.CODE=00
VALIDATOR.RM.AC.REASON=Account Validation Successful
VALIDATOR.RM.BL=true
VALIDATOR.RM.BL.STATUS.CODE=00
VALIDATOR.RM.BL.STATUS=SUCCESS
VALIDATOR.RM.BL.REASON.CODE=00
VALIDATOR.RM.BL.REASON=Account not in Blacklist
```

## 5.2 Debits

### Request:

```
TRANSACTION.MODE=LIVE
TRANSACTION.RESPONSE=SYNC
TRANSACTION.CHANNEL=546a456b789c123d456e789f012g821

IDENTIFICATION.TRANSACTIONID=MerchantAssignedID

USER.LOGIN=123456781234567812345678abcdabcd
USER.PWD=geheim

PAYMENT.CODE=CC.DB
PRESENTATION.AMOUNT=1.00
PRESENTATION.CURRENCY=EUR
PRESENTATION.USAGE=Order Number 1234

ACCOUNT.HOLDER=Joe Doe
ACCOUNT.NUMBER=1234 1234 1234 1234
ACCOUNT.BRAND=VISA
ACCOUNT.EXPIRY_MONTH=02
ACCOUNT.EXPIRY_YEAR=2003
ACCOUNT.VERIFICATION=123

NAME.GIVEN=Joe
NAME.FAMILY=Doe
NAME.SALUTATION=Herr
NAME.TITLE=Dr
NAME.COMPANY=SampleCompany

ADDRESS.STREET=Leopoldstr. 1
ADDRESS.ZIP=80798
ADDRESS.CITY=München
ADDRESS.STATE=BY
ADDRESS.COUNTRY=DE

CONTACT.EMAIL=info@provider.com
CONTACT.PHONE=+49-89-1234566
CONTACT.MOBILE=+49-172-1234566
CONTACT.IP=123.123.123.123

CRITERION.AFFILIATE=ExternalShopXY
CRITERION.AGE=30-40
CRITERION.KNOWN=YES
CRITERION.CUSTOMERID=1234567
```

### Response:

```
RESPONSE.VERSION=1.0
SECURITY.SENDER=123a456b789c123d456e789f012g345

TRANSACTION.MODE=LIVE
TRANSACTION.RESPONSE=SYNC
TRANSACTION.CHANNEL=546a456b789c123d456e789f012g821

IDENTIFICATION.TRANSACTIONID=MerchantAssignedID
IDENTIFICATION.UNIQUEID=h987i654j321k098l765m432n210o987
IDENTIFICATION.SHORTID=1234.5678.9876

PROCESSING.CODE=CC.DB.90.00
PROCESSING.TIMESTAMP=2003-02-12 14:58:07
PROCESSING.RESULT=ACK
PROCESSING.STATUS.CODE=90
PROCESSING.STATUS=NEW
PROCESSING.REASON.CODE=00
PROCESSING.REASON=Successful Processing
PROCESSING.RETURN.CODE=000.000.000
PROCESSING.RETURN=Transaction succeeded

PAYMENT.CODE=CC.DB
PRESENTATION.AMOUNT=1.00
PRESENTATION.CURRENCY=EUR
PRESENTATION.USAGE=Order Number 1234

CLEARING.AMOUNT=1.00
CLEARING.CURRENCY=EUR
CLEARING.DESRIPTOR=1234.1234.1234 - Order Number 1234

RISKMANAGEMENT.PROCESS=AUTO
AGGREGATION.RM.AG=true
AGGREGATION.RM.AG.STATUS.CODE=00
AGGREGATION.RM.AG.STATUS=SUCCESS

AGGREGATION.RM.AG.REASON.CODE=90
AGGREGATION.RM.AG.REASON=Risk Management Score is 90

VALIDATOR.RM.AC=true
VALIDATOR.RM.AC.STATUS.CODE=00
VALIDATOR.RM.AC.STATUS=SUCCESS
VALIDATOR.RM.AC.REASON.CODE=00
VALIDATOR.RM.AC.REASON=Account Validation Successful
VALIDATOR.RM.BL=true
VALIDATOR.RM.BL.STATUS.CODE=00
VALIDATOR.RM.BL.STATUS=SUCCESS
VALIDATOR.RM.BL.REASON.CODE=00
VALIDATOR.RM.BL.REASON=Account not in Blacklist
```

## 5.3 Preauthorisations

### Request:

```
TRANSACTION.MODE=LIVE
TRANSACTION.RESPONSE=SYNC
```

TRANSACTION.CHANNEL=546a456b789c123d456e789f012g821

IDENTIFICATION.TRANSACTIONID=MerchantAssignedID

USER.LOGIN=123456781234567812345678abcdabcd

USER.PWD=geheim

PAYMENT.CODE=CC.PA

PRESENTATION.AMOUNT=1.00

PRESENTATION.CURRENCY=EUR

PRESENTATION.USAGE=Order Number 1234

ACCOUNT.HOLDER=Joe Doe

ACCOUNT.NUMBER=1234 1234 1234 1234

ACCOUNT.BRAND=VISA

ACCOUNT.EXPIRY\_MONTH=02

ACCOUNT.EXPIRY\_YEAR=2003

ACCOUNT.VERIFICATION=123

NAME.GIVEN=Joe

NAME.FAMILY=Doe

NAME.SALUTATION=Herr

NAME.TITLE=Dr

NAME.COMPANY=SampleCompany

ADDRESS.STREET=Leopoldstr. 1

ADDRESS.ZIP=80798

ADDRESS.CITY=München

ADDRESS.STATE=BY

ADDRESS.COUNTRY=DE

CONTACT.EMAIL=info@provider.com

CONTACT.PHONE=+49-89-1234566

CONTACT.MOBILE=+49-172-1234566

CONTACT.IP=123.123.123.123

CRITERION.AFFILIATE=ExternalShopXY

CRITERION.AGE=30-40

CRITERION.KNOWN=YES

CRITERION.CUSTOMERID=1234567

## Response:

RESPONSE.VERSION=1.0

SECURITY.SENDER=123a456b789c123d456e789f012g345

TRANSACTION.MODE=LIVE

TRANSACTION.RESPONSE=SYNC

TRANSACTION.CHANNEL=546a456b789c123d456e789f012g821

IDENTIFICATION.TRANSACTIONID=MerchantAssignedID

IDENTIFICATION.UNIQUEID=h987i654j321k098l765m432n210o987

IDENTIFICATION.SHORTID=1234.5678.9876

PROCESSING.CODE=CC.PA.90.00

PROCESSING.TIMESTAMP=2003-02-12 14:58:07

PROCESSING.RESULT=ACK

PROCESSING.STATUS.CODE=90

PROCESSING.STATUS=NEW



```
PROCESSING.REASON.CODE=00
PROCESSING.REASON=Successful Processing
PROCESSING.RETURN.CODE=000.000.000
PROCESSING.RETURN=Transaction succeeded

PAYMENT.CODE=CC.PA
PRESENTATION.AMOUNT=1.00
PRESENTATION.CURRENCY=EUR
PRESENTATION.USAGE=Order Number 1234

CLEARING.AMOUNT=1.00
CLEARING.CURRENCY=EUR
CLEARING.DESRIPTOR=1234.1234.1234 - Order Number 1234

RISKMANAGEMENT.PROCESS=AUTO
AGGREGATION.RM.AG=true
AGGREGATION.RM.AG.STATUS.CODE=00
AGGREGATION.RM.AG.STATUS=SUCCESS
AGGREGATION.RM.AG.REASON.CODE=90
AGGREGATION.RM.AG.REASON=Risk Management Score is 90

VALIDATOR.RM.AC=true
VALIDATOR.RM.AC.STATUS.CODE=00
VALIDATOR.RM.AC.STATUS=SUCCESS
VALIDATOR.RM.AC.REASON.CODE=00
VALIDATOR.RM.AC.REASON=Account Validation Successful
VALIDATOR.RM.BL=true
VALIDATOR.RM.BL.STATUS.CODE=00
VALIDATOR.RM.BL.STATUS=SUCCESS
VALIDATOR.RM.BL.REASON.CODE=00
VALIDATOR.RM.BL.REASON=Account not in Blacklist
```

## 5.4 Captures

### Request:

```
TRANSACTION.MODE=LIVE
TRANSACTION.RESPONSE=SYNC
TRANSACTION.CHANNEL=546a456b789c123d456e789f012g821

USER.LOGIN=123456781234567812345678abcdabcd
USER.PWD=geheim

IDENTIFICATION.TRANSACTIONID=MerchantAssignedID
IDENTIFICATION.REFERENCEID= m123n456o789p876q543r210s123t456

PAYMENT.CODE=CC.CP
PRESENTATION.AMOUNT=1.00
PRESENTATION.CURRENCY=EUR
PRESENTATION.USAGE=Order Number 1234

CRITERION.AFFILIATE=ExternalShopXY
CRITERION.AGE=30-40
CRITERION.KNOWN=YES
CRITERION.CUSTOMERID=1234567
```

## Response:

```
RESPONSE.VERSION=1.0
SECURITY.SENDER=123a456b789c123d456e789f012g345

TRANSACTION.MODE=LIVE
TRANSACTION.RESPONSE=SYNC
TRANSACTION.CHANNEL=546a456b789c123d456e789f012g821

IDENTIFICATION.TRANSACTIONID=MerchantAssignedID
IDENTIFICATION.UNIQUEID=h987i654j321k098l765m432n210o987
IDENTIFICATION.SHORTID=1234.5678.9876
IDENTIFICATION.REFERENCEID= m123n456o789p876q543r210s123t456

PROCESSING.CODE=CC.CP.90.00
PROCESSING.TIMESTAMP=2003-02-12 14:58:07
PROCESSING.RESULT=ACK
PROCESSING.STATUS.CODE=90
PROCESSING.STATUS=NEW
PROCESSING.REASON.CODE=00
PROCESSING.REASON=Successful Processing
PROCESSING.RETURN.CODE=000.000.000
PROCESSING.RETURN=Transaction succeeded

PAYMENT.CODE=DD.DB
PRESENTATION.AMOUNT=1.00
PRESENTATION.CURRENCY=EUR
PRESENTATION.USAGE=Order Number 1234

CLEARING.AMOUNT=1.00
CLEARING.CURRENCY=EUR
CLEARING.DESRIPTOR=1234.1234.1234 - Order Number 1234
```

## 5.5 Risk Management

The risk management is currently exclusively configured by the system.

## 5.6 Reversals

### Request:

```
TRANSACTION.MODE=LIVE
TRANSACTION.RESPONSE=SYNC
TRANSACTION.CHANNEL=546a456b789c123d456e789f012g821

USER.LOGIN=123456781234567812345678abcdabcd
USER.PWD=geheim

IDENTIFICATION.TRANSACTIONID=MerchantAssignedID
IDENTIFICATION.REFERENCEID= m123n456o789p876q543r210s123t456

PAYMENT.CODE=CC.RV
```

### Response :

```
RESPONSE.VERSION=1.0
SECURITY.SENDER=123a456b789c123d456e789f012g345

TRANSACTION.MODE=LIVE
TRANSACTION.RESPONSE=SYNC
TRANSACTION.CHANNEL=546a456b789c123d456e789f012g821

IDENTIFICATION.TRANSACTIONID=
MerchantAssignedIDofReferencedTransaction
IDENTIFICATION.UNIQUEID=h987i654j321k098l765m432n210o987
IDENTIFICATION.SHORTID=1234.5678.9876
IDENTIFICATION.REFERENCEID= m123n456o789p876q543r210s123t456

PROCESSING.CODE=CC.RV.00.00
PROCESSING.TIMESTAMP=2003-02-12 14:58:07
PROCESSING.RESULT=ACK
PROCESSING.STATUS.CODE=00
PROCESSING.STATUS=SUCCESS
PROCESSING.REASON.CODE=00
PROCESSING.REASON=Transaction Reversed
PROCESSING.RETURN.CODE=000.000.000
PROCESSING.RETURN=Transaction succeeded

PAYMENT.CODE=CC.RV
PRESENTATION.AMOUNT=1.00
PRESENTATION.CURRENCY=EUR
PRESENTATION.USAGE=Order Number 1234
```

## 5.7 Refunds

### Refund Request:

```
TRANSACTION.MODE=LIVE
TRANSACTION.RESPONSE=SYNC
TRANSACTION.CHANNEL=546a456b789c123d456e789f012g821

USER.LOGIN=123456781234567812345678abcdabcd
USER.PWD=geheim

IDENTIFICATION.TRANSACTIONID=MerchantAssignedID
IDENTIFICATION.REFERENCEID= m123n456o789p876q543r210s123t456

PAYMENT.CODE=CC.RF
PRESENTATION.AMOUNT=1.00
PRESENTATION.CURRENCY=EUR
PRESENTATION.USAGE=Order Number 1234
```

### Refund Response:

```
RESPONSE.VERSION=1.0
SECURITY.SENDER=123a456b789c123d456e789f012g345

TRANSACTION.MODE=LIVE
TRANSACTION.RESPONSE=SYNC
TRANSACTION.CHANNEL=546a456b789c123d456e789f012g821

IDENTIFICATION.TRANSACTIONID=MerchantAssignedID
```

```
IDENTIFICATION.UNIQUEID=h987i654j321k098l765m432n210o987
IDENTIFICATION.SHORTID=1234.5678.9876
IDENTIFICATION.REFERENCEID= m123n456o789p876q543r210s123t456

PROCESSING.CODE=CC.RF.90.00
PROCESSING.TIMESTAMP=2003-02-12 14:58:07
PROCESSING.RESULT=ACK
PROCESSING.STATUS.CODE=90
PROCESSING.STATUS=NEW
PROCESSING.REASON.CODE=00
PROCESSING.REASON=Successful Processing
PROCESSING.RETURN.CODE=000.000.000
PROCESSING.RETURN=Transaction succeeded

PAYMENT.CODE=CC.RF
PRESENTATION.AMOUNT=1.00
PRESENTATION.CURRENCY=EUR
PRESENTATION.USAGE=Order Number 1234

CLEARING.AMOUNT=1.00
CLEARING.CURRENCY=EUR
CLEARING.DESRIPTOR=1234.1234.1234 - Order Number 1234
```

## 5.8 Chargebacks

A HTTPS Post with chargeback transactions can be transmitted either by a scheduled job or by a request with the Query group (version 1.0.9). Please note, that a chargeback transaction is a new transaction of its own with a new Unique ID. The given Reference ID refers to the Unique ID of the transaction which was returned. The Presentation amount is the amount given back by the bank and not the amount which was presented for the original transaction.

### Response:

```
TRANSACTION.MODE=LIVE
TRANSACTION.RESPONSE=SYNC
TRANSACTION.CHANNEL=546a456b789c123d456e789f012g821

IDENTIFICATION.TRANSACTIONID=MerchantAssignedID
IDENTIFICATION.UNIQUEID=h987i654j321k098l765m432n210o987
IDENTIFICATION.SHORTID=1234.5678.9876
IDENTIFICATION.REFERENCEID= m123n456o789p876q543r210s123t456

PROCESSING.CODE=CC.CB.00.00
PROCESSING.TIMESTAMP=2003-02-12 14:58:07
PROCESSING.RESULT=ACK
PROCESSING.STATUS.CODE=00
PROCESSING.STATUS=SUCCESS
PROCESSING.REASON.CODE=00
PROCESSING.REASON=Matched Chargeback
PROCESSING.RETURN.CODE=000.000.000
PROCESSING.RETURN=Transaction succeeded

PAYMENT.CODE=CC.CB
PRESENTATION.AMOUNT=1.00
PRESENTATION.CURRENCY=EUR
PRESENTATION.USAGE=Order Number 1234
```

```
CLEARING.AMOUNT=1.00  
CLEARING.CURRENCY=EUR  
CLEARING.DESRIPTOR=1234.1234.1234 - Order Number 1234
```

## 6 Registration Types

Registration types can be used for all payment methods and are generally used for recurring transactions where data like account, customer or recurrence information is registered in an initial Registration (RG) transaction.

After this Registration later Preauthorisation (PA), Debit (DB) or Credit (CD) Transactions can reference to the registered information. By giving the „registration“ attribute within the Account, Customer or Recurrence tag all subordinate tags, which would be required for a normal PA, CD or DB transaction can be omitted.

The Unique ID of the registration response is used as registration reference in following PA, CD or DB transactions. A reference to an account registration would for example look like this:

```
ACCOUNT.REGISTRATION=678a456b789c123d456e789f012g432
```

Registration information can also be altered or disabled by sending in a Reregistration (RR) or Deregistration (DR) transaction. Registrations are either confirmed automatically in most scenarios or explicitly by a Confirmation (CF) transaction.

### 6.1 Confirmations

If a specific Registration type also needs a custom identification number and needs to be confirmed explicitly in a second step, the response also contains this ID and a URL for downloading the Registration confirmation document. In the case of an account registration for paper based direct debit schemes this URL would contain a paper mandate, which must be signed by the end customer:

```
ACCOUNT.IDENTIFICATION=Customer Account specific Identification  
Number
```

```
ACCOUNT.REGISTRATION_URL=https://test-  
heidelpay.hpcgw.net.net/payment/registration?id=4028e4ee00a7bc470100a  
7bc6a05000d
```

As soon as a valid Registration confirmation document is received, a Confirmation (CF) transaction must be sent in. In the example of an account registration this document would be a signed paper mandate. If no explicit Confirmation is required for a specific Registration type the system automatically generates a Confirmation.

For all transactions replace the following parameters with your test or live parameters:

```
SECURITY.SENDER  
USER.LOGIN  
USER.PWD  
TRANSACTION.CHANNEL
```

See document "heidelpay-Integration Basics" for more details.

## 6.2 Registration (RG)

### Request:

```
REQUEST.VERSION=1.0
SECURITY.SENDER=123a456b789c123d456e789f012g345

USER.LOGIN=123456781234567812345678abcdabcd
USER.PWD=geheim

TRANSACTION.MODE=LIVE
TRANSACTION.RESPONSE=SYNC
TRANSACTION.CHANNEL=546a456b789c123d456e789f012g821
IDENTIFICATION.TRANSACTIONID=MerchantAssignedID

PAYMENT.CODE=DD.RG

ACCOUNT.HOLDER=Joe Doe
ACCOUNT.NUMBER=618495000
ACCOUNT.BANK=70070024
ACCOUNT.COUNTRY=DE

NAME.GIVEN=Joe
NAME.FAMILY=Doe
ADDRESS.STREET=Leopoldstr. 1
ADDRESS.ZIP=80798
ADDRESS.CITY=München
ADDRESS.STATE=BY
ADDRESS.COUNTRY=DE

CONTACT.EMAIL=info@provider.com
CONTACT.IP=123.123.123.123
```

### Response:

```
RESPONSE.VERSION=1.0
SECURITY.SENDER=123a456b789c123d456e789f012g345

TRANSACTION.MODE=LIVE
TRANSACTION.RESPONSE=SYNC
TRANSACTION.CHANNEL=546a456b789c123d456e789f012g821

IDENTIFICATION.TRANSACTIONID=MerchantAssignedID
IDENTIFICATION.UNIQUEID=h987i654j321k098l765m432n210o987
IDENTIFICATION.SHORTID=1234.5678.9876

PROCESSING.CODE=DD.RG.90.00
PROCESSING.TIMESTAMP=2003-02-12 14:58:07
PROCESSING.RESULT=ACK
PROCESSING.STATUS.CODE=90
PROCESSING.STATUS=NEW
PROCESSING.REASON.CODE=00
PROCESSING.REASON=Successful Processing
PROCESSING.RETURN.CODE=000.000.000
PROCESSING.RETURN=Transaction succeeded
```

PAYMENT.CODE=DD.RG

ACCOUNT.IDENTIFICATION=Customer Account specific Identification  
Number

ACCOUNT.REGISTRATION\_URL=https://test-  
heidelpay.hpcgw.net.net/payment/registration?id=4028e4ee00a7bc470100a  
7bc6a05000d

RISKMANAGEMENT.PROCESS=AUTO

AGGREGATION.RM.AG=true

AGGREGATION.RM.AG.STATUS.CODE=90

AGGREGATION.RM.AG.STATUS=SUCCESS

AGGREGATION.RM.AG.REASON.CODE=90

AGGREGATION.RM.AG.REASON=Risk Management Score is 90

VALIDATOR.RM.AC=true

VALIDATOR.RM.AC.STATUS.CODE=00

VALIDATOR.RM.AC.STATUS=SUCCESS

VALIDATOR.RM.AC.REASON.CODE=00

VALIDATOR.RM.AC.REASON=Account Validation Successful

VALIDATOR.RM.BC=true

VALIDATOR.RM.BC.STATUS.CODE=00

VALIDATOR.RM.BC.STATUS=SUCCESS

VALIDATOR.RM.BC.REASON.CODE=00

VALIDATOR.RM.BC.REASON=Bank Code Validation Successful

CONNECTOR.ACCOUNT.HOLDER= Internal Account Holder

CONNECTOR.ACCOUNT.NUMBER=618495000

CONNECTOR.ACCOUNT.BANK=70070024

CONNECTOR.ACCOUNT.IBAN= DE82700202700666898869

CONNECTOR.ACCOUNT.BIC= HYVEDEMM

CONNECTOR.ACCOUNT.COUNTRY=DE

## 6.3 Debit on Registration (DB)

### Request:

REQUEST.VERSION=1.0

SECURITY.SENDER=123a456b789c123d456e789f012g345

USER.LOGIN=123456781234567812345678abcdabcd

USER.PWD=geheim

TRANSACTION.MODE=LIVE

TRANSACTION.RESPONSE=SYNC

TRANSACTION.CHANNEL=546a456b789c123d456e789f012g821

IDENTIFICATION.TRANSACTIONID=MerchantAssignedID

PAYMENT.CODE=DD.DB

PRESENTATION.AMOUNT=1.00

PRESENTATION.CURRENCY=EUR

PRESENTATION.USAGE=Order Number 1234



ACCOUNT.REGISTRATION=h987i654j321k098l765m432n210o987  
(IDENTIFICATION.UNIQUEID from the initial Registration Response (RG))

### Response:

RESPONSE.VERSION=1.0  
SECURITY.SENDER=123a456b789c123d456e789f012g345

TRANSACTION.MODE=LIVE  
TRANSACTION.RESPONSE=SYNC  
TRANSACTION.CHANNEL=546a456b789c123d456e789f012g821

IDENTIFICATION.TRANSACTIONID=MerchantAssignedID  
IDENTIFICATION.UNIQUEID=h987i654j321k098l765m432n210o987  
IDENTIFICATION.SHORTID=1234.5678.9876

PROCESSING.CODE=DD.DB.90.00  
PROCESSING.TIMESTAMP=2003-02-12 14:58:07  
PROCESSING.RESULT=ACK  
PROCESSING.STATUS.CODE=90  
PROCESSING.STATUS=NEW  
PROCESSING.REASON.CODE=00  
PROCESSING.REASON=Successful Processing  
PROCESSING.RETURN.CODE=000.000.000  
PROCESSING.RETURN=Transaction succeeded

PAYMENT.CODE=DD.DB  
PRESENTATION.AMOUNT=1.00  
PRESENTATION.CURRENCY=EUR  
PRESENTATION.USAGE=Order Number 1234

CLEARING.AMOUNT=1.00  
CLEARING.CURRENCY=EUR  
CLEARING.DESRIPTOR=1234.1234.1234 - Order Number 1234

## 6.4 Reregistration (RR)

The Reference ID references the Unique ID of the original Registration.

### Request:

REQUEST.VERSION=1.0  
SECURITY.SENDER=123a456b789c123d456e789f012g345

USER.LOGIN=123456781234567812345678abcdabcd  
USER.PWD=geheim

TRANSACTION.MODE=LIVE  
TRANSACTION.RESPONSE=SYNC  
TRANSACTION.CHANNEL=546a456b789c123d456e789f012g821

IDENTIFICATION.TRANSACTIONID=MerchantAssignedID  
IDENTIFICATION.REFERENCEID= m123n456o789p876q543r210s123t456

PAYMENT.CODE=DD.RR

ACCOUNT.HOLDER=Joe Doe  
ACCOUNT.NUMBER=618495000  
ACCOUNT.BANK=70070024  
ACCOUNT.COUNTRY=DE

RISKMANAGEMENT.PROCESS=AUTO

## Response:

RESPONSE.VERSION=1.0  
SECURITY.SENDER=123a456b789c123d456e789f012g345

TRANSACTION.MODE=LIVE  
TRANSACTION.RESPONSE=SYNC  
TRANSACTION.CHANNEL=546a456b789c123d456e789f012g821

IDENTIFICATION.TRANSACTIONID=MerchantAssignedID  
IDENTIFICATION.UNIQUEID=h987i654j321k098l765m432n210o987  
IDENTIFICATION.SHORTID=1234.5678.9876

PROCESSING.CODE=DD.RR.90.00  
PROCESSING.TIMESTAMP=2003-02-12 14:58:07  
PROCESSING.RESULT=ACK  
PROCESSING.STATUS.CODE=90  
PROCESSING.STATUS=NEW  
PROCESSING.REASON.CODE=00  
PROCESSING.REASON=Successful Processing  
PROCESSING.RETURN.CODE=000.000.000  
PROCESSING.RETURN=Transaction succeeded

PAYMENT.CODE=DD.RR

ACCOUNT.IDENTIFICATION=Customer Account specific Identification  
Number  
ACCOUNT.REGISTRATION\_URL=https://test-  
heidelpay.hpcgw.net.net/payment/registration?id=4028e4ee00a7bc470100a  
7bc6a05000d

RISKMANAGEMENT.PROCESS=AUTO  
AGGREGATION.RM.AG=true  
AGGREGATION.RM.AG.STATUS.CODE=90  
AGGREGATION.RM.AG.STATUS=SUCCESS  
AGGREGATION.RM.AG.REASON.CODE=90  
AGGREGATION.RM.AG.REASON=Risk Management Score is 90

VALIDATOR.RM.AC=true  
VALIDATOR.RM.AC.STATUS.CODE=00  
VALIDATOR.RM.AC.STATUS=SUCCESS  
VALIDATOR.RM.AC.REASON.CODE=00  
VALIDATOR.RM.AC.REASON=Account Validation Successful  
VALIDATOR.RM.BC=true  
VALIDATOR.RM.BC.STATUS.CODE=00  
VALIDATOR.RM.BC.STATUS=SUCCESS  
VALIDATOR.RM.BC.REASON.CODE=00  
VALIDATOR.RM.BC.REASON=Bank Code Validation Successful

CONNECTOR.ACCOUNT.HOLDER= Internal Account Holder

```
CONNECTOR.ACCOUNT.NUMBER=618495000  
CONNECTOR.ACCOUNT.BANK=70070024  
CONNECTOR.ACCOUNT.IBAN= DE82700202700666898869  
CONNECTOR.ACCOUNT.BIC= HYVEDEMM  
CONNECTOR.ACCOUNT.COUNTRY=DE
```

## 6.5 Deregistration (DR)

### Request:

The Reference ID references to the Unique ID of the Registration transaction which is to be deregistered.

```
REQUEST.VERSION=1.0  
SECURITY.SENDER=123a456b789c123d456e789f012g345  
  
USER.LOGIN=123456781234567812345678abcdabcd  
USER.PWD=geheim  
  
TRANSACTION.MODE=LIVE  
TRANSACTION.RESPONSE=SYNC  
TRANSACTION.CHANNEL=546a456b789c123d456e789f012g821  
  
IDENTIFICATION.TRANSACTIONID=MerchantAssignedID  
IDENTIFICATION.REFERENCEID= m123n456o789p876q543r210s123t456  
  
PAYMENT.CODE=DD.DR
```

### Response:

```
RESPONSE.VERSION=1.0  
  
SECURITY.SENDER=123a456b789c123d456e789f012g345  
  
TRANSACTION.MODE=LIVE  
TRANSACTION.RESPONSE=SYNC  
TRANSACTION.CHANNEL=546a456b789c123d456e789f012g821  
  
IDENTIFICATION.TRANSACTIONID=MerchantAssignedID  
IDENTIFICATION.UNIQUEID=h987i654j321k098l765m432n210o987  
IDENTIFICATION.SHORTID=1234.5678.9876  
  
PROCESSING.CODE=DD.DR.90.00  
PROCESSING.TIMESTAMP=2003-02-12 14:58:07  
PROCESSING.RESULT=ACK  
PROCESSING.STATUS.CODE=90  
PROCESSING.STATUS=NEW  
PROCESSING.REASON.CODE=00  
PROCESSING.REASON=Successful Processing  
PROCESSING.RETURN.CODE=000.000.000  
PROCESSING.RETURN=Transaction succeeded  
  
PAYMENT.CODE=DD.DR
```

## 6.6 Confirmation (CF)

### Request:

The Reference ID references to the Unique ID of the Registration transaction which is to be confirmed.

```
REQUEST.VERSION=1.0
SECURITY.SENDER=123a456b789c123d456e789f012g345

USER.LOGIN=123456781234567812345678abcdabcd
USER.PWD=geheim

TRANSACTION.MODE=LIVE
TRANSACTION.RESPONSE=SYNC
TRANSACTION.CHANNEL=546a456b789c123d456e789f012g821

IDENTIFICATION.TRANSACTIONID=MerchantAssignedID
IDENTIFICATION.REFERENCEID= m123n456o789p876q543r210s123t456

PAYMENT.CODE=DD.CF
```

### Response:

```
RESPONSE.VERSION=1.0
SECURITY.SENDER=123a456b789c123d456e789f012g345

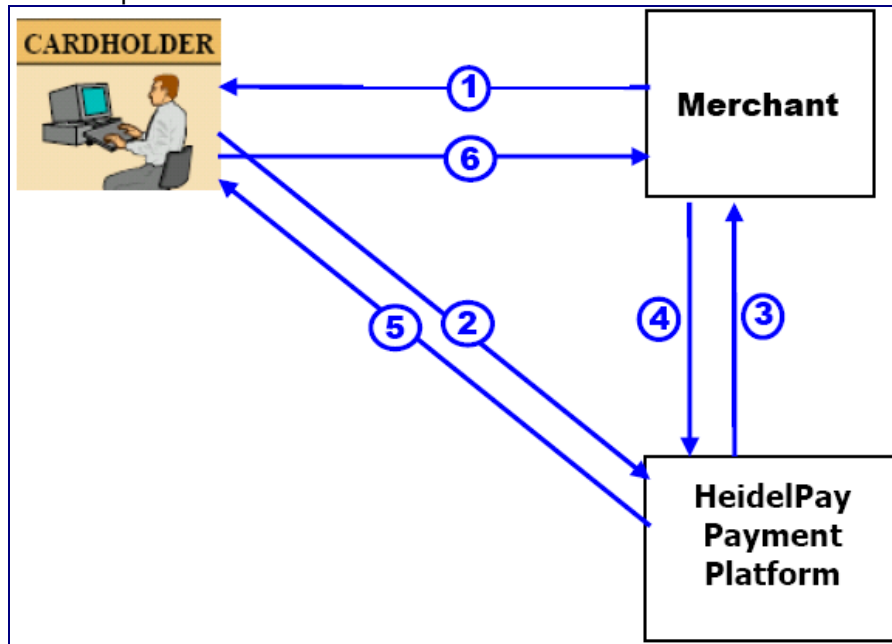
TRANSACTION.MODE=LIVE
TRANSACTION.RESPONSE=SYNC
TRANSACTION.CHANNEL=546a456b789c123d456e789f012g821

IDENTIFICATION.TRANSACTIONID=MerchantAssignedID
IDENTIFICATION.UNIQUEID=h987i654j321k098l765m432n210o987
IDENTIFICATION.SHORTID=1234.5678.9876

PROCESSING.CODE=DD.CF.90.00
PROCESSING.TIMESTAMP=2003-02-12 14:58:07
PROCESSING.RESULT=ACK
PROCESSING.STATUS.CODE=90
PROCESSING.STATUS=NEW
PROCESSING.REASON.CODE=00
PROCESSING.REASON=Successful Processing
PROCESSING.RETURN.CODE=000.000.000
PROCESSING.RETURN=Transaction succeeded
PAYMENT.CODE=DD.CF
```

## 7 Asynchronous POST

The asynchronous POST method allows the merchant to use his own html payment form but send the payment transaction directly to the payment server. By doing this the merchant works around the problem that payment data is processed via his server. Therefore he does not need to go through expensive certification processes.



Pic 1 Workflow for asynchronous POST

| Step | Description  |
|------|--|
| 1    | Cardholder gets html payment form to enter his payment data  |
| 2    | Payment data is sent directly to the payment server by HTTP POST. All other required parameters for a POST request are hold in hidden input fields in the html page. Two additional parameters are important for the asynchronous POST: <ul style="list-style-type: none"> <li>- FRONTEND.MODE=ASYNC</li> <li>- FRONTEND.RESPONSE_URL=https://merchant.net/response.php</li> </ul> |
| 3    | The transaction is processed by the payment platform and the result of the payment is sent to the url specified in FRONTEND.RESPONSE_URL.  |
| 4    | The merchant deals with the response and replies with the URL the cardholder should be redirected to (response must contain only a URL in plain text)  |
| 5    | Payment server redirects cardholder to the just received URL.  |
| 6    | Cardholder continues shopping experience.  |

## 8 Transmission Options

### 8.1 HTTPS Post Interface

The Https Post Interface is the simplest and fastest integration option available. For very high volumes and harder encryption please consider using other transmission options.

### 8.2 Login and Authorization

Each physical server that wants to access the HTTPS interface needs an own sender ID (=login). The HTTPS gateway will service any requests only if it can validate the sender ID inside the header of the HTTPS Post message:

```
SECURITY.SENDER=123a456b789c123d456e789f012g345
```

Please get back to customer support if you haven't received any sender ID yet.

Since Https is a stateless protocol, the client application needs to resend the login and password on each request by including the SECURITY parameters inside the HTTPS Post header.

Please remark, that all POST parameters must be URL encoded.

The payment system is working with the UTF-8 character set. All incoming request must be fully UTF-8 encoded.

The content-type of your message must be set to:

```
application/x-www-form-urlencoded;charset=UTF-8
```

In contrast to the sender ID the channel ID is a purely logical subdivision of the business context and should not be confused with the sender ID. In other words each sender ID can route several channel IDs and each channel ID can go over several sender IDs.

Before a merchant can access the live gateway, he must successfully pass some basic transaction tests on the test gateway. Once you are ready with testing, please consult the customer support to get the permission to send transactions to the live gateway.

## 9 Links

### 9.1 Test Gateway

URL : <https://test-heidelpay.hpcgw.net/sgw/gtw>

Content-Type : `application/x-www-form-urlencoded; charset=UTF-8`

### 9.2 Live Gateway

URL : <https://heidelpay.hpcgw.net/sgw/gtw>

Content-Type : `application/x-www-form-urlencoded; charset=UTF-8`

## A Appendix A (POST.VALIDATION Codes)

| Validation Code | Validation name             | Description  |
|-----------------|-----------------------------|--|
| <b>ACK</b>      | ACK                         | Request OK   |
| <b>2010</b>     | ERROR_AMOUNT                | Parameter PRESENTATION.AMOUNT missing or not a number  |
| <b>2030</b>     | ERROR_CURRENCY              | Parameter PRESENTATION.CURRENCY missing  |
| <b>2020</b>     | ERROR_PAYMENT_CODE          | Parameter PAYMENT.CODE missing or wrong  |
| <b>3010</b>     | ERROR_FRONTEND_MODE         | Parameter FRONTEND.MODE missing or wrong   |
| <b>3020</b>     | ERROR_FRONTEND_NEXT_TARGET  | Parameter FRONTEND.NEXT_TARGET wrong   |
| <b>3040</b>     | ERROR_FRONTEND_LANGUAGE     | Parameter FRONTEND.LANGUAGE wrong  |
| <b>3050</b>     | ERROR_FRONTEND_RESPONSE_URL | Parameter FRONTEND.RESPONSE_URL wrong  |
| <b>3070</b>     | ERROR_FRONTEND_POPUP        | Parameter FRONTEND.POPUP wrong   |
| <b>3090</b>     | ERROR_FRONTEND_LINKS        | Wrong FRONTEND.LINK parameter combination  |
| <b>3100</b>     | ERROR_FRONTEND_BANNERS      | Wrong BANNERS information  |
| <b>3110</b>     | ERROR_FRONTEND_PM_METHOD    | Wrong FRONTEND.PM_METHOD parameter combination   |
| <b>3120</b>     | ERROR_FRONTEND_BUTTON       | Wrong FRONTEND.BUTTON parameter combination  |
| <b>4020</b>     | ERROR_IP                    | Parameter SECURITY.IP missing or wrong   |
| <b>4030</b>     | ERROR_SENDERID              | Parameter SECURITY.SENDER missing or wrong   |
| <b>4040</b>     | ERROR_AUTHENTICATION        | Wrong User/Password combination  |
| <b>4050</b>     | ERROR_USER                  | Parameter USER.LOGIN missing or wrong  |
| <b>4060</b>     | ERROR_PWD                   | Parameter USER.PWD missing or wrong  |
| <b>4070</b>     | ERROR_CHANNEL               | Parameter TRANSACTION.CHANNEL missing or wrong   |
| <b>5010</b>     | ERROR_ACCOUNT_COUNTRY       | Parameter ACCOUNT.COUNTRY is wrong or missing for WPF_LIGHT mode and payment code starts with DD |