

# Sage Pay Server and Direct Shared Protocol Guidelines 3.00

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# Document Details

## Version History

Date	Change	Page
18/03/2014	Document published.	---
01/05/2014	European Payment Information updated. Removed reference to Laser Cards.	---
	Added PPro / PayPal indicators.	---

## Legal Notice

This Protocol and Integration Guidelines document (“Manual”) has been prepared to assist you with integrating your own (or your client’s) service with Sage Pay’s payment gateway. You are not permitted to use this Manual for any other purpose.

Whilst we have taken care in the preparation of this Manual, we make no representation or warranty (express or implied) and (to the fullest extent permitted by law) we accept no responsibility or liability as to the accuracy or completeness of the information contained within this Manual. Accordingly, we provide this Manual “as is” and so your use of the Manual is at your own risk.

In the unlikely event that you identify any errors, omissions or other inaccuracies within this Manual we would really appreciate it if you could please send details to us using the contact details on our website at [www.sagepay.com](http://www.sagepay.com).

We may update this Manual at any time without notice to you. Please ensure that you always use the latest version of the Manual, which we publish on our website at [www.sagepay.com](http://www.sagepay.com), when integrating with our payment gateway.

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# 1.0 Introduction

This guide contains all essential information for the user to integrate Sage Pay's Shared Protocol. We recommend that you familiarise yourself with either our Server or Direct Protocol and Integration Guidelines prior to implementing these actions.

The accompanying Server and Direct Protocols can be found on our website: [www.sagepay.com](http://www.sagepay.com).

If you use Form integration, this document does not apply to you. You should use MySagePay to perform these actions.

The Sage Pay Shared Protocol allows you to automate many of the daily procedures, such as RELEASEing or ABORTing DEFERRED transactions, requesting an AUTHROISE or CANCEL against an AUTHENTICATE, REPEATing, VOIDing or REFUNDing transactions.

All of these actions can be performed manually via MySagePay, so it is not necessary to implement these additional requests if you do not wish to. MySagePay can be accessed via the URLs below:

MySagePay Test: <https://test.sagepay.com/mysagepay>

MySagePay Live: <https://live.sagepay.com/mysagepay>

The process of RELEASEing a transaction, or REFUNDing a transaction are essentially the same as a Sever or Direct registration post. Your server send an HTTPS post containing a collection of Name=Value pairs directly to the Sage Pay gateway, which validates the information and either carries out the instruction returning a Status of **OK** and accompanying values, or generates an **INVALID**, **MALFORMED**, **NOTAUTHED** or **ERROR** Status with a description in the StatusDetail field.

Whether you use Server or Direct for transaction registration, all additional protocol messages are sent to the same set of services. The URLs for the system are:

Test: <https://test.sagepay.com/gateway/service/{service}>

Live: <https://live.sagepay.com/gateway/service/{service}>

In each case the {service} is replaced with the name of the service you are requesting, which is shown at the top of each section of the protocol appendix.

For example, if you want to VOID a payment on the Test Server, you would retrieve the VendorTxCode, VPSTxID, SecurityKey and TxAuthNo of the payment from your database and send them as Name=Value pairs in an HTTPS post to <https://test.sagepay.com/gateway/service/void.vsp>, then check the response fields for a Status of **OK** or examine the StatusDetail field to determine what went wrong.



Indicates additional information specific to European Payment method transactions.



Indicates additional information specific to PayPal transactions.

## 2.0 Additional Transaction Types

Sage Pay supports a number of additional methods of registering a transaction and completing the payment.

### 2.1 RELEASE

Once you have registered a **DEFERRED** or **REPEATDEFERRED** transaction and successfully gained authorisation, the transaction will not be sent for settlement until you perform a **RELEASE** against the initial **DEFERRED** or **REPEATDEFERRED**.

You have 30 days to **RELEASE** a transaction, any transaction not **RELEASEd** within this period will be automatically failed by the Sage Pay system.

You can only **RELEASE** once, for an amount up to and including the amount of the original **DEFERRED** transaction.

As settlement is not guaranteed to occur within 4 days for this transaction type, you may be charged a higher fee by your acquirer for ALL Deferred transactions. You should contact your Merchant Bank for more information on Pre-Authorisations.



Unlike a normal Sage Pay **DEFERRED** transaction, no shadow is placed on the customer's account for a PayPal **DEFERRED** transaction. An order is simply registered with the PayPal account and a successful authorisation for a **DEFERRED** transaction only confirms the availability of funds and does not place any funds on hold.

When you **RELEASE** a **DEFERRED** PayPal transaction, PayPal applies best efforts to capture funds at that time, but there is a possibility that funds will not be available. We recommend that you do not ship goods until obtaining a successful release.



You cannot use the **DEFERRED** transaction type with European Payments.

### 2.2 ABORT

Once you have registered a **DEFERRED** or **REPEATDEFERRED** transaction and successfully gained authorisation, if you decide not to go ahead with the order you can **ABORT** the transaction, preventing it from being settled. You will not be able to **RELEASE** a transaction once **ABORTed**.

### 2.3 REFUND

Once a transaction has been successfully **AUTHORISEd** or **RELEASEd** you can perform multiple **REFUNDs**, provided the total value of those refunds do not exceed the original amount. **REFUNDs** will always be issued to the card details used in the original transaction.

The Sage Pay gateway archives all transactions that are older than 2 years old; we therefore recommend that you check the date of the original transaction which you wish to refund before processing.

## 2.4 REPEAT or REPEATDEFERRED

Any authorised transaction can be used as a basis for initiating another transaction using the same card details. A **REPEAT** transaction simply uses the card details from the original transaction, and charges it again with an amount specified in your post. The **Amount** does not have to match the value of the original transaction.

If you wish to delay the settlement of a **REPEAT** you should use **REPEATDEFERRED**. Like a **DEFERRED** payment, these must be **RELEASED** in order for the transaction to be settled.

The Sage Pay gateway archives all transactions that are older than 2 years old; this prevents any subsequent authorisations from being made. We therefore recommend that you repeat against the last successful authorised transaction.



You can only **REPEAT** a PayPal transaction if the initial transaction was setup as a PayPal Reference transaction, where **BillingAgreement** is set to **1**.

You will need to request approval from PayPal to enable reference transactions on your account. To request approval for a live PayPal account, contact PayPal Customer Support. It's not possible to **REPEAT** PayPal transactions using MySagePay, you will need to submit a **REPEAT** request using the Shared Protocol.



You cannot **REPEAT** any European Payment transactions.

## 2.5 VOID

If you have taken a **PAYMENT**, **RELEASED**, **AUTHORISED** or **REFUNDED** a transaction and do not wish for it to be settled, you can submit a **VOID** post. This will prevent the transaction from ever being settled and change the **Status** of that transaction to failed. The ability to **VOID** a transaction is only available prior to it being settled, once settled you will need to issue a **REFUND**.

A **VOID** cannot be reversed, so only send this when you are certain you want to fail the transaction.



You cannot **VOID** a PayPal transaction, but you are able to **REFUND** a PayPal transaction.



You cannot **VOID** any European Payment transactions, but you are able to **REFUND** them.

## 2.6 MANUAL

If you require to settle a transaction that has not been authorised through the Sage Pay gateway, you can submit a **MANUAL** post.

Some transactions, for example, high value payments, will not always be authorised online. You should contact your acquiring banks authorisation centre and carry out a manual authorisation. They will provide you with an authorisation code which you will include in your **MANUAL** post.

## 2.7 DIRECTREFUND

If you wish to **REFUND** a transaction, it must have been authorised through the Sage Pay system. In some circumstances you may have taken the original payment via a Card Machine or a different payment processor. **DIRECTREFUND** is like a **MANUAL** payment but credits the specified card instead of debiting. This transaction type is never enabled by default because of the associated risks of fraud. We request that you get approval from your acquirer prior to using this transaction type.

## 2.8 AUTHORISE

If you use the transaction type **AUTHENTICATE**, and received a successful **AUTHENTICATED** or **REGISTERED** response *Status* then the transaction, card, and any 3D-Secure authentication details are being stored by Sage Pay. These transactions will not be sent for authorisation or subsequently settled until you submit an **AUTHORISE** post.

You have 90 days to **AUTHORISE** a transaction, you will not be able to **AUTHORISE** an **AUTHENTICATE** once this period has passed.

You can perform multiple **AUTHORISEs** against a single **AUTHENTICATE** provided the total amount does not exceed 115% of the original **AUTHENTICATE**.



You can use the Authenticate and Authorise transaction type but the transaction will only ever be **REGISTERED** (because the transaction will never be 3D-Secured).



You cannot use the **AUTHENTICATE** transaction type with European Payments.

## 2.9 CANCEL

If you do not wish to **AUTHORISE** an **AUTHENTICATE** or **REGSITERED** transaction, you can send a **CANCEL** request to archive it away so that it can no longer be used.

A **CANCEL** cannot be reversed, so only send a **CANCEL** when you are certain you no longer need the original transaction.

**CANCELs** happen automatically after 90 days or when 115% of the original amount has been **AUTHORISEd**.

### 3.0 Character Sets and Encoding

All transactions are simple synchronous HTTPS POSTs sent from a script on your servers to the Sage Pay gateway, with the same script reading the Response component of that POST to determine success or failure. These POSTs can be sent using any HTTPS compatible objects (such as cURL in PHP, HttpWebRequest in .NET and Apache HttpComponents in Java).

The data should be sent as URL Encoded Name=Value pairs separated with & characters and sent to the Sage Pay Server URL with a Service name set to the message type in question.

The following sections detail the contents of the POSTs and responses, between your server and ours. The format and size of each field is given, along with accepted values and characters. The legend below explains the symbols:

Aa	Letters (A-Z and a-z)	^	Caret	+	Plus
0-9	Numbers	[]	Square brackets	()	Parentheses
á	Accented characters	*	Asterisk	:	Semi-colon
&	Ampersand	'	Apostrophe (single quote)		Pipe
@	At sign	/\	Slash and Backslash	!	Exclamation Mark
:	Colon	-	Hyphen		Space
,	Comma	_	Underscore	~	Tilde
{}	Curly brackets	.	Full stop / Period	=	Equals
"	Quotes	\$	Dollar	US	Valid 2-letter US States
#	Hash	?	Question Mark	DATE	Date in the format YYYY-MM-DD
ISO639	ISO 639-2 (2-letter language codes)	BASE64	Valid Base64 characters (A-Z,a-z,0-9,+ and /)	BOOLEAN	True or False
ISO3166	ISO 3166-1 (2-letter country codes)	CR/LF	New line (Carriage Return and Line Feed)	RFC532N	RFC 5321/5322 (see also RFC 3696) compliant email addresses
ISO4217	ISO 4217 (3-letter currency codes)	RFC1738	RFC 1738 compliant HTTP(S) URL All non-compliant characters, including spaces should be URL encoded	<HTML>	Valid HTML with no active content. Script will be filtered. Includes all valid letters, numbers, punctuation and accented characters

# Appendix A: Releasing a Deferred or RepeatDeferred

## A1. You submit your RELEASE POST

This is performed via a HTTPS POST request, sent to the Release URL service release.vsp. The details should be URL encoded Name=Value fields separated by ‘&’ characters.

### Request format

Name	Mandatory	Format	Max Length	Allowed Values	Description
VPSProtocol	Yes	[0-9] [.]	4 chars	3.00	This is the version of the protocol you are integrating with. Default or incorrect value is taken to be <b>3.00</b> .
TxType	Yes	[Aa]	15 chars	RELEASE	The value should be in UPPERCASE.
Vendor	Yes	[Aa] [0-9]	15 chars		Used to authenticate your site. This should contain the Sage Pay Vendor Name supplied by Sage Pay when your account was created.
VendorTxCode	Yes	[Aa] [0-9] [{}][.] [-][=]	40 chars		The unique VendorTxCode submitted by your system when the <b>DEFERRED</b> transaction was registered.
VPSTxId	Yes	[Aa] [0-9] [-] [{}]	38 chars		The VPSTxId returned to you when the <b>DEFERRED</b> transaction was registered.
SecurityKey	Yes	[Aa] [0-9]	10 chars		The SecurityKey returned to you when the <b>DEFERRED</b> transaction was registered.
TxAuthNo	Yes	[0-9]	10 chars		The TxAuthNo returned to you when the <b>DEFERRED</b> transaction was authorised.
ReleaseAmount	Yes	[0-9] [.] [,]		0.01 to 100,000.00	The amount of the <b>DEFERRED</b> transaction to release. You can only <b>RELEASE</b> once, up to the original <b>DEFERRED</b> amount. Minor digits formatted to 2 decimal places where appropriate. e.g. 5.10 or 3.29. Values such as 3.235 will be rejected. Minimum for no minor unit currencies like JPY is 1. <b>Amounts must be in the UK currency format. The period must be used to indicate the decimal place. The comma must only be used to separate groups of thousands.</b>

## A2. Response to your RELEASE POST

This is the plain text response part of the POST sent in A1. Encoding will be as Name=Value fields separated by carriage return and linefeeds (CRLF).

### Response format

Name	Mandatory	Format	Max Length	Allowed Values	Description
VPSProtocol	Yes	0-9 .	4 chars	3.00	This is the version of the protocol you are integrating with. Default or incorrect value is taken to be <b>3.00</b> .
Status	Yes	Aa .	15 chars	OK <b>MALFORMED</b> <b>INVALID</b> <b>ERROR</b>	If the Status is not <b>OK</b> , the StatusDetail field will give more information about the problem. <b>OK</b> = Process executed without error.  <b>MALFORMED</b> = Input message was missing fields or badly formatted – normally will only occur during development.  <b>INVALID</b> = Transaction was not registered because although the POST format was valid, some information supplied was invalid. E.g. incorrect vendor name or currency.  <b>ERROR</b> = A problem occurred at Sage Pay which prevented transaction registration. Please notify Sage Pay if a Status of <b>ERROR</b> is seen, together with your Vendor, VendorTxCode and the StatusDetail.
StatusDetail	Yes	Aa 0-9 . () ; ;	255 chars		Human-readable text providing extra detail for the Status message. Always check StatusDetail if the Status is not <b>OK</b>

## Appendix B: Aborting a Deferred/RepeatDeferred

### B1. You submit your ABORT POST

This is performed via a HTTPS POST request, sent to the Abort URL service abort.vsp. The details should be URL encoded Name=Value fields separated by ‘&’ characters.

#### Request format

Name	Mandatory	Format	Max Length	Allowed Values	Description
VPSProtocol	Yes	0-9 -	4 chars	3.00	This is the version of the protocol you are integrating with. Default or incorrect value is taken to be <b>3.00</b> .
TxType	Yes	Aa	15 chars	ABORT	The value should be in UPPERCASE.
Vendor	Yes	Aa 0-9	15 chars		Used to authenticate your site. This should contain the Sage Pay Vendor Name supplied by Sage Pay when your account was created.
VendorTxCode	Yes	Aa 0-9 {} -	40 chars		The unique VendorTxCode submitted by your system when the <b>DEFERRED</b> transaction was registered.
VPSTxId	Yes	Aa 0-9 - {}	38 chars		The VPSTxId returned to you when the <b>DEFERRED</b> transaction was registered.
SecurityKey	Yes	Aa 0-9	10 chars		The SecurityKey returned to you when the <b>DEFERRED</b> transaction was registered.
TxAuthNo	Yes	0-9	10 chars		The TxAuthNo returned to you when the <b>DEFERRED</b> transaction was authorised.

## B2. Response to your ABORT POST

This is the plain text response part of the POST sent in B1. Encoding will be as Name=Value fields separated by carriage return and linefeeds (CRLF).

### Response format

Name	Mandatory	Format	Max Length	Allowed Values	Description
VPSProtocol	Yes	0-9 .	4 chars	3.00	This is the version of the protocol you are integrating with. Default or incorrect value is taken to be <b>3.00</b> .
Status	Yes	Aa .	15 chars	OK <b>MALFORMED</b> <b>INVALID</b> <b>ERROR</b>	If the Status is not <b>OK</b> , the StatusDetail field will give more information about the problem. <b>OK</b> = Process executed without error.  <b>MALFORMED</b> = Input message was missing fields or badly formatted – normally will only occur during development.  <b>INVALID</b> = Transaction was not registered because although the POST format was valid, some information supplied was invalid. E.g. incorrect vendor name or currency.  <b>ERROR</b> = A problem occurred at Sage Pay which prevented transaction registration. Please notify Sage Pay if a Status of <b>ERROR</b> is seen, together with your Vendor, VendorTxCode and the StatusDetail.
StatusDetail	Yes	Aa 0-9 . () , :	255 chars		Human-readable text providing extra detail for the Status message. Always check StatusDetail if the Status is not <b>OK</b>

# Appendix C: Refunding a transaction

## C1. You submit your REFUND POST

This is performed via a HTTPS POST request, sent to the Refund URL service refund.vsp. The details should be URL encoded Name=Value fields separated by ‘&’ characters.

### Request format

Name	Mandatory	Format	Max Length	Allowed Values	Description
VPSProtocol	Yes	0-9 .	4 chars	3.00	This is the version of the protocol you are integrating with. Default or incorrect value is taken to be <b>3.00</b> .
TxType	Yes	Aa	15 chars	REFUND	The value should be in UPPERCASE.
Vendor	Yes	Aa 0-9	15 chars		Used to authenticate your site. This should contain the Sage Pay Vendor Name supplied by Sage Pay when your account was created.
VendorTxCode	Yes	Aa 0-9 {} . - =	40 chars		This should be your own reference code to the transaction. You should provide a completely unique VendorTxCode for each transaction.
Amount	Yes	0-9 . ,		0.01 to 100,000.00	<p>The amount to Refund. You can make multiple refunds against a single transaction but the total value of all refunds CANNOT exceed the amount of the original transaction.</p> <p>Minor digits formatted to 2 decimal places where appropriate.</p> <p>e.g. 5.10 or 3.29. Values such as 3.235 will be rejected.</p> <p>Minimum for no minor unit currencies like JPY is 1.</p> <p>Amounts must be in the UK currency format. The period must be used to indicate the decimal place. The comma must only be used to separate groups of thousands.</p>
Currency	Yes	ISO4217	3 chars	ISO 4217 Examples: <b>GBP</b> , <b>EUR</b> and <b>USD</b>	The currency of the transaction being refunded. This must match the original transaction and be supported by one of your Sage Pay merchant accounts or the transaction will be rejected.

Description	Yes	<code>&lt;HTML&gt;</code>	100 chars		Free text description of goods or services being refunded. This will be stored against the transaction for your future reference via MySagePay.
RelatedVPSTxId	Yes	<code>Aa 0-9 - {}</code>	38 chars		The <code>VPSTxId</code> returned to you when the transaction which requires refunding was registered.
RelatedVendorTxCode	Yes	<code>Aa 0-9 {} - -</code>	40 chars		The unique <code>VendorTxCode</code> submitted by your system for the transactions which required refunding.
RelatedSecurityKey	Yes	<code>Aa 0-9</code>	10 chars		The <code>SecurityKey</code> returned to you when the transaction which requires refunding was registered.
RelatedTxAuthNo	Yes	<code>0-9</code>	10 chars		The <code>TxAuthNo</code> returned to you when the transaction which requires refunding was authorised.

## C2. Response to your REFUND POST

This is the plain text response part of the POST sent in C1. Encoding will be as Name=Value fields separated by carriage return and linefeeds (CRLF).

### Response format

Name	Mandatory	Format	Max Length	Allowed Values	Description
VPSProtocol	Yes	0-9 - .	4 chars	3.00	This is the version of the protocol you are integrating with. Default or incorrect value is taken to be <b>3.00</b> .
Status	Yes	Aa -	15 chars	OK <b>MALFORMED</b> <b>INVALID</b> <b>ERROR</b>	If the Status is not <b>OK</b> , the StatusDetail field will give more information about the problem. <b>OK</b> = Process executed without error.  <b>MALFORMED</b> = Input message was missing fields or badly formatted – normally will only occur during development.  <b>INVALID</b> = Transaction was not registered because although the POST format was valid, some information supplied was invalid. E.g. incorrect vendor name or currency.  <b>ERROR</b> = A problem occurred at Sage Pay which prevented transaction registration. Please notify Sage Pay if a Status of <b>ERROR</b> is seen, together with your Vendor, VendorTxCode and the StatusDetail.
StatusDetail	Yes	Aa 0-9 - . () ,	255 chars		Human-readable text providing extra detail for the Status message. Always check StatusDetail if the Status is not <b>OK</b>
VPSTxId	Yes	Aa 0-9 - {}	38 chars		The Sage Pay ID to uniquely identify the transaction on our system. Only present if the Status is <b>OK</b>
TxAuthNo	Yes	0-9	10 chars		Sage Pay unique Authorisation Code for a successfully authorised transaction. Only present if the Status is <b>OK</b>

# Appendix D: Repeating a transaction

## D1. You submit your REPEAT POST

This is performed via a HTTPS POST request, sent to the Repeat URL service repeat.vsp. The details should be URL encoded Name=Value fields separated by ‘&’ characters.

### Request format

Name	Mandatory	Format	Max Length	Allowed Values	Description
VPSProtocol	Yes	0-9 -	4 chars	3.00	This is the version of the protocol you are integrating with. Default or incorrect value is taken to be <b>3.00</b> .
TxType	Yes	Aa	15 chars	REPEAT REPEATDEFERRED	The value should be in UPPERCASE.
Vendor	Yes	Aa 0-9	15 chars		Used to authenticate your site. This should contain the Sage Pay Vendor Name supplied by Sage Pay when your account was created.
VendorTxCode	Yes	Aa 0-9 {} - - -	40 chars		This should be your own reference code to the transaction. Your site should provide a completely unique VendorTxCode for each transaction.
Amount	Yes	0-9 . ,		0.01 to 100,000.00	Amount for the transaction containing minor digits formatted to 2 decimal places where appropriate. e.g. 5.10 or 3.29. Values such as 3.235 will be rejected. Minimum for no minor unit currencies like JPY is 1. <b>Amounts must be in the UK currency format. The period must be used to indicate the decimal place. The comma must only be used to separate groups of thousands.</b>
Currency	Yes	ISO4217	3 chars	ISO 4217 Examples: GBP, EUR and USD	The currency the transaction is performed in, irrespective of the currency of the original transaction. This must be supported by one of your Sage Pay merchant accounts or the transaction will be rejected.
Description	Yes	<HTML>	100 chars		Free text description of goods or services being purchased. This will be stored against the transaction for your future reference via MySagePay.
RelatedVPSTxId	Yes	Aa 0-9 - {}	38 chars		The VPSTxId returned to you when the transaction which you're repeating was registered.

RelatedVendorTxCode	Yes		40 chars		The unique VendorTxCode submitted by your system for the transactions which you're repeating.
RelatedSecurityKey	Yes		10 chars		The SecurityKey returned to you when the transaction you're repeating was registered.
RelatedTxAuthNo	Yes		10 chars		The TxAuthNo returned to you when the transaction you're repeating was registered.
CV2	No		4 chars		The 3 digits on the signature strip of the card, or the extra 4 digits on the front for American Express Cards  This field is optional for REPEATs but can be provided if you ask the customer to supply it again.
DeliverySurname	Yes		20 chars		Customer delivery details.  Delivery information can be supplied again for a REPEAT if a different address is to be used. Otherwise the delivery information from the original transaction will be used.
DeliveryFirstnames	Yes		20 chars		These fields are optional if none of them are supplied.
DeliveryAddress1	Yes		100 chars		All mandatory fields must contain a value, apart from the DeliveryPostcode. The DeliveryPostcode can be blank for countries that do not have postcodes (e.g. Ireland) but is required in all countries that do have them. Providing a blank field when information is required will cause an error.
DeliveryAddress2	No		100 chars		The DeliveryState becomes mandatory when the DeliveryCountry is set to US.
DeliveryCity	Yes		40 chars		
DeliveryPostCode	Yes		10 chars		
DeliveryCountry	Yes		2 chars	ISO 3166 Examples: GB, IE and DE	
DeliveryState	No		2 chars	Examples: AL, MS and NY	
DeliveryPhone	No		20 chars		
BasketXML	No		20000 chars	See companion document "Direct Integration and Protocol Guidelines 3.00" for the format of the BasketXML field.	A more flexible version of the current basket field which can be used instead of the basket field.  If this field is supplied then the Basket field should not be supplied.

## D2. Response to your REPEAT POST

This is the plain text response part of the POST sent in D1. Encoding will be as Name=Value fields separated by carriage return and linefeeds (CRLF).

### Response format

Name	Mandatory	Format	Max Length	Allowed Values	Description
VPSProtocol	Yes	0-9 - .	4 chars	3.00	This is the version of the protocol you are integrating with. Default or incorrect value is taken to be <b>3.00</b> .
Status	Yes	Aa -	15 chars	OK <b>NOTAUTHED</b> <b>MALFORMED</b> <b>INVALID</b> <b>ERROR</b>	If the Status is not <b>OK</b> , the StatusDetail field will give more information about the problem. <b>OK</b> = Process executed without error.  <b>NOTAUTHED</b> = The Authorisation was not authorised by the acquiring bank. No funds will be charged to the card.  <b>MALFORMED</b> = Input message was missing fields or badly formatted – normally will only occur during development.  <b>INVALID</b> = Transaction was not registered because although the POST format was valid, some information supplied was invalid. E.g. incorrect vendor name or currency.  <b>ERROR</b> = A problem occurred at Sage Pay which prevented transaction registration. Please notify Sage Pay if a Status of <b>ERROR</b> is seen, together with your Vendor, VendorTxCode and the StatusDetail.
StatusDetail	Yes	Aa 0-9 - . () , :	255 chars		Human-readable text providing extra detail for the Status message. Always check StatusDetail if the Status is not <b>OK</b>
VPSTxId	Yes	Aa 0-9 - {}	38 chars		The Sage Pay ID to uniquely identify the transaction on our system. Only present if the Status is <b>OK</b>

SecurityKey	Yes	Aa 0-9	10 chars		Only present if the Status is OK
TxAuthNo	Yes	0-9	10 chars		Sage Pay unique Authorisation Code for a successfully authorised transaction. Only present if the Status is OK
AVSCV2	No	Aa	50 chars	<b>ALL MATCH SECURITY CODE MATCH ONLY ADDRESS MATCH ONLY NO DATA MATCHES DATA NOT CHECKED</b>	<p>This is the response from AVS and CV2 checks. Provided for Vendor info and backward compatibility with the banks. Rules set up at the Sage Pay server will accept or reject the transaction based on these values.</p> <p>More detailed results are split out in the next three fields. <b>This field is only present if the CV2 is supplied.</b></p>
AddressResult	No	Aa	20 chars	<b>NOTPROVIDED NOTCHECKED MATCHED NOTMATCHED</b>	<p>The specific result of the cardholder's address numerics from the AVS/CV2 checks.</p> <p><b>This field is only present if the CV2 is supplied.</b></p>
PostCodeResult	No	Aa	20 chars	<b>NOTPROVIDED NOTCHECKED MATCHED NOTMATCHED</b>	<p>The specific result of the cardholder's postcode from the AVS/CV2 checks.</p> <p><b>This field is only present if the CV2 is supplied.</b></p>
CV2Result	No	Aa	20 chars	<b>NOTPROVIDED NOTCHECKED MATCHED NOTMATCHED</b>	<p>The specific result of the cardholder's CV2 code from the AVS/CV2 checks.</p> <p><b>This field is only present if the CV2 is supplied.</b></p>
BankAuthCode	Yes	Aa 0-9	6 chars		The authorisation code returned from the bank. e.g T99777
DeclineCode	Yes	0-9	2 chars		The decline code from the bank. These codes are specific to the bank. Please contact them for a description of each code. e.g. 00

## Appendix E: Voiding a transaction

### E1. You submit your VOID POST

This is performed via a HTTPS POST request, sent to the Void URL service void.vsp. The details should be URL encoded Name=Value fields separated by ‘&’ characters.

#### Request format

Name	Mandatory	Format	Max Length	Allowed Values	Description
VPSProtocol	Yes	0-9 -	4 chars	3.00	This is the version of the protocol you are integrating with. Default or incorrect value is taken to be <b>3.00</b> .
TxType	Yes	Aa	15 chars	VOID	The value should be in UPPERCASE.
Vendor	Yes	Aa 0-9	15 chars		Used to authenticate your site. This should contain the Sage Pay Vendor Name supplied by Sage Pay when your account was created.
VendorTxCode	Yes	Aa 0-9 {} - -	40 chars		The unique VendorTxCode submitted by your system when the original transaction you’re voiding was registered.
VPSTxId	Yes	Aa 0-9 - {}	38 chars		The VPSTxId returned to you when the original transaction you’re voiding was registered.
SecurityKey	Yes	Aa 0-9	10 chars		The SecurityKey returned to you when the original transaction you’re voiding was registered.
TxAuthNo	Yes	0-9	10 chars		The TxAuthNo returned to you when the original transaction you’re voiding was authorised.

## E2. Response to your VOID POST

This is the plain text response part of the POST sent in E1. Encoding will be as Name=Value fields separated by carriage return and linefeeds (CRLF).

### Response format

Name	Mandatory	Format	Max Length	Allowed Values	Description
VPSProtocol	Yes	0-9 .	4 chars	3.00	This is the version of the protocol you are integrating with. Default or incorrect value is taken to be <b>3.00</b> .
Status	Yes	Aa .	15 chars	OK <b>MALFORMED</b> <b>INVALID</b> <b>ERROR</b>	If the Status is not <b>OK</b> , the StatusDetail field will give more information about the problem. <b>OK</b> = Process executed without error.  <b>MALFORMED</b> = Input message was missing fields or badly formatted – normally will only occur during development.  <b>INVALID</b> = Transaction was not registered because although the POST format was valid, some information supplied was invalid. E.g. incorrect vendor name or currency.  <b>ERROR</b> = A problem occurred at Sage Pay which prevented transaction registration. Please notify Sage Pay if a Status of <b>ERROR</b> is seen, together with your Vendor, VendorTxCode and the StatusDetail.
StatusDetail	Yes	Aa 0-9 . () , :	255 chars		Human-readable text providing extra detail for the Status message. Always check StatusDetail if the Status is not <b>OK</b>

# Appendix F: Manual Payment transaction

## F1. You submit your MANUAL POST

This is performed via a HTTPS POST request, sent to the Manual URL service manualpayment.vsp. The details should be URL encoded Name=Value fields separated by '&' characters.

### Request format

Name	Mandatory	Format	Max Length	Allowed Values	Description
VPSProtocol	Yes	0-9 .	4 chars	3.00	This is the version of the protocol you are integrating with. Default or incorrect value is taken to be <b>3.00</b> .
TxType	Yes	Aa	15 chars	MANUAL	The value should be in UPPERCASE.
Vendor	Yes	Aa 0-9	15 chars		Used to authenticate your site. This should contain the Sage Pay Vendor Name supplied by Sage Pay when your account was created.
VendorTxCode	Yes	Aa 0-9 {} . -	40 chars		This should be your own reference code to the transaction. Your site should provide a completely unique <code>VendorTxCode</code> for each transaction.
Amount	Yes	0-9 . ,		0.01 to 100,000.00	Amount for the transaction containing minor digits formatted to 2 decimal places where appropriate. e.g. 5.10 or 3.29. Values such as 3.235 will be rejected. Minimum for no minor unit currencies like JPY is 1. <b>Amounts must be in the UK currency format. The period must be used to indicate the decimal place. The comma must only be used to separate groups of thousands.</b>
Currency	Yes	ISO4217	3 chars	ISO 4217 Examples: GBP, EUR and USD	The currency the transaction is performed in. This must be supported by one of your Sage Pay merchant accounts or the transaction will be rejected.
Description	Yes	<HTML>	100 chars		Free text description of goods or services being purchased. This will be stored against the transaction for your future reference via MySagePay.
CardHolder	Yes	Aa á ñ / \ &	50 chars		This should be the name displayed on the card.
CardNumber	Yes	0-9	20 chars		The full card number is required.

ExpiryDate	Yes	<b>0-9</b>	4 chars		The expiry date of the card in the format <b>MMYY</b>
CV2	No	<b>0-9</b>	4 chars		The extra security 3 digits on the signature strip of the card, or the extra 4 digits on the front for American Express Cards  <b>If AVS/CV2 is ON for your account this field becomes compulsory.</b>
CardType	Yes	<b>Aa</b>	15 chars	<b>VISA</b> <b>MC</b> <b>MCDEBIT</b> <b>DELTA</b> <b>MAESTRO</b> <b>UKE</b> <b>AMEX</b> <b>DC</b> <b>JCB</b>	<b>VISA</b> is Visa <b>MC</b> is MasterCard <b>MCDEBIT</b> is Debit MasterCard <b>DELTA</b> is Visa Debit <b>MAESTRO</b> is Domestic and International issued Maestro <b>UKE</b> is Visa Electron <b>AMEX</b> is American Express <b>DC</b> is Diners Club International and Discover <b>JCB</b> is Japan Credit Bureau
AuthCode	No	<b>Aa 0-9</b>	15 chars		The manual Authorisation Code obtained from your acquirer.  <b>This field is optional since Auth Codes may not be required for transactions below the floor limit on your account. Check with your acquirer.</b>
BillingSurname	No	<b>Aa á é ï ñ / \ &amp;</b> - - - - -	20 chars		Customer billing details.  <b>All mandatory fields are optional when performing a MANUAL transaction.</b>
BillingFirstnames	No	<b>Aa á é ï ñ / \ &amp;</b> - - - - -	20 chars		
BillingAddress1	No	<b>Aa á é ï ñ / \ &amp;</b> - - - - - : + () CR/LF	100 chars		
BillingAddress2	No	<b>Aa á é ï ñ / \ &amp;</b> - - - - - : + () CR/LF	100 chars		
BillingCity	No	<b>Aa á é ï ñ / \ &amp;</b> - - - - - : + () CR/LF	40 chars		

BillingPostCode	No	Aa - 0-9	10 chars		Customer billing details.  All mandatory fields are optional when performing a MANUAL transaction.
BillingCountry	No	ISO3166	2 chars	ISO 3166 Examples: <b>GB</b> , <b>IE</b> and <b>DE</b>	
BillingState	No	US	2 chars	Examples: <b>AL</b> , <b>MS</b> and <b>NY</b>	
BillingPhone	No	0-9 - Aa + ()	20 chars		
DeliverySurname	No	Aa á / \ &	20 chars		
DeliveryFirstnames	No	Aa á / \ &	20 chars		
DeliveryAddress1	No	Aa á / \ & - . , 0-9 : + () CR/LF	100 chars		
DeliveryAddress2	No	Aa á / \ & - . , 0-9 : + () CR/LF	100 chars		
DeliveryCity	No	Aa á / \ & - . , 0-9 : + () CR/LF	40 chars		
DeliveryPostCode	No	Aa - 0-9	10 chars		
DeliveryCountry	No	ISO3166	2 chars	ISO 3166 Examples: <b>GB</b> , <b>IE</b> and <b>DE</b>	The customers email address.  If you wish to use multiple email addresses, you should add them using the : (colon) character as a separator.  The current version of the Shared Protocol does not send confirmation emails to the customer. This field is provided for your records only.
DeliveryState	No	US	2 chars	Examples: <b>AL</b> , <b>MS</b> and <b>NY</b>	
DeliveryPhone	No	0-9 - Aa + ()	20 chars		
CustomerEMail	No	RFC532N	255 chars	Examples: me@mail1.com:me@mail2.com	

Basket	No	<b>&lt;HTML&gt;</b>	7500 chars	See companion document "Direct Integration and Protocol Guidelines 3.00" for the format of the Basket field.	You can use this field to supply details of the customer's order. This information will be displayed to you in "My Sage Pay". If this field is supplied then the BasketXML field should not be supplied.
ClientIPAddress	No	<b>0-9 .</b>	15 chars		The IP address of the client connecting to your server making the payment.  This should be a full IP address which you can obtain from your server scripts. We will attempt to Geolocate the IP address in your reports and fraud screening.
AccountType	No	<b>Aa</b>	1 char	<b>E</b> (default) <b>M</b> <b>C</b>	This optional flag is used to tell the Sage Pay gateway which merchant account to use. If omitted, the system will use E, then M, then C by default. <b>E</b> = Use the e-commerce merchant account (default).  <b>M</b> = Use the mail order/telephone order account (if present).  <b>C</b> = Use the continuous authority merchant account (if present).
BasketXML	No		20000 chars	See companion document "Direct Integration and Protocol Guidelines 3.00" for the format of the BasketXML field.	A more flexible version of the current basket field which can be used instead of the basket field. If this field is supplied then the Basket field should not be supplied.
CustomerXML	No		2000 chars	See companion document "Direct Integration and Protocol Guidelines 3.00" for the format of the CustomerXML field.	This can be used to supply information on the customer for purposes such as fraud screening.
SurchargeXML	No		800 chars	See companion document "Direct Integration and Protocol Guidelines 3.00" for the format of the SurchargeXML field.	Use this field to override current surcharge settings in "My Sage Pay" for the current transaction. Percentage and fixed amount surcharges can be set for different payment types.
VendorData	No	<b>Aa 0-9</b>	200 chars		Use this field to pass any data you wish to be displayed against the transaction in "My Sage Pay".

ReferrerID	No		40 char		This can be used to send the unique reference for the Partner that referred the Vendor to Sage Pay.
Website	No		100 chars		Reference to the website this transaction came from. This field is useful if transactions can originate from more than one website. Supplying this information will enable reporting to be performed by website.

## F2. Response to your MANUAL POST

This is the plain text response part of the POST sent in F1. Encoding will be as Name=Value fields separated by carriage return and linefeeds (CRLF).

### Response format

Name	Mandatory	Format	Max Length	Allowed Values	Description
VPSProtocol	Yes	0-9 - .	4 chars	3.00	This is the version of the protocol you are integrating with. Default or incorrect value is taken to be <b>3.00</b> .
Status	Yes	Aa -	15 chars	OK <b>MALFORMED</b> <b>INVALID</b> <b>ERROR</b>	If the Status is not <b>OK</b> , the StatusDetail field will give more information about the problem. <b>OK</b> = Process executed without error.  <b>MALFORMED</b> = Input message was missing fields or badly formatted – normally will only occur during development.  <b>INVALID</b> = Transaction was not registered because although the POST format was valid, some information supplied was invalid. E.g. incorrect vendor name or currency.  <b>ERROR</b> = A problem occurred at Sage Pay which prevented transaction registration. Please notify Sage Pay if a Status of <b>ERROR</b> is seen, together with your Vendor, VendorTxCode and the StatusDetail.
StatusDetail	Yes	Aa 0-9 - . () , :	255 chars		Human-readable text providing extra detail for the Status message. Always check StatusDetail if the Status is not <b>OK</b>
VPSTxId	Yes	Aa 0-9 - {}	38 chars		The Sage Pay ID to uniquely identify the transaction on our system. Only present if the Status is <b>OK</b>
SecurityKey	Yes	Aa 0-9	10 chars		Only present if the Status is <b>OK</b>
TxAuthNo	Yes	0-9	10 chars		Only present if the Status is <b>OK</b>

# Appendix G: Direct Refund transaction

## G1. You submit your DIRECTREFUND POST

This is performed via a HTTPS POST request, sent to the Direct Refund URL service directrefund.vsp. The details should be URL encoded Name=Value fields separated by '&' characters.

### Request format

Name	Mandatory	Format	Max Length	Allowed Values	Description
VPSProtocol	Yes	0-9 .	4 chars	3.00	This is the version of the protocol you are integrating with. Default or incorrect value is taken to be <b>3.00</b> .
TxType	Yes	Aa	15 chars	DIRECTREFUND	The value should be in UPPERCASE.
Vendor	Yes	Aa 0-9	15 chars		Used to authenticate your site. This should contain the Sage Pay Vendor Name supplied by Sage Pay when your account was created.
VendorTxCode	Yes	Aa 0-9 {} . -	40 chars		This should be your own reference code to the transaction. You should provide a completely unique VendorTxCode for each transaction.
Amount	Yes	0-9 . ,		0.01 to 100,000.00	Amount for the transaction containing minor digits formatted to 2 decimal places where appropriate. e.g. 5.10 or 3.29. Values such as 3.235 will be rejected. Minimum for no minor unit currencies like JPY is 1. <b>Amounts must be in the UK currency format. The period must be used to indicate the decimal place. The comma must only be used to separate groups of thousands.</b>
Currency	Yes	ISO4217	3 chars	ISO 4217 Examples: GBP, EUR and USD	The currency the transaction is performed in. This must be supported by one of your Sage Pay merchant accounts or the transaction will be rejected.
Description	Yes	<HTML>	100 chars		Free text description of goods or services being refunded. This will be stored against the transaction for your future reference via MySagePay.
CardHolder	Yes	Aa á ñ ÷ & - -	50 chars		This should be the name displayed on the card.
CardNumber	Yes	0-9	20 chars		The full card number is required.
ExpiryDate	Yes	0-9	4 chars		The expiry date of the card in the format <b>MMYY</b>

CardType	Yes	<b>Aa</b>	15 chars	<b>VISA</b> <b>MC</b> <b>MCDEBIT</b> <b>DELTA</b> <b>MAESTRO</b> <b>UKE</b> <b>AMEX</b> <b>DC</b> <b>JCB</b>	<b>VISA</b> is Visa <b>MC</b> is MasterCard <b>MCDEBIT</b> is Debit MasterCard <b>DELTA</b> is Visa Debit <b>MAESTRO</b> is Domestic and International issued Maestro <b>UKE</b> is Visa Electron <b>AMEX</b> is American Express <b>DC</b> is Diners Club International and Discover <b>JCB</b> is Japan Credit Bureau
AccountType	No	<b>Aa</b>	1 char	<b>E</b> (default) <b>M</b> <b>C</b>	This optional flag is used to tell the Sage Pay gateway which merchant account to use. If omitted, the system will use E, then M, then C by default.  <b>E</b> = Use the e-commerce merchant account (default).  <b>M</b> = Use the mail order/telephone order account (if present).  <b>C</b> = Use the continuous authority merchant account (if present).

## G2. Response to your DIRECTREFUND POST

This is the plain text response part of the POST sent in G1. Encoding will be as Name=Value fields separated by carriage return and linefeeds (CRLF).

### Response format

Name	Mandatory	Format	Max Length	Allowed Values	Description
VPSProtocol	Yes	0-9 .	4 chars	3.00	This is the version of the protocol you are integrating with. Default or incorrect value is taken to be <b>3.00</b> .
Status	Yes	Aa .	15 chars	OK <b>MALFORMED</b> <b>INVALID</b> <b>ERROR</b>	If the Status is not <b>OK</b> , the StatusDetail field will give more information about the problem. <b>OK</b> = Process executed without error.  <b>MALFORMED</b> = Input message was missing fields or badly formatted – normally will only occur during development.  <b>INVALID</b> = Transaction was not registered because although the POST format was valid, some information supplied was invalid. E.g. incorrect vendor name or currency.  <b>ERROR</b> = A problem occurred at Sage Pay which prevented transaction registration. Please notify Sage Pay if a Status of <b>ERROR</b> is seen, together with your Vendor, VendorTxCode and the StatusDetail.
StatusDetail	Yes	Aa 0-9 . : { }	255 chars		Human-readable text providing extra detail for the Status message. Always check StatusDetail if the Status is not <b>OK</b>
VPSTxId	Yes	Aa 0-9 - { }	38 chars		The Sage Pay ID to uniquely identify the transaction on our system. Only present if the Status is <b>OK</b>
SecurityKey	Yes	Aa 0-9	10 chars		Only present if the Status is <b>OK</b>
TxAuthNo	Yes	0-9	10 chars		Only present if the Status is <b>OK</b>

# Appendix H: Authorising an Authenticated/Registered

## H1. You submit your AUTHORISE POST

This is performed via a HTTPS POST request, sent to the Authorise URL service cancel.vsp. The details should be URL encoded Name=Value fields separated by '&' characters.

### Request format

Name	Mandatory	Format	Max Length	Allowed Values	Description
VPSProtocol	Yes	0-9 -	4 chars	3.00	This is the version of the protocol you are integrating with. Default or incorrect value is taken to be <b>3.00</b> .
TxType	Yes	Aa	15 chars	AUTHORISE	The value should be in UPPERCASE.
Vendor	Yes	Aa 0-9	15 chars		Used to authenticate your site. This should contain the Sage Pay Vendor Name supplied by Sage Pay when your account was created.
VendorTxCode	Yes	Aa 0-9 {} -	40 chars		This should be your own reference code to the transaction. You should provide a completely unique VendorTxCode for each transaction.
Amount	Yes	0-9 , .		0.01 to 100,000.00	<p>The amount to Authorise. You can make multiple authorisations against a single AUTHENTICATE but the total value of all authorisations CANNOT exceed 115% of the amount of the original transaction.</p> <p>Minor digits formatted to 2 decimal places where appropriate.</p> <p>e.g. 5.10 or 3.29. Values such as 3.235 will be rejected.</p> <p>Minimum for no minor unit currencies like JPY is 1.</p> <p>Amounts must be in the UK currency format. The period must be used to indicate the decimal place. The comma must only be used to separate groups of thousands.</p>
Description	Yes	<HTML>	100 chars		Free text description of goods or services being authorised. This will be stored against the transaction for your future reference via MySagePay.
RelatedVPSTxId	Yes	Aa 0-9 - {}	38 chars		The VPSTxId of the AUTHENTICATE transaction which requires authorising.

RelatedVendorTxCode	Yes		40 chars		The VendorTxCode submitted by your system for the AUTHENTICATE transaction which requires authorising.
RelatedSecurityKey	Yes		10 chars		The SecurityKey of the AUTHENTICATE transaction which requires authorising.
RelatedTxAuthNo	Yes		10 chars		The TxAuthNo of the AUTHENTICATE transaction which requires authorising.
ApplyAVSCV2	No		Flag	<p><b>0</b> (default)</p> <p><b>1</b></p> <p><b>2</b></p> <p><b>3</b></p>	<p>Using this flag you can fine tune the AVS/CV2 checks and rule set you've defined at a transaction level. This is useful in circumstances where direct and trusted customer contact has been established and you wish to override the default security checks.</p> <p><b>0</b> = If AVS/CV2 enabled then check them. If rules apply, use rules (default)</p> <p><b>1</b> = Force AVS/CV2 checks even if not enabled for the account. If rules apply, use rules.</p> <p><b>2</b> = Force NO AVS/CV2 checks even if enabled on account.</p> <p><b>3</b> = Force AVS/CV2 checks even if not enabled for the account but DON'T apply any rules.</p> <p>This field is ignored for <b>PAYPAL</b> transactions.</p>

## H2. Response to your AUTHORISE POST

This is the plain text response part of the POST sent in H1. Encoding will be as Name=Value fields separated by carriage return and linefeeds (CRLF).

### Response format

Name	Mandatory	Format	Max Length	Allowed Values	Description
VPSProtocol	Yes	0-9 - .	4 chars	3.00	This is the version of the protocol you are integrating with. Default or incorrect value is taken to be <b>3.00</b> .
Status	Yes	Aa -	15 chars	<b>OK</b> <b>NOTAUTHED</b> <b>MALFORMED</b> <b>INVALID</b> <b>ERROR</b>	If the Status is not <b>OK</b> , the StatusDetail field will give more information about the problem. <b>OK</b> = Process executed without error.  <b>NOTAUTHED</b> = The Authorisation was not authorised by the acquiring bank. No funds will be charged to the card.  <b>MALFORMED</b> = Input message was missing fields or badly formatted – normally will only occur during development.  <b>INVALID</b> = Transaction was not registered because although the POST format was valid, some information supplied was invalid. E.g. incorrect vendor name or currency.  <b>ERROR</b> = A problem occurred at Sage Pay which prevented transaction registration. Please notify Sage Pay if a Status of <b>ERROR</b> is seen, together with your Vendor, VendorTxCode and the StatusDetail.
StatusDetail	Yes	Aa 0-9 - : ()	255 chars		Human-readable text providing extra detail for the Status message. Always check StatusDetail if the Status is not <b>OK</b>
VPSTxId	Yes	Aa 0-9 - {}	38 chars		The Sage Pay ID to uniquely identify the transaction on our system. Only present if the Status is <b>OK</b>

SecurityKey	Yes	<b>Aa   0-9</b>	10 chars		Only present if the Status is <b>OK</b>
TxAuthNo	Yes	<b>0-9</b>	10 chars		Sage Pay unique Authorisation Code for a successfully authorised transaction. Only present if the Status is <b>OK</b>
AVSCV2	No	<b>Aa  </b>	50 chars	<b>ALL MATCH SECURITY CODE MATCH ONLY ADDRESS MATCH ONLY NO DATA MATCHES DATA NOT CHECKED</b>	This is the response from AVS and CV2 checks. Provided for Vendor info and backward compatibility with the banks. Rules set up at the Sage Pay server will accept or reject the transaction based on these values.  More detailed results are split out in the next three fields.
AddressResult	No	<b>Aa</b>	20 chars	<b>NOTPROVIDED NOTCHECKED MATCHED NOTMATCHED</b>	The specific result of the cardholder's address numerics from the AVS/CV2 checks.
PostCodeResult	No	<b>Aa</b>	20 chars	<b>NOTPROVIDED NOTCHECKED MATCHED NOTMATCHED</b>	The specific result of the cardholder's postcode from the AVS/CV2 checks.
CV2Result	No	<b>Aa</b>	20 chars	<b>NOTPROVIDED NOTCHECKED MATCHED NOTMATCHED</b>	The specific result of the cardholder's CV2 code from the AVS/CV2 checks.
BankAuthCode	Yes	<b>Aa   0-9</b>	6 chars		The authorisation code returned from the bank. e.g T99777
DeclineCode	Yes	<b>0-9</b>	2 chars		The decline code from the bank. These codes are specific to the bank. Please contact them for a description of each code. e.g. 00

# Appendix I: Cancelling an Authenticated/Registered

## I1. You submit your CANCEL POST

This is performed via a HTTPS POST request, sent to the Cancel URL service cancel.vsp. The details should be URL encoded Name=Value fields separated by ‘&’ characters.

### Request format

Name	Mandatory	Format	Max Length	Allowed Values	Description
VPSProtocol	Yes	0-9 -	4 chars	3.00	This is the version of the protocol you are integrating with. Default or incorrect value is taken to be <b>3.00</b> .
TxType	Yes	Aa	15 chars	CANCEL	The value should be in UPPERCASE.
Vendor	Yes	Aa 0-9	15 chars		Used to authenticate your site. This should contain the Sage Pay Vendor Name supplied by Sage Pay when your account was created.
VendorTxCode	Yes	Aa 0-9 {} -	40 chars		The VendorTxCode submitted by your system for the AUTHENTICATE transaction which requires cancelling.
VPSTxId	Yes	Aa 0-9 - {}	38 chars		The VPSTxId of the AUTHENTICATE transaction which requires cancelling.
SecurityKey	Yes	Aa 0-9	10 chars		The SecurityKey of the AUTHENTICATE transaction which requires cancelling.

## 12. Response to your CANCEL POST

This is the plain text response part of the POST sent in I1. Encoding will be as Name=Value fields separated by carriage return and linefeeds (CRLF).

### Response format

Name	Mandatory	Format	Max Length	Allowed Values	Description
VPSProtocol	Yes	0-9 .	4 chars	3.00	This is the version of the protocol you are integrating with. Default or incorrect value is taken to be <b>3.00</b> .
Status	Yes	Aa .	15 chars	OK <b>MALFORMED</b> <b>INVALID</b> <b>ERROR</b>	If the Status is not <b>OK</b> , the StatusDetail field will give more information about the problem. <b>OK</b> = Process executed without error.  <b>MALFORMED</b> = Input message was missing fields or badly formatted – normally will only occur during development.  <b>INVALID</b> = Transaction was not registered because although the POST format was valid, some information supplied was invalid. E.g. incorrect vendor name or currency.  <b>ERROR</b> = A problem occurred at Sage Pay which prevented transaction registration. Please notify Sage Pay if a Status of <b>ERROR</b> is seen, together with your Vendor, VendorTxCode and the StatusDetail.
StatusDetail	Yes	Aa 0-9 . () , :	255 chars		Human-readable text providing extra detail for the Status message. Always check StatusDetail if the Status is not <b>OK</b>

## 4.0 URLs

The table below shows the complete set of web addresses (URLs) to which you send the messages detailed above.

Transaction Type	Environment	URL
RELEASE	TEST	<a href="https://test.sagepay.com/gateway/service/release.vsp">https://test.sagepay.com/gateway/service/release.vsp</a>
RELEASE	LIVE	<a href="https://live.sagepay.com/gateway/service/release.vsp">https://live.sagepay.com/gateway/service/release.vsp</a>
ABORT	TEST	<a href="https://test.sagepay.com/gateway/service/abort.vsp">https://test.sagepay.com/gateway/service/abort.vsp</a>
ABORT	LIVE	<a href="https://live.sagepay.com/gateway/service/abort.vsp">https://live.sagepay.com/gateway/service/abort.vsp</a>
REFUND	TEST	<a href="https://test.sagepay.com/gateway/service/refund.vsp">https://test.sagepay.com/gateway/service/refund.vsp</a>
REFUND	LIVE	<a href="https://live.sagepay.com/gateway/service/refund.vsp">https://live.sagepay.com/gateway/service/refund.vsp</a>
REPEAT / REPEATDEFERRED	TEST	<a href="https://test.sagepay.com/gateway/service/repeat.vsp">https://test.sagepay.com/gateway/service/repeat.vsp</a>
REPEAT / REPEATDEFERRED	LIVE	<a href="https://live.sagepay.com/gateway/service/repeat.vsp">https://live.sagepay.com/gateway/service/repeat.vsp</a>
VOID	TEST	<a href="https://test.sagepay.com/gateway/service/void.vsp">https://test.sagepay.com/gateway/service/void.vsp</a>
VOID	LIVE	<a href="https://live.sagepay.com/gateway/service/void.vsp">https://live.sagepay.com/gateway/service/void.vsp</a>
MANUAL	TEST	<a href="https://test.sagepay.com/gateway/service/manualpayment.vsp">https://test.sagepay.com/gateway/service/manualpayment.vsp</a>
MANUAL	LIVE	<a href="https://live.sagepay.com/gateway/service/manualpayment.vsp">https://live.sagepay.com/gateway/service/manualpayment.vsp</a>
DIRECTREFUND	TEST	<a href="https://test.sagepay.com/gateway/service/directrefund.vsp">https://test.sagepay.com/gateway/service/directrefund.vsp</a>
DIRECTREFUND	LIVE	<a href="https://live.sagepay.com/gateway/service/directrefund.vsp">https://live.sagepay.com/gateway/service/directrefund.vsp</a>
AUTHORISE	TEST	<a href="https://test.sagepay.com/gateway/service/authorise.vsp">https://test.sagepay.com/gateway/service/authorise.vsp</a>
AUTHORISE	LIVE	<a href="https://live.sagepay.com/gateway/service/authorise.vsp">https://live.sagepay.com/gateway/service/authorise.vsp</a>
CANCEL	TEST	<a href="https://test.sagepay.com/gateway/service/cancel.vsp">https://test.sagepay.com/gateway/service/cancel.vsp</a>
CANCEL	LIVE	<a href="https://live.sagepay.com/gateway/service/cancel.vsp">https://live.sagepay.com/gateway/service/cancel.vsp</a>