



# SID Instant EFT Implementation Guide

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# Summary of Revisions

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1.0.1	30 Dec 2008	D. Liu - Setcom	Added SID Logo and Style Guide.
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# Overview

SID Instant EFT makes it possible for customers without credit cards to pay merchants using their Internet Banking.

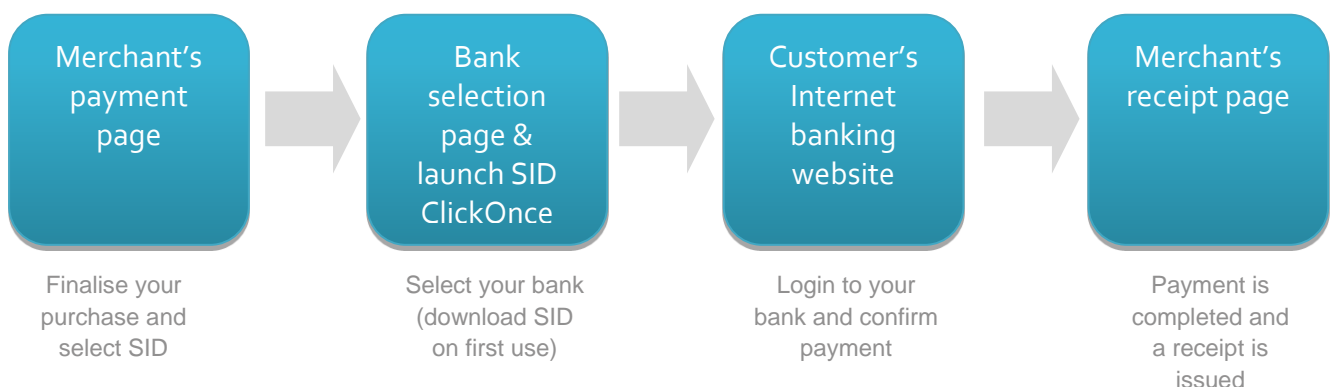
The merchant implementation explained in this guide is very simple and requires a developer that can:

1. Build a HTML form, also known as the buy button.
2. Receive and parse URL and FORM variables back from SID.

# Payment Flow

The steps below outline the payment flow when the customer uses SID:

1. The customer populates the shopping cart on the merchant's website and clicks on the Checkout button.
2. On the Checkout Page, the customer is presented with SID as a payment option which the customer selects.
3. The customer is directed to the SID Bank Selection Page where the customer needs to select the bank he/she banks with.
4. The customer clicks on the Pay Button and SID is initialised.
5. If this is the first time the customer is using SID, a small ClickOnce application will be installed.
6. SID will open a browser window and navigate the customer to his/her Internet banking homepage.
7. Once on the bank's home page, the customer will be prompted by SID to login to the Internet banking site.
8. Once logged in, SID will navigate the customer to the bank's once-off/single payment page and populate the merchant's bank account details (beneficiary).
9. The customer clicks on pay and SID prompts the customer to confirm the transactions.
10. After the payment is successfully processed the bank will present the receipt page, SID prompts the customer to print the receipt and log out of Internet banking.
11. The customer is navigated back to the merchant's website.



# Submitting the Transaction using SID Buy Button

The SID buy button is a HTML buy button. It needs to contain the following fields:

Field Name	Required	Description
SID_MERCHANT	Yes	Set this field to the Merchant Identifier as issued to you by SID when your account was created.
SID_CURRENCY	Yes	ZAR
SID_COUNTRY	Yes	ZA
SID_REFERENCE	Yes	Set this field to the merchant pass-through reference. This field should ideally be unique per transaction. This field will appear on all reports and will be passed back to the merchant when the customer is redirected back to the merchant's website. Use this field to reconcile to your system. Only Alphanumeric values and – (dash) and / (single slash) can be used. <b>Max 12 characters.</b>
SID_DEFAULT_REFERENCE	No	<p>Certain banks require a new beneficiary to be added before allowing a once-off payment to be done to the new beneficiary. This field will be used as a reference when adding a new beneficiary.</p> <p>If the buyer later uses this beneficiary manually (without using SID), then this field will be used as the default payment reference. We suggest setting this field to the customer's account number on your system, or any other value that can be used to easily identify the buyer later. This field supports a maximum 12 Characters.</p> <ul style="list-style-type: none"> <li>- Numbers 0-9</li> <li>-Characters A-Z and a-z</li> <li>- The character -(dash)</li> <li>- The character / (slash)</li> </ul>
SID_AMOUNT	Yes	Transaction amount is decimal format, excluding any currency symbols or decimal commas, e.g.: 1955.60 or 12.00
SID_CONSISTENT	Yes	The merchant can use this field to prevent tampering of the buy button values. Please see the section entitled SID Buy Button Consistent Field below on guidelines on generating this field.
SID_CUSTOM_01	No	Can contain any custom data the merchant wants to pass

		through with the transaction. This field will appear on all reports and will be passed back to the merchant on the redirect and HTTP Notification Post
SID_CUSTOM_02	No	Can contain any custom data the merchant wants to pass through with the transaction. This field will appear on all reports and will be passed back to the merchant on the redirect and HTTP Notification Post
SID_CUSTOM_03	No	Can contain any custom data the merchant wants to pass through with the transaction. This field will appear on all reports and will be passed back to the merchant on the redirect and HTTP Notification Post
SID_CUSTOM_04	No	Can contain any custom data the merchant wants to pass through with the transaction. This field will appear on all reports and will be passed back to the merchant on the redirect and HTTP Notification Post
SID_CUSTOM_05	No	Can contain any custom data the merchant wants to pass through with the transaction. This field will appear on all reports and will be passed back to the merchant on the redirect and HTTP Notification Post

This is code for a sample buy button:

```
<FORM METHOD="POST" ACTION="https://www.sidpayment.com/paySID/">
  <INPUT TYPE="HIDDEN" NAME="SID_MERCHANT" VALUE="PHONEWAREHOUSE" />
  <INPUT TYPE="HIDDEN" NAME="SID_CURRENCY" VALUE="ZAR" />
  <INPUT TYPE="HIDDEN" NAME="SID_COUNTRY" VALUE="ZA" />
  <INPUT TYPE="HIDDEN" NAME="SID_REFERENCE" VALUE="REE384DJ" />
  <INPUT TYPE="HIDDEN" NAME="SID_AMOUNT" VALUE="129.00" />
  <INPUT TYPE="HIDDEN" NAME="SID_CONSISTENT" VALUE="DFIHFRUGTOSTERG" />
  <INPUT TYPE="submit" NAME="PaySID" VALUE=" Pay using your Internet Banking" />
</FORM>
```

## SID Logo and Style Guide

The SID Payment Method should be presented on the merchant's checkout/payment page. The following graphic illustrates how SID is to be displayed on the page where the user can select SID as their payment method.

### Example 1: Button Display



## Example 2: Displayed in a drop-down list

### Payment Options

## Example 3: Display in tick boxes


### Pay with SID Instant EFT (Internet Banking)




### Pay with Credit Card



The merchant will need to display the following elements when the page loads:

Elements	Description	Style
SID logo: 	The description for SID  Options: <ul style="list-style-type: none"> <li>• Pay Instantly via Internet Banking</li> <li>• SA's most trusted alternative payment method to credit card</li> <li>• Pay via your trusted Internet Banking facility</li> </ul>	Format: png Size: 128 x 69 pixels Alt Text: SID Instant EFT  The logo can be downloaded from:  <a href="http://www.sidpayment.com/images/SID_instanteft.png">http://www.sidpayment.com/images/SID_instanteft.png</a>



<p>SID payment button:</p> 	<p>The description for SID</p> <p>Options:</p> <ul style="list-style-type: none"> <li>• Pay Instantly via Internet Banking</li> <li>• SA's most trusted alternative payment method to credit card</li> <li>• Pay via your trusted Internet Banking facility</li> </ul>	<p>Format: png                  Size: 150 x 25 pixels                  Alt Text: SID Instant EFT</p> <p>The button can be downloaded from:</p> <p><a href="http://www.sidpayment.com/images/sid_payment.png">http://www.sidpayment.com/images/sid_payment.png</a></p>
<p>Own Image</p>	<p>Pay Now button or graphic button.</p>	<p>Merchants may also use their own pay button or graphic that is consistent with their existing web site.</p>
<p>SID badge:</p> 	<p>The description for SID</p> <p>Options:</p> <ul style="list-style-type: none"> <li>• Pay Instantly via Internet Banking</li> <li>• SA's most trusted alternative payment method to credit card</li> <li>• Pay via your trusted Internet Banking facility</li> </ul>	<p>Format: png                  Size: 150 x 25 pixels                  Alt Text: SID Instant EFT                  Hyperlink: The badge should be hyperlinked to:</p> <p><a href="http://www.sidpayment.com">http://www.sidpayment.com</a></p> <p>The badge can be downloaded from:</p> <p><a href="http://www.sidpayment.com/images/sid_badge.png">http://www.sidpayment.com/images/sid_badge.png</a></p>

Merchants may wish to display more/educational information about SID on other pages within their website. In this case the following information should be used:

## Full Description

### What is SID Instant EFT?

SID is an Instant EFT (electronic fund transfer) payment option that allows you to pay {merchant name here} directly from your bank account via your existing Internet banking facility. SID is South Africa's most trusted payment alternative to Credit Card – it's like paying with cash, online!

Don't panic if you've never used SID before, it's easy! There's no shopper registration required and you can complete your payment in 4 simple steps!

1. Select SID at checkout
2. Select your bank
3. Login to your Internet banking page
4. Approve the pre-populated payment details

{merchant name here} will receive an instant notification that your payment was completed, so you don't have to fax or email your proof of payment. SID's smooth, automated payment process makes online payment quick, convenient and secure!

---

# Buy Button Consistent Field

By using the SID consistent field, the merchant can include a data validation field to stop tampering of the buy button variables.

After signup SID will issue the merchant with a secret Key. This secret key should be kept protected at all times and should never be exposed in the clear in the button or on the website.

To generate the consistent field, concatenate all the buy buttons values along with the secret key into a new string applying the SHA512 hash function. The resulting hash value is then passed in the buy button as the value for the SID\_CONSISTENT field.

Once SID receives the request, SID will follow the same procedure and use the values in the buy button and the agreed secret key to generate their own version of the consistent field. We will compare our version of the consistent field with that received in the buy button and only allow the transaction to continue should the two values match.

The order in which the fields need to be concatenated are:

1. SID\_MERCHANT
2. SID\_CURRENCY
3. SID\_COUNTRY
4. SID\_REFERENCE
5. SID\_AMOUNT
6. SID\_DEFAULT\_REFERENCE (if applicable)
7. SID\_CUSTOM\_01 (if applicable)
8. SID\_CUSTOM\_02 (if applicable)
9. SID\_CUSTOM\_03 (if applicable)
10. SID\_CUSTOM\_04 (if applicable)
11. SID\_CUSTOM\_05 (if applicable)
12. SID\_SECRET\_KEY

Always remember to hash the values in the same case as that you sent them in the buy button to SID, as this will make a difference to the outcome. SID uses UTF-8 encoding on the SID\_CONSISTENT field. The SID\_CONSISTENT field will always be an uppercase value.

Sample code can be downloaded from the Getting Started page on our website.

<https://www.sidpayment.com/Default.aspx?page=GetStarted>

# Receiving the Transaction Result

**All transaction should be considered as CANCELLED / DECLINED until such time that you receive the COMPLETED notification**

The following 3 methods are provided for receiving both Completed and Cancelled transaction results from SID. We strongly recommend that all 3 methods be implemented:

1. Redirect Notification
2. HTTP Notification
3. Order Query Web Service

Please note: All the return variables in the URL are URL encoded. Please decode the variables before generating the Notification consistent key.

## Method 1: Redirect Notification

Once the payment has been completed or cancelled, the customer will be redirected back to the merchant's website. A receipt/confirmation page should be displayed that is consistent with their existing website's look and feel.

The URL where the customer is redirected to is locked in the SID system for security reasons and can only be changed by authorised SID staff. To change this, please get the account holder to send the request in writing to [support@sidpayment.com](mailto:support@sidpayment.com).

The following variables are sent to the merchant when the customer is redirected back to the merchant's website.

Field Name	Description
SID_STATUS	The result of the transaction. Possible returned values are: COMPLETED CANCELLED CREATED READY See the section titled 'Status Code Explained' for a detailed explanation on this field.
SID_MERCHANT	Contains the merchant code as assigned to the merchant by SID when the account was created.
SID_COUNTRY	ZA
SID_CURRENCY	ZAR

SID_REFERENCE	Contains the reference number as passed to SID in the buy button.
SID_AMOUNT	The amount of the transaction as captured on the Internet banking receipt page.
SID_BANK	The bank name of the bank that the customer paid from.
SID_DATE	The date and time when the transaction was completed. All dates are given in GMT +02:00.
SID_RECEIPTNO	The bank receipt number as issued and appearing on the internet banking receipt page.
SID_TNXID	Contains the unique SID System Transaction ID for this transaction.
SID_CUSTOM_01	Contains any custom data the merchant sent through in the buy button in the SID_CUSTOM_01 field.
SID_CUSTOM_02	Contains any custom data the merchant sent through in the buy button in the SID_CUSTOM_02 field.
SID_CUSTOM_03	Contains any custom data the merchant sent through in the buy button in the SID_CUSTOM_03 field.
SID_CUSTOM_04	Contains any custom data the merchant sent through in the buy button in the SID_CUSTOM_04 field.
SID_CUSTOM_05	Contains any custom data the merchant sent through in the buy button in the SID_CUSTOM_05 field.
SID_CONSISTENT	Security field that should be used by the merchant to determine the authenticity of this message. To generate the consistent field concatenate all the above fields in the same order with the secret key and SHA512 hash the data (Note this is not the same as the Buy Button Consistent Field).

## Method 2: HTTP Notification

Once the payment has been completed or cancelled, SID can post a HTTP notification to a pre-defined URL on the merchant's server.

This service will try to run for a maximum of 3 times with a waiting period between each retry.

We strongly recommend that the HTTP Notification be implemented in addition to the Return Notification. This will reduce the number of client queries when the Redirect Notification fails. Another nicety would be to confirm that the status and transactional information is identical between the HTTP Notification and the Return Notification for extra security.

The URL where the notification is posted to is locked in the SID system for security reasons and can only be changed by authorised SID staff. To change this, please get the account holder to send the request in writing to [support@sidpayment.com](mailto:support@sidpayment.com).

The following variables are sent to the merchant as a Post in the HTTP Notification.

Field Name	Description
SID_STATUS	The result of the transaction. Possible returned values are: COMPLETED CANCELLED CREATED READY See the section titled 'Status Code Explained' for a detailed explanation on this field.
SID_MERCHANT	Contains the merchant code as assigned to the merchant by SID when the account was created.
SID_COUNTRY	ZA
SID_CURRENCY	ZAR
SID_REFERENCE	Contains the reference number as passed to SID in the buy button.
SID_AMOUNT	The amount of the transaction as captured on the Internet banking receipt page.
SID_BANK	The bank name of the bank that the customer paid from.
SID_DATE	The date and time when the transaction was completed. All dates are given in GMT +02:00.
SID_RECEIPTNO	The bank receipt number as issued and appearing on the internet banking receipt page.
SID_TNXID	Contains the unique SID System Transaction ID for this transaction.
SID_CUSTOM_01	Contains any custom data the merchant sent through in the buy button in the SID_CUSTOM_01 field.
SID_CUSTOM_02	Contains any custom data the merchant sent through in the buy button in the SID_CUSTOM_02 field.
SID_CUSTOM_03	Contains any custom data the merchant sent through in the buy button in the SID_CUSTOM_03 field.
SID_CUSTOM_04	Contains any custom data the merchant sent through in the buy

	button in the SID_CUSTOM_04 field.
SID_CUSTOM_05	Contains any custom data the merchant sent through in the buy button in the SID_CUSTOM_05 field.
SID_CONSISTENT	Security field that should be used by the merchant to determine the authenticity of this message. To generate the consistent field concatenate all the above fields in the same order with the secret key and SHA512 hash the data (Note this is not the same as the Buy Button Consistent Field).

## Method 3: Order Query Web Service

The Order Query Web Service allows you to query the status of any transaction during or after the transaction. This is useful to keep the merchant's system in sync with SID.

Implementation can be done in 2 ways, you can check for individual transaction's status and information or you can query numerous transactions in a single call.

We strongly recommend that the Order Query Web Service be implemented in addition to the Return Notification. This will reduce the number of client queries when the Redirect Notification fails. Another nicety would be to confirm that the status and transactional information is identical between the Order Query Web Service and the Return Notification for extra security.

To retrieve the information, the merchant would have to connect to the SID Web Service interface. The Web Service and method details are attached below.

Web Service WSDL File: <https://www.sidpayment.com/api/?wsdl>

Method Name: sid\_order\_query

The method accepts one XML string as argument, named "sid\_order\_query\_request". The method returns a XML string as output.

Please refer to the XML examples below for sample request and response strings.

The XSD (XML Schema Definition) files for the request and response data can be found at the below URLs.

[https://www.sidpayment.com/api/schemas/sid\\_order\\_query\\_request.xsd](https://www.sidpayment.com/api/schemas/sid_order_query_request.xsd)

[https://www.sidpayment.com/api/schemas/sid\\_order\\_query\\_response.xsd](https://www.sidpayment.com/api/schemas/sid_order_query_response.xsd)

## Sample request string:

```
<?xml version="1.0" encoding="UTF-8"?>
<sid_order_query_request>
  <merchant>
    <code>PHONE</code>
    <uname>sid@phonewarehouse.co.za</uname>
    <pwd>112233</pwd>
  </merchant>
  <orders>
    <transaction>
      <country>ZA</country>
      <currency>ZAR</currency>
      <amount>106.00</amount>
      <reference>8</reference>
    </transaction>
    <transaction>
      <country>ZA</country>
      <currency>ZAR</currency>
      <amount>106.00</amount>
      <reference>7</reference>
    </transaction>
  </orders>
</sid_order_query_request>
```

## Sample ERROR response string:

```
<sid_order_query_response>
  <data signature="oq3fkq1jSH4HKyM/9Ns86c4/mq8EBGxckp6xpwlA4/7RdblgM1TVP5f=">
    <outcome errorcode="SIDAPI0054" errordescription="Object reference not set to an
instance of an object" errorsolution="" />FAILED</data>
</sid_order_query_response>
```



## Sample SUCCESSFUL response string:

```

<sid_order_query_response>
  <data
    signature="MuGliQes4KJHNFoOS5xH8bFtErxyfsG2FpUv8MVfLd+YNgh2jXjT3U1jrhQMtgK08hJaGJ
    TMkdjvawex6s7TGY++cRMvOy5SY9Z70FFFpwwgqPHQbVpl/mpLtSovd1UCXaN2Wy5y2OVS2IMN+5
    yzLs3ohtEMd+ONAVu+sdFrNPYw=">
    <outcome errorcode="0" errordescription="" errorsolution="" />
    <orders>
      <transaction>
        <status>CANCELLED</status>
        <country>
          <code>ZA</code>
          <name>South Africa</name>
        </country>
        <currency>
          <code>ZAR</code>
          <name>South African Rand</name>
          <symbol>R</symbol>
        </currency>
        <bank>
          <name>ABSA</name>
        </bank>
        <amount>106.00</amount>
        <reference>8</reference>
        <receiptno>0001</receiptno>
        <tnxid>e73a3d6c-46b5-42cf-93c3-a33c95b0d864</tnxid>
        <date_created>2014/04/25 10:45:35 AM</date_created>
        <date_ready></date_ready>
        <date_completed></date_completed>
      </transaction>
      <transaction>
        <status>COMPLETED</status>
        <country><code>ZA</code>
          <name>South Africa</name>
        </country>
        <currency>
          <code>ZAR</code>
          <name>South African Rand</name>
          <symbol>R</symbol>
        </currency>
        <bank>
          <name>ABSA</name>
        </bank>
        <amount>106.00</amount>
        <reference>7</reference>
        <receiptno>00002</receiptno>
        <tnxid>b5e28622-dbf9-415a-9625-0dc4739d1c04</tnxid>
        <date_created>2014/04/25 10:44:09 AM</date_created>
        <date_ready></date_ready>
        <date_completed></date_completed>
      </transaction>
    </orders>
  </data>
</sid_order_query_response>VeKRu/60x6krPnH5d2ubqTG9QD22gpLySWtyPW3NHkWYdjhXfg858lt
mFGlw/XLJllmmvVwpr1bH
9PVQqAqi7NzDvoE0tBePPp/hmfq4r0=</signature>
</sid_order_query_response>

```

## XML Explained:

### **sid\_order\_query\_request:**

The sid\_order\_query\_request XML string contains the merchant information (and login details). The string also needs to contain the order information of the transaction (or transactions) being queried. The merchant would have to supply the same data as used in the buy button when the transaction was initially created.

### **sid\_order\_query\_response:**

The sid\_order\_query\_response string contains the request outcome in the /sid\_order\_query\_response/data/outcome/error\_code XML element. Only responses where the error code is equal to 0 (zero) can be seen as successful responses. For any other code the /sid\_order\_query\_response/data/outcome/error\_desc and /sid\_order\_query\_response/data/outcome/error\_solution XML elements must be consulted and the request treated as failed.

The response XML on a successful request will contain the following:

- Error details and solution
- Merchant identifier
- Transaction status
- Country
- Currency
- Bank information
- Transaction amount
- Merchant's reference
- Bank receipt number/reference
- SID transaction number
- transaction ready date
- transaction created date
- transaction completed date

## Status Code Explained:

Status Codes	Description
COMPLETED	Orders with a status of COMPLETED was successfully paid and the merchant will receive the funds in their bank account within 2 to 3 business days
CANCELLED	The order was cancelled. The merchant should NOT credit the customer.
CREATED	The customer is still busy making the payment. The payment process has started; SID ClickOnce is starting up and verifying itself. The browser window has not yet opened.
READY	The customer is still busy making the payment. The payment process has started, SID ClickOnce has launched and verified itself, and the browser window has opened.

Any other status code should be treated as CANCELLED and the customer should NOT be credited.

## Transaction Date Explained:

The response XML contains 3 date fields for every order. This will help the merchant track when the transaction steps occurred.

Field Name	Description
date_ready	This is the date and time when the customer clicked on the Pay Now button on the SID Payment Page and SID ClickOnce started to launch and verify itself.
date_created	This is the date and time when the SID ClickOnce application opened the new browser window. SID ClickOnce has completed verifying itself for the first time at this stage.
date_completed	<p>This is the date and time when the transaction was either "completed" for successful transactions or "cancelled" for cancelled transactions.</p> <p>For example:            If the customer clicked on the "Log out" button in his internet banking we will send a cancel request to our database. This field will thus contain the date and time we received the cancellation request.            If the customer turns off the power to his PC, this field will be blank. We never received any request confirming or cancelling this transaction.            If the customer completes the transaction, SID ClickOnce will update the SID database with the completed transaction details. This field will contain the date and time SID database received the request to complete the transaction.</p>

When using the Order Query Web Service, SID will return transactions based on a reference number.

There may be multiple cancelled transactions before a successful transaction is completed. An example would be, if the user selects an incorrect bank, or their connection drops which will result in multiple transactions not in a COMPLETED status. Therefore you may receive multiple XML nodes returned for the same reference number.

In order to overcome this, one should firstly look for a COMPLETED transaction and then use this as the status of the transaction; however if there is not a node with a COMPLETED status, a CANCELLED status should then be looked for.

A safe guard that must be put in place is to validate the date of the transaction to make sure that the same reference number has not been reused by transactions on multiple days.

## Notes Regarding Security

1. In regard to the Return and Notification URLs, it is crucial to also validate the SID\_CONSISTENT field in the Return and Notification URL response. This field is designed to stop tampering of any of the response fields.
2. There cannot be a COMPLETED transaction without the receipt number being populated (passed back as SID\_RECEIPTNO).
3. All information passed back that was initially sent through to us, such as the merchant code, country and currency should be validated to make sure nothing has changed.
4. Between the different notifications methods, validate that the status field (passed back as SID\_STATUS) are all the same.

# Appendix A: Demo Bank Login Details

	Account Number	Online PIN	Account Holder Name
1	1111	1111	Mr John Deer
2	2222	2222	Mr James Samuels
3	3333	3333	Mr Derick Marks
4	4444	4444	Mr Rudy Smith
5	5555	5555	Mr Joe Jones
6	6666	6666	Mr Rodney Buffalo
7	7777	7777	Miss Oprah Jones
8	8888	8888	Mr Dave Black
9	9999	9999	Mr Smiley Green
10	AAAA	AAAA	Mr Freddy Faffoor
11	BBBB	BBBB	Mr Ursh Hask
12	CCCC	CCCC	Mr Shane Victory
13	DDDD	DDDD	Mrs Veronica Sanders
14	EEEE	EEEE	Mr Shaun Flame
15	FFFF	FFFF	Mr Albert Flock
16	GGGG	GGGG	Mr Chris Times
17	HHHH	HHHH	Mr Porky Lama
18	JJJJ	JJJJ	Miss Reddy Green
19	KKKK	KKKK	Mrs Susan Orfer
20	LLLL	LLLL	Miss Jane Greely

# Appendix B: Timeout & Failure Scenarios and Solutions

	Possible Failures	Solution
1	Notification timed out between SID's server and the Merchant's server	<p>Payment was successful but SID failed to notify the merchant.</p> <p>Causes that result in these timeouts are:            SID's internet connection or bandwidth dropped            The merchant's internet connection or bandwidth dropped            SID's website or server encounters problems            The merchant's website or server encounters problems</p> <p><u>Solution:</u> Merchant should query SID using the Order Query Web Service for any timeout transactions. We recommend every 15 minutes for 4 times.</p>
2	Browser/Client timed out <u>without</u> the funds being debited from the client's bank account	<p>The client's payment was unsuccessful.</p> <p>Causes that result in these timeouts are:            Client's internet connection or bandwidth dropped            Client's internet bandwidth is too slow to complete the transaction            The bank's internet connection or bandwidth dropped            The bank's website or server encounters problems</p> <p><u>Solution:</u> The client should retry the payment.</p>
3	Browser/Client timed out <u>with</u> the funds being debited from the client's bank account	<p>The client's payment was successfully debited from their bank account.</p> <p>Causes that result in these timeouts are:            Client's internet connection or bandwidth dropped after the payment was submitted to the bank            The bank's website or server encountered a problem generating the receipt            SID's website or server encounters problems</p>

		<p><u>Solution:</u> The merchant will receive extra payment in their bank account which is not listed in the SID report. The merchant should credit the client and deliver on the order.</p>
4	Client manually completes a payment using a previous reference number (without using SID)	<p>We've noticed that ABSA bank stores the beneficiary details and reference number used in once-off payments. If the client manually logs into their Internet banking and make a second payment to the same merchant, after first using SID. The first reference number is used in the second payment. The result is that you will receive 2 payments with the same reference number.</p> <p><u>Solution:</u> We recommend the merchant search for duplicated transactions from the same client and advice the client of the corrective action.</p>



## Appendix C: SID Consistent Field Sample Code

PHP, VB.NET, Cold Fusion, C# and ASP Sample Code can be downloaded from our website ([www.sidpayment.com](http://www.sidpayment.com)).

## Appendix D: Order Query Web Service Sample Code

C# Sample Code can be downloaded from our website ([www.sidpayment.com](http://www.sidpayment.com)).

## Appendix E: Implementation Error Code

These could be common errors whilst implementing SID.

Error Code	Cause	Solution
PAYSID0001	SID_MERCHANT is blank or invalid.	Ensure this field has a value and it is correct.
PAYSID0002	SID_COUNTRY is blank or invalid.	Ensure this field has a value and it is correct.
PAYSID0003	SID_CURRENCY is blank or invalid.	Ensure this field has a value and it is correct.
PAYSID0004	SID_AMOUNT is blank or invalid.	Ensure this field has a legitimate value.
PAYSID0005	Transaction amount too low.	Confirm seller limits with customer support.
PAYSID0006	Transaction amount too high.	Confirm seller limits with customer support.
PAYSID0007	SID_REFERENCE is invalid	The SID_REFERENCE field may not be left blank and may only be a maximum of 12 characters long.
PAYSID0008	Merchant has no terminals loaded.	Confirm that your merchant has terminals loaded with customer support.
PAYSID0009	SID_CONSISTENT does not match.	Ensure that the required fields are concatenated in the correct order. -Do not HTML/URL encode any fields before concatenating the fields.

		<p>-Ensure you include your secret key before hashing the string.</p> <p>-Ensure you are using the SHA512 hash function.</p> <p>-If required, ensure that all characters in the hash are upper case before sending the consistent field.</p>
PAYSID0014	.NET Framework 2.0 is not detected.	<p>If you have .NET 2.0, please click “Continue”, otherwise it must be installed. The SID Payment page provides a link to download .NET 2.0. If you clicked “Continue” and you do not have .NET 2.0 installed, you can simply clear your cookies and you will be presented with the option again.</p>
PAYSID0025	Conversion to number failed on SID_AMOUNT.	<p>Ensure that the amount does not contain any currency symbols or decimal commas. A decimal point is allowed to indicate cents.</p>

# Contact Information

For technical assistance with your SID implementation, please contact our Tech Support Team:

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