E-commerce Global Payments Brazil Solution

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E-commerce Global Payments Brazil Solution

global payments

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Version Management

Version	Date	Amendment	Brief description of the amendment
1.0	12/03/2015	ALL	Initial version
1.1	05/06/2015	Sections 2.1, 3.1, 3.2 and APPENDIX I	Corrected: - *DS_MERCHANT_ACCOUNTTYPE* - *DS_MERCHANT_CURRENCY* - URL testing environment
1.3	12/11/2015	6.1 Error codes	
1.5	18/08/2016	Item 2 Items 2 and 11 Item 3.1. and sub-items Item 6 Item 9.1	- Change of production URL; - Updated support contact; - Zero Dollar functionality added to the *DS_MERCHANT_AMOUNT* field and completion examples included. - *DS_MERCHANT_VCIND, DS_MERCHANT_ACCEPTHEADER and DS_MERCHANT_USERAGENT* fields included. - Table with 3DS functionality supported by credit and debit product created; - Examples of authorisation requests created; - Authenticated debits and credits included. - External MPI included. - Revision of error codes;

Contents

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1 Introduction

This manual contains all the information necessary to integrate the Global Payments Brazil e-commerce solution. Below is a quick 4-step guide with everything you need to integrate the solution and start selling over the internet.

Step 1 – How to register with Global Payments?

You can register in the following manner:
- Form completed with your commercial representative or;
- On the website:
  https://portaldeservicos.globalpagamentos.com.br/Pages/credenciamento.aspx

After the registration request, the lead technician of the virtual store it will be sent a Global Payments registration number, stating that integration will commence.

Step 2 – What is needed to commence integration?

To commence integration, the following documents and information will be necessary:
- This integration manual;
- Global Payments registration number;
- Test key and;
- Developer's access to the e-commerce administrative website.

The key for commencing the integration in the Global Payments testing environment is:

Test key	qwertyasdf0123456789
Password Type	"SHA-256"

During the integration process, we provide a specialist team in case questions or difficulties arise with regard to the integration. The support centre can be contacted at any time by email suporte.ecommerce@globalpagamentos.com.br

Step 3 – How are the tests performed?

Global Payments provides a testing environment for transitional tests, through the URL https://sis-t.redsys.es:25443/sis/services/SerClsWSEntrada
In order to ensure successful integration, at least one approved and one rejected transaction need to be made with the following test card data.

1- Test card data for the approved transaction (cash payment).

Card number	4548812049400004
Expiry Date	12/20
CVV2 Code	123
CIP Code	123456

2- Test card data for the approved transaction (payment in instalments).

Card number	4761120000000148
Expiry Date	12/17
CVV2 Code	111

3- Test card data for the rejected transaction.

Card number	1111111111111117
Expiry Date	12/20

4- Check the result of the transactions on the e-commerce Administrative Website > Consultations (state period)

5- After successfully confirming and validating the tests, send an email to suporte.ecommerce@globalpagamentos.com.br with the URL and a test user (user and password, if applicable) and request site ratification to access the production environment.

Attention! To validate the store it must have:

✓ Digital Certificate (HTTPS) in the purchase process
✓ Complete description of the products and services on offer
✓ Credit card brands (Visa and MasterCard) in their original colours
✓ Customer service contact

Step 4 – Replace the test key and URL for the production key and URL and commence your sales over the internet!

After receiving the ratification request, we will validate the virtual store and send the instructions for the lead technician to replace the test data with the production and commence sales over the internet within 2 days.

2   Environment Types

You must use one of the URLs below:

Environment	URL
Test	https://sis-t.redsys.es:25443/sis/services/SerClsWSEntrada
Production	https://sisw.globalpaybrasil.com.br/sis/services/SerClsWSEntrada

Test environment: in order to perform the tests during the integration process with the Global Payments API.

Production environment: to transact with the Global Payments production Platform.

It is important to emphasise that the environments are completely different and therefore contain different data.

3   Access Method

To exchange messages with the Global Payments e-commerce solution, an XML including transaction data must be forwarded. In Appendix I, you will find examples of the WSDL of the SOAP service.

For WebService integration, we will work with the following methods:

3.1   trataPeticion

This model will be used under the following conditions:

- **Authorisation Requests**
- **Transaction Capture Requests**
- **Cancellation Requests**
- **Authorisation Response**
- **Transaction Capture Response**
- **Cancellation Response**
- **DCC Consultation (currency converter)**

All transactions will receive a confirmation response according to the flow below:

3.1.1   Authorisation Requests

The following transactions are supported for an authorisation request:

Product	Without 3D Secure Authentication	With 3D Secure Authentication
Credit transaction authorisation	Supported	Supported
Debit transaction authorisation	Not supported	Supported
Credit transaction pre-authorisation	Supported	Supported

The fields below must be completed every time the store executes an Authorisation:

Field Name	Type	Size	Description
DS_MERCHANT_AMOUNT	Numeric	12	**Obligatory.** Total purchase transaction amount. Examples: - For a BRL 100.00 transaction, the store must send this field with 10000. - For a BRL 0.01 transaction, the store must send this field with 1. - For a BRL 0.10 transaction, the store must send this field with 10. **Zero Dollar:** To execute a Zero Dollar payment transaction, just execute an authorisation operation with the value set at BRL 0.00. At this is a reset authorisation, it works the same as a normal transaction; therefore, its response also works as a normal sale. The Zero Dollar operation can be used, for example, in validating the card without submitting an actual authorisation.

DS_MERCHANT_ORDER	Alphanumeric	12	**Obligatory.** Order Number. The first 4 digits must be numerical. This field cannot be repeated
DS_MERCHANT_MERCHANTCODE	Numeric	15	**Obligatory.** Establishment number (MID) defined by Global Payments.
DS_MERCHANT_TERMINAL	Numeric	3	**Obligatory.** Terminal number that will be defined by Global Payments.
DS_MERCHANT_CURRENCY	Numeric	4	**Obligatory.** Transaction currency will be 986 for Brazil.
DS_MERCHANT_PAN	Numeric	19	**Obligatory.** Card number
DS_MERCHANT_EXPIRYDATE	Numeric	4	**Obligatory.** Card Expiry Date. Format must be YYMM, where YY is the last 2 digits of the year and MM is the digits of the month.
DS_MERCHANT_CVV2	Numeric	3 or 4	**Obligatory** - CVV - Security code on the card.
DS_MERCHANT_TRANSACTIONTYPE	Alphanumeric	1	**Obligatory.** Indicates type of transaction: A – authorisation (without 3D Secure) 0 – Authorisation (with 3D Secure authentication) 1 – Pre-authorisation
DS_MERCHANT_ACCOUNTTYPE	Alphanumeric	2	**Obligatory.** Method of Payment – Credit or Debit 01 – Credit 02 – Debit
DS_MERCHANT_PLANTYPE	Numeric	2	**Obligatory.** Indicates type of transaction: 01 – Cash 02 – Instalments
DS_MERCHANT_PLANINSTALLMENTSNUMBER	Numeric	2	**Optional** – Indicates the number of instalments in the transaction.
DS_MERCHANT_PRODUCTDESCRIPTION	Alphanumeric	125	**Optional.** 125 when considering the maximum length. This field will be shown to the card holder on the purchase confirmation screen.
DS_MERCHANT_TITULAR	Alphanumeric	60	**Optional.** Maximum length is 60 characters. This field will be shown to the card holder on the purchase confirmation screen.
DS_MERCHANT_MERCHANTDATA	Alphanumeric	1024	**Optional.** Optional field for the establishment to be included in the data sent by the "on-line" response to the establishment if this option has been selected.
DS_MERCHANT_CLIENTIP	Alphanumeric	15	**Optional.** Customer IP.
DS_MERCHANT_MERCHANTSIGNATURE	Alphanumeric	64	**Obligatory.** Store signature for validation of the transaction.
DS_MERCHANT_VCIND	Alphanumeric	5	**Optional.** CVIND value of the Visa Checkout transaction
DS_MERCHANT_RECURRINGPAYMENT	*Alphanumeric*	*1*	**Optional.** Indicates whether it is a recurrent transaction 'Y': indicates that it is a recurrent transaction. Any other value will not mark it as a recurrent transaction
DS_MERCHANT_ACCEPTHEADER	Alphanumeric	2048	**Obligatory in 3D Secure authenticated transactions.** Exact content of the header **http accept** that the merchant receives in the order from the http of its customer's browser (end user)
DS_MERCHANT_USERAGENT	Alphanumeric	256	**Obligatory in 3D Secure authenticated transactions.** Exact content of the header **http user-agent** that the establishment receives in the order from the http of its customer's browser (end user)
AN Type: ASCII characters from 65 = A to 90 = Z and from 97 = to 122 = z. N Type: ASCII characters from 30 = 0 to 39 = 9.			

To calculate the *DS_MERCHANT_ MERCHANTSIGNATURE* field, see Chapter 4. To calculate authorisation, see item 4.1.

3.1.1.1 Debit or Credit requests using 3D Secure authentication (Verified By Visa and MasterCard SecureCode)

To process debit and credit transactions authenticated via webservice, the data below must be submitted in XML format, as presented in item 3.1.1.

3.1.1.2 Examples of authorisation Messages

Credit transactions (without 3D Secure authentication)

```
<DATOSENTRADA>
  <DS_MERCHANT_AMOUNT>10000</DS_MERCHANT_AMOUNT>
  <DS_MERCHANT_ORDER>5381Q9bvzL</DS_MERCHANT_ORDER>
  <DS_MERCHANT_MERCHANTCODE>012000009010001</DS_MERCHANT_MERCHANTCODE>
  <DS_MERCHANT_TERMINAL>001</DS_MERCHANT_TERMINAL>
  <DS_MERCHANT_CURRENCY>986</DS_MERCHANT_CURRENCY>
  <DS_MERCHANT_PAN>4548810000000003</DS_MERCHANT_PAN>
  <DS_MERCHANT_EXPIRYDATE>4912</DS_MERCHANT_EXPIRYDATE>
  <DS_MERCHANT_CVV2>123</DS_MERCHANT_CVV2>
  <DS_MERCHANT_TRANSACTIONTYPE>A</DS_MERCHANT_TRANSACTIONTYPE>
  <DS_MERCHANT_ACCOUNTTYPE>01</DS_MERCHANT_ACCOUNTTYPE>
<DS_MERCHANT_MERCHANTSIGNATURE>09f8afd00eb1ee0acac534dee100eb4e5222ff7fe5e1ed18486b5c541f5bef96</DS_MERCHANT_MERCHANTSIGNATURE>
</DATOSENTRADA>
```

Credit transactions (with 3D Secure authentication)

```
<DATOSENTRADA>
  <DS_MERCHANT_AMOUNT>10000</DS_MERCHANT_AMOUNT>
  <DS_MERCHANT_ORDER>7068</DS_MERCHANT_ORDER>
  <DS_MERCHANT_MERCHANTCODE>012000009010001</DS_MERCHANT_MERCHANTCODE>
  <DS_MERCHANT_TERMINAL>001</DS_MERCHANT_TERMINAL>
  <DS_MERCHANT_CURRENCY>986</DS_MERCHANT_CURRENCY>
  <DS_MERCHANT_PAN>4548810000000003</DS_MERCHANT_PAN>
  <DS_MERCHANT_EXPIRYDATE>4912</DS_MERCHANT_EXPIRYDATE>
  <DS_MERCHANT_CVV2>123</DS_MERCHANT_CVV2>
  <DS_MERCHANT_TRANSACTIONTYPE>0</DS_MERCHANT_TRANSACTIONTYPE>
  <DS_MERCHANT_ACCOUNTTYPE>01</DS_MERCHANT_ACCOUNTTYPE>
<DS_MERCHANT_ACCEPTHEADER>text/html,application/xhtml+xml,application/xml;q=0.9,image/webp,*/*;q=0.8</DS_MERCHANT_ACCEPTHEADER>
  <DS_MERCHANT_USERAGENT>Mozilla/5.0 (Windows NT 6.1) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/53.0.2785.143 Safari/537.36</DS_MERCHANT_USERAGENT>
<DS_MERCHANT_MERCHANTSIGNATURE>f0dc883e2f66e15c3a8cbbd01da6c5c0b30c59d980547bb8cc9d4e0c6b9aba64</DS_MERCHANT_MERCHANTSIGNATURE>
</DATOSENTRADA>
```

Debit transactions (with 3D Secure authentication)

```
<DATOSENTRADA>
  <DS_MERCHANT_AMOUNT>10000</DS_MERCHANT_AMOUNT>
  <DS_MERCHANT_ORDER>5328</DS_MERCHANT_ORDER>
  <DS_MERCHANT_MERCHANTCODE>012000009010001</DS_MERCHANT_MERCHANTCODE>
  <DS_MERCHANT_TERMINAL>001</DS_MERCHANT_TERMINAL>
  <DS_MERCHANT_CURRENCY>986</DS_MERCHANT_CURRENCY>
  <DS_MERCHANT_PAN>4548810000000003</DS_MERCHANT_PAN>
  <DS_MERCHANT_EXPIRYDATE>4912</DS_MERCHANT_EXPIRYDATE>
  <DS_MERCHANT_CVV2>123</DS_MERCHANT_CVV2>
  <DS_MERCHANT_TRANSACTIONTYPE>0</DS_MERCHANT_TRANSACTIONTYPE>
  <DS_MERCHANT_ACCOUNTTYPE>02</DS_MERCHANT_ACCOUNTTYPE>
<DS_MERCHANT_ACCEPTHEADER>text/html,application/xhtml+xml,application/xml;q=0.9,image/webp,*/*;q=0.8</DS_MERCHANT_ACCEPTHEADER>
  <DS_MERCHANT_USERAGENT>Mozilla/5.0 (Windows NT 6.1) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/53.0.2785.143 Safari/537.36</DS_MERCHANT_USERAGENT>
<DS_MERCHANT_MERCHANTSIGNATURE>870670dda60588eb4d30ea84ec163a6c2997a9cdcf7a222ec16addb89f567de8</DS_MERCHANT_MERCHANTSIGNATURE>
</DATOSENTRADA>
```

Pre-authorisation credit transactions (without 3D Secure authentication)

```
<DATOSENTRADA>
  <DS_MERCHANT_AMOUNT>10000</DS_MERCHANT_AMOUNT>
  <DS_MERCHANT_ORDER>12370JpkZMP</DS_MERCHANT_ORDER>
```

<DS_MERCHANT_MERCHANTCODE>012000009010001</DS_MERCHANT_MERCHANTCODE>
<DS_MERCHANT_TERMINAL>001</DS_MERCHANT_TERMINAL>
<DS_MERCHANT_CURRENCY>986</DS_MERCHANT_CURRENCY>
<DS_MERCHANT_PAN>4548810000000003</DS_MERCHANT_PAN>
<DS_MERCHANT_EXPIRYDATE>4912</DS_MERCHANT_EXPIRYDATE>
<DS_MERCHANT_CVV2>123</DS_MERCHANT_CVV2>
<DS_MERCHANT_TRANSACTIONTYPE>1</DS_MERCHANT_TRANSACTIONTYPE>
<DS_MERCHANT_ACCOUNTTYPE>01</DS_MERCHANT_ACCOUNTTYPE>
<DS_MERCHANT_MERCHANTSIGNATURE>6b7a7bfc85248989317b06a301d8c1e3f8ea964e6eb3a9a4ce4f8223cca25c77</DS_MERCHANT_MERCHANTSIGNATURE>
</DATOSENTRADA>

Pre-authorisation credit transactions (with 3D Secure authentication)

<DATOSENTRADA>
<DS_MERCHANT_AMOUNT>10000</DS_MERCHANT_AMOUNT>
<DS_MERCHANT_ORDER>7275</DS_MERCHANT_ORDER>
<DS_MERCHANT_MERCHANTCODE>012000009010001</DS_MERCHANT_MERCHANTCODE>
<DS_MERCHANT_TERMINAL>001</DS_MERCHANT_TERMINAL>
<DS_MERCHANT_CURRENCY>986</DS_MERCHANT_CURRENCY>
<DS_MERCHANT_PAN>4548810000000003</DS_MERCHANT_PAN>
<DS_MERCHANT_EXPIRYDATE>4912</DS_MERCHANT_EXPIRYDATE>
<DS_MERCHANT_CVV2>123</DS_MERCHANT_CVV2>
<DS_MERCHANT_TRANSACTIONTYPE>1</DS_MERCHANT_TRANSACTIONTYPE>
<DS_MERCHANT_ACCOUNTTYPE>01</DS_MERCHANT_ACCOUNTTYPE>

<DS_MERCHANT_ACCEPTHEADER>text/html,application/xhtml+xml,application/xml;q=0.9,image/webp,*/*;q=0.8</DS_MERCHANT_ACCEPTHEADER>
<DS_MERCHANT_USERAGENT>Mozilla/5.0 (Windows NT 6.1) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/53.0.2785.143 Safari/537.36</DS_MERCHANT_USERAGENT>

<DS_MERCHANT_MERCHANTSIGNATURE>310d5593bb16a1ca39bcc7eabb8d43d953c9adc54b0d5c791d440db87df85c07</DS_MERCHANT_MERCHANTSIGNATURE>
</DATOSENTRADA>

3.1.2   Pre-authorisation Capture Request / Cancellation:

The fields below must be sent every time the store captures or cancels a transaction:

Field Name	Type	Size	Description
DS_MERCHANT_AMOUNT	Numeric	12	**Obligatory.** Total purchase transaction amount. Examples: - For a BRL 100.00 transaction, the store must send this field with 10000. - For a BRL 0.01 transaction, the store must send this field with 1. - For a BRL 0.10 transaction, the store must send this field with 10.
DS_MERCHANT_ORDER	Alphanumeric	12	**Obligatory** - Order Number. The first 4 digits must be numerical. This field cannot be repeated, because it is an identification of the transaction.
DS_MERCHANT_MERCHANTCODE	Numeric	15	**Obligatory** - Establishment number (MID) defined by Global Payments.
DS_MERCHANT_TERMINAL	Numeric	3	**Obligatory** - Terminal number that will be defined by Global Payments.
DS_MERCHANT_CURRENCY	Numeric	4	**Obligatory** - Transaction currency will be 986 for Brazil.
DS_MERCHANT_TRANSACTIO NTYPE	Alphanumeric	1	**Obligatory** – Indicates the type of transaction: 2 – Pre-Authorisation Confirmation 3 – Cancellation 9 – Pre-Authorisation Cancellation
DS_MERCHANT_MERCHANTSIGNATURE	Alphanumeric	64	**Obligatory** – Store signature for transaction validation.
AN Type: ASCII characters from 65 = **A** to 90 = **Z** and from 97 = **to** 122 = **z**. **N Type**: ASCII characters from 30 = **0** to 39 = **9**.			

To calculate the _DS_MERCHANT_ MERCHANTSIGNATURE_ field, see Chapter 4. To calculate authorisation, see item 4.2.

For transactions authenticated with 3D Secure, go to item 3.1.3.

For transactions without 3D Secure authentication, go directly to the return message, in item 3.1.7.

3.1.2.1 Examples of Capture/Cancellation Messages

Capture/Cancellation Transactions

```
<DATOSENTRADA>
        <DS_MERCHANT_AMOUNT>30</DS_MERCHANT_AMOUNT>
        <DS_MERCHANT_ORDER>0311183709</DS_MERCHANT_ORDER>
        <DS_MERCHANT_MERCHANTCODE>012000009010001</DS_MERCHANT_MERCHANTCODE>
        <DS_MERCHANT_CURRENCY>986</DS_MERCHANT_CURRENCY>
        <DS_MERCHANT_TRANSACTIONTYPE>3</DS_MERCHANT_TRANSACTIONTYPE>
        <DS_MERCHANT_TERMINAL>1</DS_MERCHANT_TERMINAL>
        <DS_MERCHANT_MERCHANTSIGNATURE>e5b62480124a59c000f91dc1b535df71f9958677ed006fddeec34c6ab0c86
79a</DS_MERCHANT_MERCHANTSIGNATURE>
</DATOSENTRADA>
```

3.1.3 Initial return message for credit/debit transactions with 3D Secure authentication

When the authorisation request from item 3.1.1 requests authentication, the webservice will return the XML declared here.

For cards not accepted for 3D Secure transactions, the response message will be the SIS0428 rejected transaction return code, according to the specifications of the webservice integration manual, following the XML template according to item 3.1.7.

Card accepted for 3D Secure transactions: the following message is returned:

Data name	Type	Size	Description
CODIGO	Alphanumeric	8	**Obligatory**. Indicates whether any processing problems occurred during the transaction. A 0 indicates the operation has been processed. Check the error codes for any number other than 0.
DS_AMOUNT	Alphanumeric	12	**Obligatory**. Transaction value. For Brazilian reals, the last two positions are considered decimal.
DS_CURRENCY	Numeric	4	**Obligatory**. Establishment currency.
DS_ORDER	Alphanumeric	12	**Obligatory**. Order Number.
DS_SIGNATURE	Alphanumeric	64	**Obligatory**. Establishment signature.
DS_MERCHANTCODE	Numeric	9	**Obligatory.** Establishment number (MID) defined by Global Payments.
DS_TERMINAL	Numeric	3	**Obligatory.** Terminal number that will be defined by Global Payments.
DS_TRANSACTIONTYPE	Alphanumeric	1	**Obligatory**. Indicates what type of transaction has been made. Possible values are: 0 – authorisation 1 – Pre-Authorisation

DS_ACSURL	Alphanumeric	*128*	**Obligatory.** URL of the authentication server
DS_PAREQUEST	Alphanumeric	*1024*	**Obligatory.** Authentication request message
DS_MD	Alphanumeric	*1024*	**Obligatory**. Additional data
A Type: ASCII characters from 65 = A to 90 = Z and from 97 = to 122 = z. **N Type:** ASCII characters from 30 = 0 to 39 = 9.			

The *DS_SIGNATURE* field is calculated by linking the value of the following fields (unless a particular value is null, it will not be considered in the signature), including the final of the test key or production and applying the sha-256 hash:

Sha-256 (DS_AMOUNT + DS_ORDER + DS_MERCHANTCODE + DS_CURRENCY + DS_TRANSACTIONTYPE + DS_MD + KEY)

3.1.4   Redirect the customer to the card-issuing bank.

After the result of the return message, the establishment should redirect customer to the card-issuing bank, via browser, to proceed with authentication. Accordingly, the establishment must include the PAReq = *DS_PAREQUEST* and MD = *DS_MD* fields in an html form that must be automatically submitted to the URL indicated in *DS_ACSURL*.
The termURL parameter must also be included in this form; this will indicate the URL that the card holder will be redirected to once authentication is concluded.

Example:
```
<html>
<head>
        <title>Title for Page</title>
</head>
<body OnLoad="OnLoadEvent();" >
 <form name="downloadForm" action="${Ds_AcsUrl}" method="POST">
        <noscript>
                <br>
                <br>
                <center>
                        <h1>Processing your 3-D Secure Transaction</h1>
                        <h2>
                        JavaScript is currently disabled or is not supported
                        by your browser.<br></h2>
                        <h3>Please click Submit to continue
                        the processing of your 3-D Secure
                        transaction.</h3>
                        <input type="submit" value="Submit">
                </center>
        </noscript>
        <input type="hidden" name="PaReq" value="${Ds_PaRequest}">
        <input type="hidden" name="TermUrl" value="${termUrl}">
        <input type="hidden" name="MD" value="${Ds_MD}">
</form>
<SCRIPT LANGUAGE="Javascript" >
        <!--
        function OnLoadEvent()
        {
                document.downloadForm.submit();
        }
        //-->
</SCRIPT>
```

```
</body>
</html>
```

3.1.5   Return of authentication result

When concluding authentication, customer will be redirected to the store by an http request to the termURL URL, where the MD parameter sent previously and a new Pairs parameter will be received, which will be necessary to conclude the transaction.

3.1.6   Final approval request – Transactions with 3D Secure authentication

To conclude the transaction, the store will request authorisation from the Global Payments system with the following message:

Data name	Type	Size	Description
DS_MERCHANT_ORDER	Alphanumeric	12	**Obligatory** - Order Number. The first 4 digits must be numerical. This field cannot be repeated, because it is an identification of the transaction
DS_MERCHANT_MERCHANTCODE	Numeric	15	**Obligatory** - Establishment number (MID) defined by Global Payments.
DS_MERCHANT_TERMINAL	Numeric	3	**Obligatory** - Terminal number that will be defined by Global Payments.
DS_MERCHANT_TRANSACTIONTYPE	Alphanumeric	1	**Obligatory** – Indicates the transaction type: 0 – authorisation
DS_MERCHANT_PARESPONSE	Alphanumeric		**Obligatory.** 3D Secure message of the authentication result that the merchant received from the issuer
DS_MERCHANT_MD	Alphanumeric	1024	**Obligatory.** Additional data must have the same value that was returned in the initial response
DS_MERCHANT_SHOPPERIP	Alphanumeric		**Optional:** Customer IP
DS_MERCHANT_MERCHANTSIGNATURE	Alphanumeric	64	**Obligatory.** Establishment signature.

A Type: ASCII characters from **65 = A** to 90 = **Z** and from 97 = **to** 122 = **z**.
N Type: ASCII characters from 30 = **0** to 39 = **9**.

To calculate the *DS_SIGNATURE* field, it is necessary to link the value of the following fields (unless a particular value is null, it will not be considered in the signature), including the final of the test key or production and applying the sha-256 hash:

Sha-256(DS_MERCHANT_ORDER + DS_MERCHANTCODE + DS_MERCHANT_TRANSACTIONTYPE + DS_MERCHANT_MD + CHAVE)

3.1.7   Response message (Transaction Result)

Important! – To confirm whether a transaction has been approved, it is necessary to check the "CODE = 0" and "DS_RESPONSE = 0000" fields. The two fields are necessary to confirm the transaction has been successfully executed.

Data name	Type	Size	Description
CODIGO	Alphanumeric	8	**Obligatory**. Indicates whether any processing problems occurred during the transaction. A 0 indicates the operation has been processed. Check the chapter on error codes for any number other than 0. Important - Validate DS_response to find out whether the transaction has been approved.
DS_AMOUNT	Alphanumeric	12	**Obligatory**. Value of the operation. For Brazilian reals, the last two positions are considered decimal.
DS_CURRENCY	Numeric	4	**Obligatory**. Establishment currency.
DS_ORDER	Alphanumeric	12	**Obligatory**. Order Number.
DS_SIGNATURE	Alphanumeric	64	**Obligatory**. Establishment signature.
DS_MERCHANTCODE	Numeric	9	**Obligatory** - Establishment number (MID) defined by Global Payments.
DS_TERMINAL	Numeric	3	**Obligatory** - Terminal number that will be defined by Global Payments.
DS_RESPONSE	Numeric	4	**Obligatory**. Value that indicates the result of the operation. It will indicate whether or not it has been authorised. For approved transactions, this field must be received with the value "0000" and the CODE field must be received with the value "0".
DS_AUTHORISATIONCODE	Numeric	6	**Optional**. Authorisation code, if there is one for authorised transactions.
DS_TRANSACTIONTYPE	Alphanumeric	1	**Obligatory**. Indicates what type of transaction has been made. Possible values are: A – Authorisation (without 3D Secure authentication) 0 – Authorisation (with 3D Secure authentication) 1 – Pre-Authorisation 2 – Pre-Authorisation Confirmation 3 – Cancellation 9 – Pre-Authorisation Cancellation
DS_SECUREPAYMENT	Alphanumeric	1	**Obligatory**. Indicates whether or not payment has been authenticated (with 3DS): 0: authenticated – 3D Secure (VBV and Secure Code) 1: not authenticated. – Without 3D Secure
DS_LANGUAGE	Numeric	1	**Obligatory**. Language.
DS_MERCHANTDATA	Alphanumeric	1024	**Optional.** Optional information send by the customer in the payment form.
DS_NSU	Numeric	6	**Obligatory**. Conciliation number
A Type: ASCII characters from **65 = A** to 90 = **Z** and from 97 = **to** 122 = **z**. **N Type**: ASCII characters from 30 = **0** to 39 = **9**.			

To calculate the *DS_SIGNATURE* field, see Chapter 4. For Authorisation, see item 4.3.

3.1.7.1 Examples of Response Messages

Capture Transaction Response

```
<RETORNOXML>
      <CODIGO>0</CODIGO>
      <OPERACION>
            <DS_AMOUNT>30</DS_AMOUNT>
            <DS_CURRENCY>986</DS_CURRENCY>
            <DS_ORDER>0311183709</DS_ORDER>
      <DS_SIGNATURE>8681299AD5732CB8273DA6E3B913A83D533461D17ECDC6F05D555EBBDCED6384</DS_SIGNATURE>
            <DS_MERCHANTCODE>012000009010001</DS_MERCHANTCODE>
            <DS_TERMINAL>1</DS_TERMINAL>
            <DS_RESPONSE>0000</DS_RESPONSE>
            <DS_AUTHORISATIONCODE>319317</DS_AUTHORISATIONCODE>
            <DS_TRANSACTIONTYPE>A</DS_TRANSACTIONTYPE>
            <DS_SECUREPAYMENT>0</DS_SECUREPAYMENT>
            <DS_LANGUAGE>1</DS_LANGUAGE>
            <DS_CARD_TYPE>C</DS_CARD_TYPE>
            <DS_MERCHANTDATA>
            </DS_MERCHANTDATA>
            <DS_CARD_COUNTRY>724</DS_CARD_COUNTRY>
            <DS_NSU>751485</DS_NSU>
      </OPERACION>
</RETORNOXML>
```

Cancellation Transaction Response

```
<RETORNOXML>
      <CODIGO>0</CODIGO>
      <OPERACION>
            <DS_AMOUNT>30</DS_AMOUNT>
            <DS_CURRENCY>986</DS_CURRENCY>
            <DS_ORDER>0311183709</DS_ORDER>
      <DS_SIGNATURE>BD1EF7AEFCEC6048F87C303780401EE37A3A800F144F32627FDE9346AF7FDB84</DS_SIGNATURE>
            <DS_MERCHANTCODE>012000009010001</DS_MERCHANTCODE>
            <DS_TERMINAL>1</DS_TERMINAL>
            <DS_RESPONSE>0900</DS_RESPONSE>
            <DS_AUTHORISATIONCODE>319317</DS_AUTHORISATIONCODE>
            <DS_TRANSACTIONTYPE>3</DS_TRANSACTIONTYPE>
            <DS_SECUREPAYMENT>0</DS_SECUREPAYMENT>
            <DS_LANGUAGE>1</DS_LANGUAGE>
            <DS_CARD_TYPE>C</DS_CARD_TYPE>
            <DS_MERCHANTDATA>
            </DS_MERCHANTDATA>
            <DS_CARD_COUNTRY>724</DS_CARD_COUNTRY>
            <DS_NSU>751489</DS_NSU>
      </OPERACION>
</RETORNOXML>
```

Credit response transaction (with 3D Secure authentication)

```
<RETORNOXML>
   <CODIGO>0</CODIGO>
   <OPERACION>
    <DS_AMOUNT>20000</DS_AMOUNT>
    <DS_CURRENCY>986</DS_CURRENCY>
    <DS_ORDER>3215</DS_ORDER>
    <DS_SIGNATURE>DF101B0FDA1C8C1FBEFB9A815F876142B5664DD6E2AD5CBCBE8321DB37F00545</DS_SIGNATURE>
    <DS_MERCHANTCODE>012000009002001</DS_MERCHANTCODE>
    <DS_TERMINAL>1</DS_TERMINAL>
    <DS_RESPONSE>0000</DS_RESPONSE>
    <DS_AUTHORISATIONCODE>597179</DS_AUTHORISATIONCODE>
    <DS_TRANSACTIONTYPE>0</DS_TRANSACTIONTYPE>
```

```
        <DS_SECUREPAYMENT>1</DS_SECUREPAYMENT>
        <DS_LANGUAGE>9</DS_LANGUAGE>
        <DS_CARD_TYPE>C</DS_CARD_TYPE>
        <DS_MERCHANTDATA/>
        <DS_CARD_COUNTRY>724</DS_CARD_COUNTRY>
        <DS_NSU>597179</DS_NSU>
    </OPERACION>
</RETORNOXML>
```

Debit response transaction (with 3D Secure authentication)

```
<RETORNOXML>
  <CODIGO>0</CODIGO>
  <OPERACION>
     <DS_AMOUNT>20000</DS_AMOUNT>
     <DS_CURRENCY>986</DS_CURRENCY>
     <DS_ORDER>3870</DS_ORDER>
     <DS_SIGNATURE>5CE48E2EBFA6FF2F7EAF432BE287AF8ED1506E94BF2D5177BAF8484B5D5FC0A7</DS_SIGNATURE>
     <DS_MERCHANTCODE>012000009002001</DS_MERCHANTCODE>
     <DS_TERMINAL>1</DS_TERMINAL>
     <DS_RESPONSE>0000</DS_RESPONSE>
     <DS_AUTHORISATIONCODE>597180</DS_AUTHORISATIONCODE>
     <DS_TRANSACTIONTYPE>0</DS_TRANSACTIONTYPE>
     <DS_SECUREPAYMENT>1</DS_SECUREPAYMENT>
     <DS_LANGUAGE>9</DS_LANGUAGE>
     <DS_CARD_TYPE>D</DS_CARD_TYPE>
     <DS_MERCHANTDATA/>
     <DS_CARD_COUNTRY>724</DS_CARD_COUNTRY>
     <DS_NSU>597180</DS_NSU>
  </OPERACION>
</RETORNOXML>
```

3.2   Transaction Flow: trataPeticion

Transaction Flow for Sale without authentication or any rejected transaction:
Products:

- Credit
- Credit Pre-Authorisation
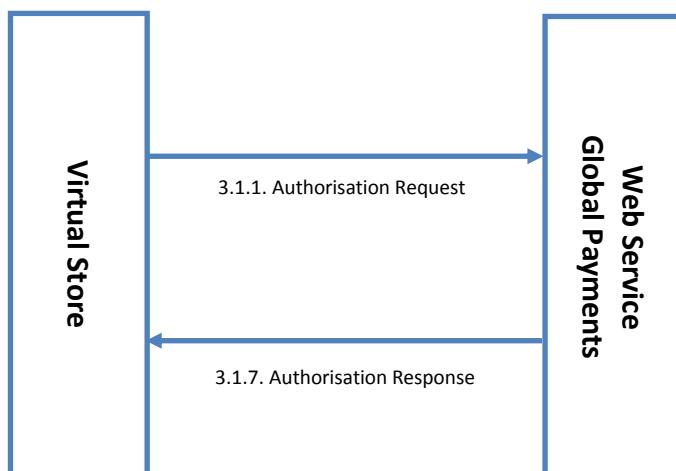
Transaction Flow for Sale with MPI Global Payments 3D Secure authentication:
Products:

- Credit
- Credit Pre-Authorisation
- Debit

```
Virtual Store                          Web Service Global Payments
    |------------------------------------>|
    |      3.1.1. Authorisation Request    |
    |<------------------------------------|
    |    3.1.3. Return – Redirect 3D Secure|

                                          Bank
    |------------------------------------>|
    |  3.1.4. Issuing Bank Authentication  |
    |              URL                     |
    |<------------------------------------|
    |  3.1.5. Return Bank Authentication   |
    |             Result                   |

                                          Web Service Global Payments
    |------------------------------------>|
    |    3.1.6. Final Approval Request      |
    |<------------------------------------|
    |    3.1.7. Authorisation Response      |
```
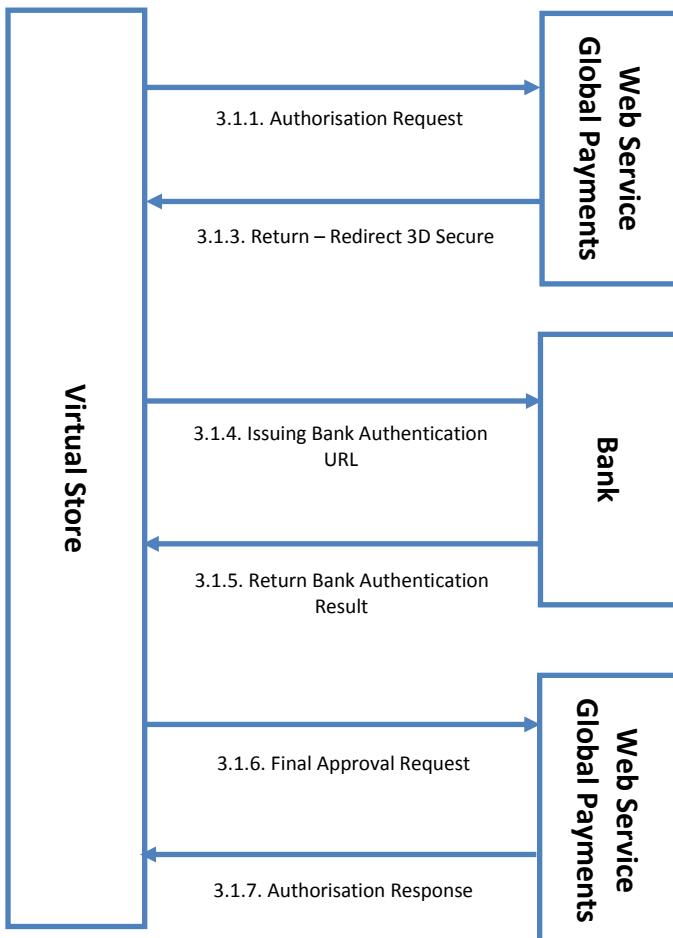
Transaction Flow for Sale with 3D Secure authentication – External MPI:
Products:
- Credit
- Pre-Authorisation of Credit
- Debit

Virtual Store

External MPI / Bank

MPI Integration - Issuing Bank Authentication

Return Bank Authentication Result

Web Service Global Payments

3.1.1. Authorisation Request with 3D Secure External MPI Data

3.1.3. Authorisation Return

3.1.6. Final Approval Request

3.1.7. Authorisation Response
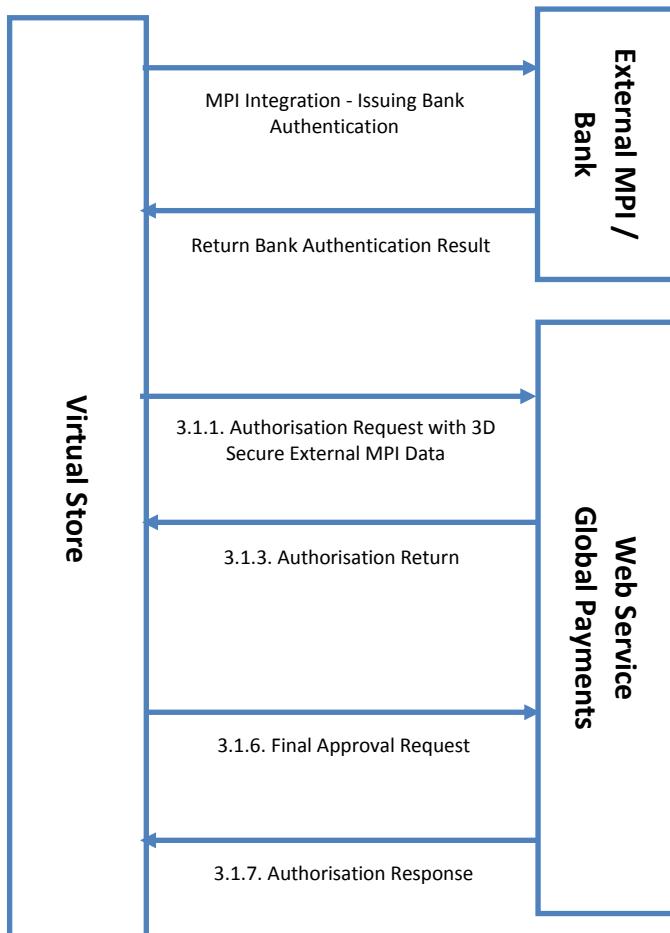
4   Store signature for transaction validation.

The establishment will have a signature, which it will use to sign data included in messages exchanged with the Global Payments e-commerce solution. This will not only verify establishment identity, but also ensure that data are not altered.

Hash SHA-256 will be used as an encryption algorithm, which will ensure minimum security requirements in terms of origin authentication. This same algorithm will be used to ensure the establishment authenticity of the response data.

4.1   Calculation of the Signature for Authorisation

In authorisation request messages to the Global Payments E-commerce Platform, the electronic signature of the establishment must be linked to the value of the following fields, including the test or production key at the end:

SHA 256 (DS_MERCHANT_AMOUNT + DS_MERCHANT_ORDER + DS_MERCHANT_MERCHANTCODE + DS_MERCHANT_CURRENCY + DS_MERCHANT_PAN + DS_MERCHANT_CVV2 + DS_MERCHANT_TRANSACTIONTYPE + CHAVE)

       DS_MERCHANT_AMOUNT: 30
       DS_MERCHANT_ORDER: 0311183709
       DS_MERCHANT_MERCHANTCODE: 012000009010001
       DS_MERCHANT_CURRENCY: 986
       DS_MERCHANT_PAN: 4548810000000003
       DS_MERCHANT_CVV2: 123
       DS_MERCHANT_TRANSACTIONTYPE: A
       CHAVE: QWERTYASDF0123456789

CHAIN RESULT: 300311183709012000009010001986454881000000000303123AQWERTYASDF0123456789

SHA-256 RESULT: A3B1DA2F43D1739320D3487C553558EEF3C85CB981831B5872D8F7649C64F514

4.2   Calculation of the Signature for Capture and Cancellation

In payment and cancellation messages to the Global Payments E-commerce Platform, the electronic signature of the establishment must be linked to the value of the following fields (except in the event of a null value, which will not be considered in the signature), including the test password at the end:

DS_MERCHANT_AMOUNT + DS_MERCHANT_ORDER + DS_MERCHANT_MERCHANTCODE + DS_MERCHANT_CURRENCY + DS_MERCHANT_TRANSACTIONTYPE + CHAVE

       DS_MERCHANT_AMOUNT: 30
       DS_MERCHANT_ORDER: 0311183709
       DS_MERCHANT_MERCHANTCODE: 012000009010001
       DS_MERCHANT_CURRENCY: 986
       DS_MERCHANT_TRANSACTIONTYPE: 3
       CHAVE: QWERTYASDF0123456789

CHAIN RESULT: 3003111837090120000090100019863QWERTYASDF0123456789
SHA-256 RESULT: E5B62480124A59C000F91DC1B535DF71F9958677ED006FDDEEC34C6AB0C8679A

4.3   Return message for calculation of the signature

In return messages, the electronic signature of the establishment must be linked to the value of the following fields (except in the event of a null value, which will not be considered), including the test or production key at the end:

DS_MERCHANT_AMOUNT + DS_MERCHANT_ORDER + DS_MERCHANT_CODE + DS_MERCHANT_CURRENCY + DS_RESPONSE + DS_MERCHANT_TRANSACTIONTYPE + DS_SECURE_PAYMENT + CHAVE

DS_MERCHANT_AMOUNT: 30
DS_MERCHANT_ORDER: 0707121532
DS_MERCHANT_MERCHANTCODE: 012000009010001
DS_MERCHANT_CURRENCY: 986
DS_RESPONSE: 0000
DS_MERCHANT_TRANSACTIONTYPE: 3
DS_SECURE_PAYMENT: 0
CHAVE: QWERTYASDF0123456789

CHAIN RESULT:
3007071215320120000090100019860000030QWERTYASDF0123456789
SHA-256 RESULT:
E2D147B2BC9650A3BD9E8A6B21FFCCA0F4B5E93FA0A026E11BDDACE8CB3410EC

4.4 Recommendations for Calculation of the Signature

Once the signature has been generated, the request data must not be altered in any way, because the Global Payments E-commerce Solution uses it for validation. If the data sent are not identical to those used to generate the signature, an error will be generated and it will not be possible to continue with the purchase.

Conditions:

The **Value** must be multiplied by 100, without decimal places and without zeros to the left.

The **order number** will be different with each transaction and the first 4 positions will be numeric.

Check that the **key** that is being used to generate the signature is the one assigned to the establishment and check the environment (test or production), in which the purchase request is being made.

5 External MPI

One authenticated transaction (3D Secure) may be made by the Global Payments MPI (see item 3.1.1), and also by using an External MPI. This section defines an integration of an external MPI with the Global Payments authorisation environment, such that the merchant will be responsible for the entire authorisation flow of the card holder.

Thus when the virtual store executes the authentication process with the MPI system, it must also send the result received to the Global Payments e-commerce system using the fields for this purpose:

Data name	Type	Size	Description
DS_MERCHANT_TXID	Alphanumeric	50	**Obligatory**. Indicates the transaction ID returned by the authenticator.
DS_MERCHANT_CAVV	Alphanumeric	50	**Obligatory**. CAVV value of the authentication field
DS_MERCHANT_SECLEVEL	Alphanumeric	1	**Obligatory**. Authentication of the Status field, the potential values are: Y: card holder authenticated A: safe commerce card holder not authenticated U: System error.
A Type: ASCII characters from **65 = A** to 90 = **Z** and from 97 = **to** 122 = **z**. **N Type**: ASCII characters from 30 = **0** to 39 = **9**.			

NOTE: This function is incompatible with DCC and Visa Checkout operations and Zero Dollar authorisation requisitions.

5.1 Specification of the authorisation message fields

	"DS_MerchantTransactionType" Parameter	Authenticated Payment Parameters	Comments
Authenticated Payment (with 3D Secure) using External MPI	**DS_MERCHANTTRANSATIONTYPE = 0** **OR** **DS_MERCHANTTRANSACTIONTYPE = 1**	**DS_MERCHANT_SECLEVEL** **DS_MERCHANT_TXID** **DS_MERCHANT_CAVV** ~~DS_MERCHANT_ACCEPTHEADER~~ ~~DS_MERCHANT_USERAGENT~~	The transaction will be rejected if Global Payments WebService receives the fields *DS_ACCEPTHEADER* or *DS_USERAGENT* The transaction will be rejected if Global Payments WebService receives the AcceptHeader or UserAgent fields.
Authenticated Payment (with 3D Secure) using Global Payments MPI	**DS_MERCHANTTRANSACTIONTYPE = 0** **OR** **DS_MERCHANTTRANSACTIONTYPE = 1**	~~DS_MERCHANT_SECLEVEL~~ ~~DS_MERCHANT_TXID~~ ~~DS_MERCHANT_CAVV~~ **DS_MERCHANT_ACCEPTHEADER** **DS_MERCHANT_USERAGENT**	The transaction will be rejected if the *DS_SECLEVEL, DS_STATUS,TXID* or *DS_CAVV* fields are received. The operation will be rejected if Status, Txid or Cavv are received.
Non-authenticated payment (Without 3D Secure)	**DS_MERCHANTTRANSACTIONTYPE = A** **OR** **DS_MERCHANTTRANSACTIONTYPE = 1**	~~DS_MERCHANT_SECLEVEL~~ ~~DS_MERCHANT_TXID~~ ~~DS_MERCHANT_CAVV~~ ~~DS_MERCHANT_ACCEPTHEADER~~ ~~DS_MERCHANT_USERAGENT~~	Credit only Non-authenticated transactions will be rejected if the Global Payments authoriser receives: - 3D Secure parameters or - debit transactions.

	DS_MERCHANTTRANSACTIONTYPE = 0 OR DS_MERCHANTTRANSACTIONTYPE = 1	~~DS_MERCHANT_SECLEVEL~~ ~~DS_MERCHANT_TXID~~ ~~DS_MERCHANT_CAVV~~ ~~DS_MERCHANT_ACCEPTHEADER~~ ~~DS_MERCHANT_USERAGENT~~	CREDIT only. For unsecured payments, authenticated payment parameters must not be sent (3D Secure).

5.2 Message validations

Transação Autenticada

DS_MERCHANT_SECLEVEL	DS_MERCHANT_TXID	DS_MERCHANT_CAVV	Brand	Payment type	ECI (3DSecure)	Comments
1	Not null	Not null	Visa	CRE/DEB	5	Transaction will be sent to issuer for authorization
1	Not null	Not null	MasterCard	CRE/DEB	2	Transaction will be sent to issuer for authorization

Transação Autenticada com Portador do cartão não autenticado

DS_MERCHANT_SECLEVEL	DS_MERCHANT_TXID	DS_MERCHANT_CAVV	Brand	Payment type	ECI (3DSecure)	Comments
2	Not null	Not null	Visa	CRE/DEB	6	Transaction will be sent to issuer for authorization
2	Not null	Not null	MasterCard	CRE/DEB	1	Transaction will be sent to issuer for authorization

Transaçao não segura

DS_MERCHANT_SECLEVEL	DS_MERCHANT_TXID	DS_MERCHANT_CAVV	Brand	Payment type	ECI (3DSecure)	Comments
3	N/A	N/A	Visa	CREDITO	7	Transaction will be sent to issuer for authorization
3	N/A	N/A	Visa	DEBITO	-	Transaction rejected with SIS0428 error code
3	N/A	N/A	MasterCard	CREDITO	0	Transaction will be sent to issuer for authorization
3	N/A	N/A	MasterCard	DEBITO	-	Transaction rejected with SIS0428 error code

Outro resultado

DS_MERCHANT_SECLEVEL	DS_MERCHANT_TXID	DS_MERCHANT_CAVV	Brand	Payment type	ECI (3DSecure)	Comments
Different value	N/A	N/A	Visa/master	CREDIT	N/A	Transaction rejected
Different value	N/A	N/A	Visa/master	DEBIT	N/A	Transaction rejected

5.3 Examples of message with External MPI

```
<DATOSENTRADA>
  <DS_MERCHANT_AMOUNT>30</DS_MERCHANT_AMOUNT>
  <DS_MERCHANT_ORDER>0829102048</DS_MERCHANT_ORDER>
  <DS_MERCHANT_MERCHANTCODE>012000009002001</DS_MERCHANT_MERCHANTCODE>
  <DS_MERCHANT_CURRENCY>986</DS_MERCHANT_CURRENCY>
  <DS_MERCHANT_PAN>454881******0003</DS_MERCHANT_PAN>
  <DS_MERCHANT_CVV2>***</DS_MERCHANT_CVV2>
  <DS_MERCHANT_TRANSACTIONTYPE>0</DS_MERCHANT_TRANSACTIONTYPE>
  <DS_MERCHANT_TERMINAL>1</DS_MERCHANT_TERMINAL>
  <DS_MERCHANT_EXPIRYDATE>****</DS_MERCHANT_EXPIRYDATE>
  <DS_MERCHANT_ACCOUNTTYPE>01</DS_MERCHANT_ACCOUNTTYPE>
  <DS_MERCHANT_PLANTYPE>1</DS_MERCHANT_PLANTYPE>
  <DS_MERCHANT_PLANINSTALLMENTSNUMBER>1</DS_MERCHANT_PLANINSTALLMENTSNUMBER>
  <DS_MERCHANT_SECLEVEL>Y</DS_MERCHANT_SECLEVEL>
  <DS_MERCHANT_TXID>MjAxNjA4MTgxMTQxMTcyMDAwMDA=</DS_MERCHANT_TXID>
  <DS_MERCHANT_CAVV>AAACCCgCQxYIGBNBJwJDAAAAAAA=</DS_MERCHANT_CAVV>

<DS_MERCHANT_MERCHANTSIGNATURE>80cbd70fea0665dac6fd2a719e7e2bc808bdd6c11a477a2c6b2cdbe821581fab</DS_MERCHANT_MERCHANTSIGNATURE>
</DATOSENTRADA>
```

6   Using DCC (Dynamic Currency Conversion)

6.1   What is DCC?

DCC (Dynamic Change Currency), or Currency Converter, is a dynamic currency converter solution that enables foreign Visa and MasterCard holders to make their purchases in local currency.

All the information required to use DCC (Dynamic Currency Conversion), when contracted by the establishment, is detailed below.

IMPORTANT: This function is not compatible with External MPI transactions.

Global Payments · Rua dos Pinheiros, 610 – cj. 83nc · São Paulo · BRAZIL
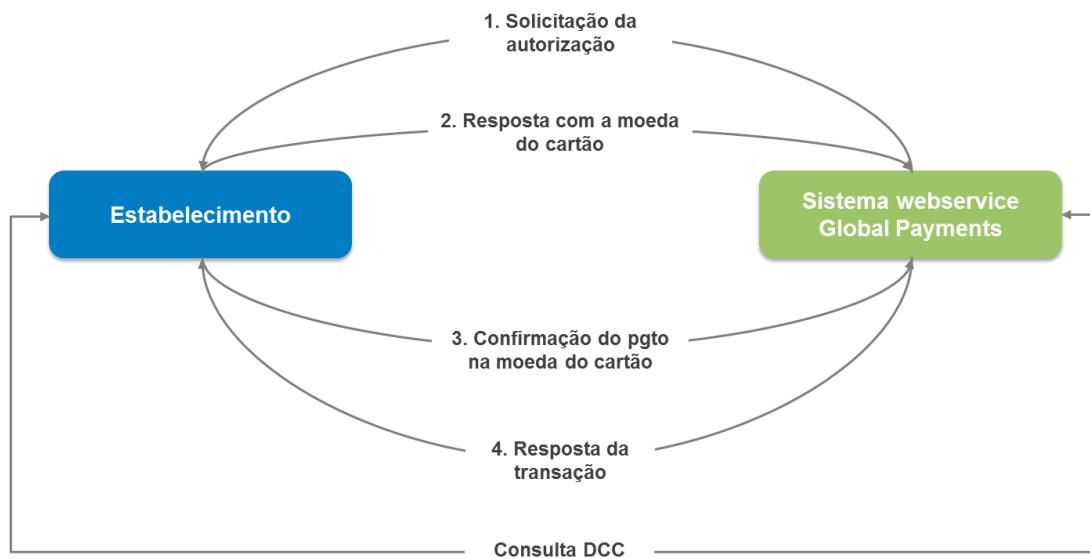
NOTE: As shown in the graph, DCC transactions are based on the submission of two requests to the Global Payments WebService system. In order to ensure proper operation of the system, it is necessary for the merchant to maintain the session between the first and second call to WebService. Session maintenance will depend on the software used to make the call to the WebService. For example, if the Axis API is used, it will be sufficient to use the same "Stub" for both requests and set the setMaintainSession(true) property before making the first call.

6.2 Initial request message

The initial request message (1. Authorisation request) has the same characteristics as outlined previously in Paragraph 3.1.1 of this manual;

6.3 DCC (Dynamic Currency Conversion) response message

Below, the necessary data and their characteristics, received in the Global Payments system DCC response messages (2. Response with card currency) in the previously described XML format, are outlined.

SPECIFIC FIELDS FOR USE OF THE DCC

Field Name	Type	Size	Description
CVMONEDA	Numeric	3 / N	**Obligatory.** Value of the currency identifier (ISO-4217),
LITMONEDA	Alphanumeric	- / A	**Obligatory.** Currency name.
LITMONEDAR	Alphanumeric	3 / R	**Obligatory.** Acronym associated with the currency. Example: USD, EUR, etc
CAMBIO	Numeric	- / N	**Obligatory**. Exchange rate of the currency.
IMPORTE	Numeric	- / N	**Obligatory.** Value of the currency.
CHECKED	true/false		**Obligatory.** Indicates whether card bearer wishes to pay in the currency of his/her card (True)
MARGENDCC	Numeric	- / N	**Obligatory.** DCC margin applied by entity to the value.
NOMBREENTIDAD	Alphanumeric	- / A	**Obligatory.** Name of banking institution that applies the DCC.
DS_MERCHANT_SESION	Alphanumeric	- / AN	**Obligatory.** Session identifier to continue the DCC operation.

A Type: ASCII characters from **65 = A** to 90 = **Z** and from 97 = **to** 122 = **z**.
N Type: ASCII characters from 30 = **0** to 39 = **9**.

6.3.1 DCC response example

```
<RETORNOXML>
 <CODIGO>0</CODIGO>
 <DCC>
  <MONEDA>826</MONEDA>
  <LITMONEDA>POUND STERLING</LITMONEDA>
  <LITMONEDAR>GBP</LITMONEDAR>
```

```xml
   <CAMBIO>4.892104</CAMBIO>
   <IMPORTE>61.32</IMPORTE>
   <CHECKED>TRUE</CHECKED>
  </DCC>
  <DCC>
   <MONEDA>986</MONEDA>
   <LITMONEDA>REAL BRASILEIRO </LITMONEDA>
   <IMPORTE>300.00</IMPORTE>
  </DCC>
  <MARGENDCC>3.0</MARGENDCC>
  <NOMBREENTIDAD>GLOBAL PAYMENTS BRASIL</NOMBREENTIDAD>
  <DS_MERCHANT_SESION>F9CA9AA33BEF2FCF2748F11CEBA0948A6462A2F2</DS_MERCHANT_SESION>
 </RETORNOXML>
```

6.4   DCC confirmation message

Below, we outline the necessary data and their characteristics to send the DCC confirmation request (3. Payment confirmation in card currency) on the Global Payments WebService System; these serve as an example to confirm the previous DCC request message.

ADDITIONAL FIELDS REQUIRED IN THE SECOND REQUEST

Data name	Type	Size	Description
SIS_DIVISA	Alphanumeric	16	**Obligatory**. Two values separated by #. The first is the currency identifier (ISO-4217) and the second is the value in that currency.
DS_MERCHANT_SESION			**Obligatory**. Session identifier to continue the DCC operation.
A Type: ASCII characters from **65 = A** to 90 = **Z** and from 97 = **to** 122 = **z**.			
N Type: ASCII characters from 30 = **0** to 39 = **9**.			

6.4.1   Example of DCC currency confirmation message

```
<DATOSENTRADA>
    <DS_MERCHANT_ORDER>0312125601</DS_MERCHANT_ORDER>
    <DS_MERCHANT_MERCHANTCODE>012000009010001</DS_MERCHANT_MERCHANTCODE>
    <SIS_DIVISA>826#61.32</SIS_DIVISA>
    <DS_MERCHANT_SESION>F9CA9AA33BEF2FCF2748F11CEBA0948A6462A2F2</DS_MERCHANT_SESION>
    <DS_MERCHANT_TERMINAL>1</DS_MERCHANT_TERMINAL>
    <DS_MERCHANT_MERCHANTSIGNATURE>E5B62480124A59C000F91DC1B535DF71F9958677ED006FDDEEC34C6AB0
C8679A</DS_MERCHANT_MERCHANTSIGNATURE>
</DATOSENTRADA>
```

6.5   Response message

The response message (4. Transaction response) has the same characteristics as described previously in paragraph 3.1.7 of the Global Payments System WebService guide.

6.6   DCC consultation message

The DCC consultation message will be generated with data previously described in an XML that will be sent to the **consultaDCC** method. This consultation is merely informative.

6.6.1   Example of a DCC consultation message

```
<DATOSENTRADA>
    <DS_MERCHANT_AMOUNT>30000</DS_MERCHANT_AMOUNT>
    <DS_MERCHANT_ORDER>0312155508</DS_MERCHANT_ORDER>
    <DS_MERCHANT_MERCHANTCODE>012000009010001</DS_MERCHANT_MERCHANTCODE>
    <DS_MERCHANT_CURRENCY>826</DS_MERCHANT_CURRENCY>
    <DS_MERCHANT_TERMINAL>1</DS_MERCHANT_TERMINAL>
    <DS_MERCHANT_MERCHANTSIGNATURE>8409cb4eaa4062556712942b75065b96cb69d20dd6b3816dabda36a4798
e9988</DS_MERCHANT_MERCHANTSIGNATURE>
</DATOSENTRADA>
```

6.7   Response message to a DCC consultation

The DCC consultation message will be generated with data previously described in an XML that will be sent to the **consultaDCC** method.

6.7.1 Example of response message to a DCC consultation

```
<RETORNOXML>
            <CODIGO>0</CODIGO>
            <DCC>
                    <MONEDA>826</MONEDA>
                    <LITMONEDA>POUND STERLING</LITMONEDA>
                    <LITMONEDAR>GBP</LITMONEDAR>
                    <CAMBIO>5.038868</CAMBIO>
                    <FECHACAMBIO>2004-10-07</FECHACAMBIO>
                    <IMPORTE>59.54</IMPORTE>
                    <CHECKED>TRUE</CHECKED>
            </DCC>
            <DCC>
                    <MONEDA>986</MONEDA>
                    <IMPORTE>300.00</IMPORTE>
            </DCC>
            <MARGENDCC>0.0</MARGENDCC>
            <NOMBREENTIDAD>GP BRASIL</NOMBREENTIDAD>
    </RETORNOXML>
```

6.8 Merchant's signature

6.8.1 DCC confirmation requests

If a second request is necessary to the Global Payments WebService, given that DCC is used in the transaction, the signature will be calculated as follows:

DS_MERCHANT_ORDER + DS_MERCHANT_MERCHANTCODE + *Sis_Divisa* + *DS_MERCHANT_SESION* + CHAVE

DS_MERCHANT_ORDER=0312125601
DS_MERCHANT_MERCHANTCODE=012000009010001
Sis_Divisa=826#61.32
DS_MERCHANT_SESION=f9ca9aa33bef2fcf2748f11ceba0948a6462a2f2
CHAVE=qwertyasdf0123456789

Chain Result:
0312125601012000009010001826#61.32f9ca9aa33bef2fcf2748f11ceba0948a6462a2f2qwertyasdf0123456789 / N

Sha-256 Result:
0c26c372cfd60fcfae849057da0bf6b22e79942a493d8aacf0a723fae252c8fc

6.9.1   DCC consultation requests

The electronic signature of the merchant will be calculated linking the value of the following fields (except in the event of any null value, in which case it will not be considered in the signature), including the secret encryption password at the end:

DS_MERCHANT_AMOUNT + DS_MERCHANT_ORDER + DS_MERCHANT_MERCHANTCODE + DS_MERCHANT_CURRENCY + DS_MERCHANT_TRANSACTIONTYPE + KEY

DS_MERCHANT_AMOUNT = 30000
DS_MERCHANT_ORDER = 0312155508
DS_MERCHANT_MERCHANTCODE = 012000009010001
DS_MERCHANT_CURRENCY = 826
KEY = qwertyasdf0123456789

Chain Result:
300000312155508012000009010001826qwertyasdf0123456789
Sha-256 Result:
8409cb4eaa4062556712942b75065b96cb69d20dd6b3816dabda36a4798e9988

7   Tests and website Validation

To move into the production environment, the following tests must be performed in order to ensure that the connection with the virtual store was properly established.

1 - To perform tests with authorisation approved with the test card data below:

Cash payment:

Card number	4548812049400004
Expiry Date	12/20
CVV2 Code	123
CIP Code	123456

Payment in instalments:

Card number	4761120000000148
Expiry Date	12/17
CVV2 Code	111

2 – Make at least one rejected transaction with the test card data below:

Card number	1111111111111117
Expiry Date	12/20

3 – Check the result of the transactions on the e-commerce Administrative Web page > Consultations – check the return code in the "Notifications" tab

8 Validations of the Global Payments E-commerce Platform

The Global Payments E-commerce Platform include validations and controls to detect potential data entry errors.

Validations pertaining to data entry are made for any system entry. If the entry data are not correct, an error code is generated and it is not possible to continue with the transaction.

Although establishment integration is correct, we must pay attention to conditions such as the generation of repeat orders.

8.1 Error codes

The following table lists the different errors that can appear in response messages

8.2 Error codes by the issuers (banks) or Global Payments

CODE	MEANING
0000 to 0099	**Transaction authorised for payments and pre-authorisations**
900	**Transaction authorised for returns and confirmations**
400	**Transaction authorised for annulments**
101	The card has expired.
102	Contact the issuer
125	Card not activated
129	Incorrect security code (CVV2 / CVC2)
180	Invalid card
184	CARD BEARER NOT AUTHENTICATED
190	Refused by issuer with no reason specified
191	Wrong expiry date
202	Contact the issuer
904	PROBLEMS WITH THE CONFIGURATION OF THE ESTABLISHMENT
909	System error
913	Repeat order
950	Cancellation operation not permitted
9912/912	Issuer not available
9064	Number of card positions incorrect
9078	Type of operation not permitted for this card
9093	Non-existent card
9094	Rejected by international servers

9104	Establishment with authenticated bearer and without an authenticated purchase key
9218	Establishment does not permit authenticated operations
9256	Establishment not certified to undertake pre-authorisations
9257	This card does not permit pre-authorisation operations
9915	Payment cancelled at user's request
9997	Another transaction is being processed on the system with the same card.
9998	Operation processing order for card data
9999	Operation has been redirected to issuer for authentication

The card and expiry date field will appear depending on the merchant's configuration. In this example, they are shown, but they are not obligatory and they will not appear unless specified within the configuration defined for the merchant.

8.3 Global Payments e-commerce system error codes

ERROR	DESCRIPTION
SIS0007	Error when disassembling the entry XML
SIS0008	Error Ds_Merchant_MerchantCode missing
SIS0009	Format error in Ds_Merchant_MerchantCode
SIS0010	Error Ds_Merchant_Terminal missing
SIS0011	Format error in Ds_Merchant_Terminal
SIS0014	Format error in Ds_Merchant_Order
SIS0015	Error Ds_Merchant_Currency missing
SIS0016	Format error in Ds_Merchant_Currency
SIS0018	Error Ds_Merchant_Amount missing
SIS0019	Format error in Ds_Merchant_Amount
SIS0020	Error Ds_Merchant_MerchantSignature missing
SIS0021	Error Ds_Merchant_MerchantSignature empty
SIS0022	Format error in Ds_Merchant_TransactionType
SIS0023	Error Ds_Merchant_TransactionType unknown
SIS0026	Store / terminal does not exist
SIS0027	Type of currency not authorised for this terminal
SIS0028	Store / terminal deactivated
SIS0030	Invalid operation
SIS0031	Method of payment not recognised
SIS0034	Error when accessing the database
SIS0038	Java error
SIS0040	Store does not have any authorised payment method
SIS0041	Store data HASH calculation error
SIS0042	The submitted signature is not correct
SIS0046	The card BIN is not activated
SIS0051	Error order number repeated
SIS0054	Transaction not located. Cancellation not possible
SIS0055	There is more than one payment with the same order number
SIS0056	Cancellation not authorised for this operation
SIS0057	The amount to be cancelled is above the permitted limit

SIS0058	Inconsistency in transaction confirmation validation data
SIS0059	Operation invalid for confirming the transaction
SIS0060	There is already a confirmation associated with the pre-authorisation
SIS0061	Operation not authorised to confirm pre-authorisation
SIS0062	The value to be captured is above the authorised limit
SIS0063	Card number unavailable
SIS0064	Card number cannot have more than 19 digits
SIS0065	Card number is not numeric
SIS0066	Expiry month unavailable
SIS0067	Expiry month not numeric
SIS0068	Expiry month invalid
SIS0069	Expiry year unavailable
SIS0070	Expiry year not numeric
SIS0071	Card expired
SIS0072	Operation cannot be annulled
SIS0074	Error Ds_Merchant_Order missing
SIS0075	Error Ds_Merchant_Order has less than 4 positions or more than 12
SIS0077	Error the first four positions of the Ds_Merchant_Order are not numeric
SIS0078	Payment method unavailable
SIS0079	Error when making payment with card
SIS0081	New session, stored data have been lost
SIS0089	The value of Ds_Merchant_ExpiryDate does not occupy 4 positions
SIS0092	The value of Ds_Merchant_ExpiryDate is null
SIS0093	Card not recognised
SIS0112	Error type of transaction specified in Ds_Merchant_Transaction_Type is not permitted
SIS0132	The capture date cannot be more than 7 days after pre-authorisation
SIS0142	Time for payment exceeded
SIS0216	Error Ds_Merchant_CVV2 has more than 3 or 4 positions
SIS0217	Format error in Ds_Merchant_CVV2
SIS0221	CVV2 is obligatory
SIS0222	There is already a cancellation associated with the pre-authorisation
SIS0223	Cancellation of the pre-authorisation not authorised
SIS0225	There is no transaction to make the cancellation
SIS0226	Inconsistency in transaction cancellation validation data
SIS0227	Value of the Ds_Merchan_TransactionDate field invalid
SIS0252	The store does not allow the card to be sent
SIS0253	Check that your card is valid
SIS0261	Operation cancelled because it violates the restriction controls of entry to the system
SIS0274	Operation unknown or not permitted at entry to the system
SIS0416	Value not permitted for cancellation
SIS0417	Cancellation not permitted as it exceeds the deadline
SIS0418	There is not current sales plan for this operation
SIS0419	The value of the field *DS_MERCHANT_ACCOUNTTYPE* (CRE/DEB) is not compatible with the card configuration
SIS0420	The store does not have any authorised payment forms for this type of operation
SIS0428	Debit transaction not authenticated

9 WSDL of the service (Appendix I)

The WSDL is available at the three addresses listed in item 2 of this document.

We have included the WSDL in the production environment.

```xml
<?xml version="1.0" encoding="UTF-8"?>
<wsdl:definitions targetNamespace="http://WebService.sis.sermepa.es" xmlns:apachesoap="http://xml.apache.org/xml-
soap" xmlns:impl="http://WebService.sis.sermepa.es   " xmlns:intf="http://WebService.sis.sermepa.es"
xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/" xmlns:wsdlsoap="http://schemas.xmlsoap.org/wsdl/soap/"
xmlns:xsd="http://www.w3.org/2001/XMLSchema">
 <wsdl:types>
  <schema elementFormDefault="qualified" targetNamespace="http://WebService.sis.sermepa.es"
xmlns="http://www.w3.org/2001/XMLSchema" xmlns:apachesoap="http://xml.apache.org/xml-soap"
xmlns:impl="http://WebService.sis.sermepa.es" xmlns:intf="http://WebService.sis.sermepa.es"
xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
   <element name="trataPeticion">
   <complexType>
    <sequence>
     <element name="datoEntrada" nillable="true" type="xsd:string"/>
    </sequence>
   </complexType>
   </element>
   <element name="trataPeticionResponse">
   <complexType>
    <sequence>
     <element name="trataPeticionReturn" nillable="true" type="xsd:string"/>
    </sequence>
   </complexType>
   </element>
   <element name="consultaDCC">
   <complexType>
    <sequence>
     <element name="datoEntrada" nillable="true" type="xsd:string"/>
    </sequence>
   </complexType>
   </element>
   <element name="consultaDCCResponse">
   <complexType>
    <sequence>
     <element name="consultaDCCReturn" nillable="true" type="xsd:string"/>
    </sequence>
   </complexType>
   </element>
  </schema>
 </wsdl:types>
  <wsdl:message name="consultaDCCRequest">
    <wsdl:part element="intf:consultaDCC" name="parameters"/>
  </wsdl:message>
  <wsdl:message name="trataPeticionResponse">
    <wsdl:part element="intf:trataPeticionResponse" name="parameters"/>
  </wsdl:message>
  <wsdl:message name="trataPeticionRequest">
    <wsdl:part element="intf:trataPeticion" name="parameters"/>
  </wsdl:message>
  <wsdl:message name="consultaDCCResponse">
    <wsdl:part element="intf:consultaDCCResponse" name="parameters"/>
  </wsdl:message>
  <wsdl:portType name="SerClsWSEntrada">
    <wsdl:operation name="trataPeticion">
      <wsdl:input message="intf:trataPeticionRequest" name="trataPeticionRequest"/>
      <wsdl:output message="intf:trataPeticionResponse" name="trataPeticionResponse"/>
    </wsdl:operation>
```

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```xml
      <wsdl:operation name="consultaDCC">
        <wsdl:input message="intf:consultaDCCRequest" name="consultaDCCRequest"/>
        <wsdl:output message="intf:consultaDCCResponse" name="consultaDCCResponse"/>
      </wsdl:operation>
    </wsdl:portType>
    <wsdl:binding name="SerClsWSEntradaSoapBinding" type="intf:SerClsWSEntrada">
      <wsdlsoap:binding style="document" transport="http://schemas.xmlsoap.org/soap/http"/>
      <wsdl:operation name="trataPeticion">
        <wsdlsoap:operation soapAction=""/>
        <wsdl:input name="trataPeticionRequest">
          <wsdlsoap:body use="literal"/>
        </wsdl:input>
        <wsdl:output name="trataPeticionResponse">
          <wsdlsoap:body use="literal"/>
        </wsdl:output>
      </wsdl:operation>
      <wsdl:operation name="consultaDCC">
        <wsdlsoap:operation soapAction=""/>
        <wsdl:input name="consultaDCCRequest">
          <wsdlsoap:body use="literal"/>
        </wsdl:input>
        <wsdl:output name="consultaDCCResponse">
          <wsdlsoap:body use="literal"/>
        </wsdl:output>
      </wsdl:operation>
    </wsdl:binding>
    <wsdl:service name="SerClsWSEntradaService">
      <wsdl:port binding="intf:SerClsWSEntradaSoapBinding" name="SerClsWSEntrada">
        <wsdlsoap:address location="https://sisw.globalpaybrasil.com.br:443/sis/services/SerClsWSEntrada"/>
      </wsdl:port>
    </wsdl:service>
  </wsdl:definitions>
```

10 Contact integration support

If you require any further **information or have any questions**, please contact us:

Our email is suporte.ecommerce@globalpagamentos.com.br or telephone 0800-7725213, option 4.

Service hours are 8 a.m. to 10 p.m., seven days a week.