

# PAYMENT GATEWAY API



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#### INTRODUCTION

This document is for merchants who are interested in accepting card, bank, invoice, payment plan, or e-wallet payments from their customers. The payments will go through our payment gateway, which redirects the customer to their bank, a card service provider, or a payment service provider, where the customer can complete the payment.

There are also other ways to integrate with Svea's payment services, like using a module or integration package, but those are described in other documents.

#### INTEGRATION USING MODULES OR INTEGRATION PACKAGES

#### MODULES

Svea Bank has developed module plug-ins to a number of e-commerce platforms. For a shop that uses one of those platforms, this is the easiest way to get started. The list of modules can be found at <a href="https://www.svea.com/se/sv/foretag/betallosningar/betallosningar-for-e-handel/tech-site">https://www.svea.com/se/sv/foretag/betallosningar/betallosningar-for-e-handel/tech-site</a>.

#### **INTEGRATION PACKAGES**

To create a unified API for all kinds of payments, Svea Bank has developed code libraries for PHP, Java, and C# that the merchant can import and call from their own code. These can be downloaded from GitHub at <a href="https://github.com/sveawebpay">https://github.com/sveawebpay</a>. Look for the repositories called php-integration, java-integration, and dotnet-integration. There is a button to download as a zip file for those who do not use git.

For card, bank, and e-wallet payments, the integration packages will communicate with the payment gateway. For invoice and payment plan payments, they will bypass the payment gateway and communicate directly with Svea's invoice and payment plan system.

#### INTEGRATING WITH THE PAYMENT GATEWAY API

If the merchant wants more control of the integration, they can bypass the modules and integration packages and integrate with the payment gateway API directly. This includes making payment requests directly to Payment Gateway, to integrate with our webservices, and to be prepared to receive callbacks from Payment Gateway. These things are what the rest of this document is about.



#### PAYMENTS

To initiate a payment, the merchant sends the customer to Payment Gateway with a POST request. Payment Gateway will then in turn redirect the customer to the end destination, which can be e.g. a bank or a card payment provider. Depending on the payment type, the customer might have to do something there to complete the payment. E.g. if it is a card payment, they might have to fill in their credit card number etc.

After the request has been handled, the customer will normally be sent back to the return URL that was specified in the payment request. It the merchant has specified a callback URL, a separate callback will also be sent, with the same information.

# URL for *test payments* is: https://webpaypaymentgatewaystage.svea.com/webpay/payment

URL for production payments is:

https://webpaypaymentgateway.svea.com/webpay/payment

#### THE PAYMENT REQUEST

The request should contain the following parameters:

HTTP POST	
Parameter name	Description
merchantid	Your Merchant ID
message	Payment information, Base64-encoded
mac	Checksum

• merchantid - is the store ID that you received from your integrator.

• message - contains the Base64 encoded XML you have generated as described in the section The Payment Request Structure.

• mac – a code that is calculated in order to verify the sender of the call. To generate it, you must have received a secret word from your integrator. See more under the section MAC.

#### Example:

<form name='form' method='post' action='https://webpaypaymentgatewaystage.svea.com/webpay/payment'>
<input type='hidden' name='merchantid' value='1100'/>

<input type='hidden' name='message' value='Jmx0Oz94bWwgdmVyc2lvbj0iMS4wliBlbmNvZGluZz0iVVRGLTgiJmd 0OyAKJmx0O3BheW1lbnQmZ3Q7lAombHQ7bWVzc2FnZSZndDsgCiZsdDtwYXltZW50TWV0aG9kJmd0O0tPUIQmbHQ7L3BheW11 bnRNZXRob2QmZ3Q7lAombHQ7Y3VycmVuY3kmZ3Q7U0VLJmx0Oy9jdXJyZW5jeSZndDsKJmx0O2Ft b3VudCZndDs3MzMwMCZsdDsvYW1vdW50Jmd0OyAKJmx0O2N1c3RvbWVycmVmbm8mZ3Q7dGVzdDEy MyZsdDsvY3VzdG9tZXJyZWZubyZndDsKJmx0O3JldHVybnVybCZndDtodHRwOi8vbG9jYWxob3N0 OjgwODgvZXBheW1lbnQvcGF5bWVudCZsdDsvcmV0dXJudXJsJmd0OyAKJmx0Oy9tZXNzYWdIJmd0 OyAKJmx0Oy9wYXltZW50Jmd0Ow=='/> <input type='hidden' name='mac' value='df74ce933f1d367d4100b4d34ad6970760c6040e13d4 9b94b36bd81239c2c3a724435ab5dc4e1065c861944f9a1e56fa1f53f1cd22d71564e69d5256fba24d43'/>

</form>



#### THE PAYMENT REQUEST STRUCTURE

The call is structured in XML with the root element <payment>. It contains all information about the payment.

<payment></payment>				
Element name	Content	Value	Format	Mandatory
paymentmethod	Payment method	See Appendix 1	AN(32)	
lang	Language on pay page	Supported languages: da, de, en, es, fi, fr, it, nl, no, pl, sv	AN(2)	
currency	Currency	ISO 4217 alphabetical upper-case (e.g. SEK)	AN(3)	Y
amount	Total amount in minor currency, including VAT	E.g. 1001	Ν	Y
vat	VAT in minor currency	E.g. 200	Ν	
customerrefno	Merchant ref.nr	Only a-z, A-Z, 0-9, and a few characters for legacy reasons eg - and _	AN(64)	Y
returnurl	Return URL	Free text	AN(256)	Y
callbackurl	Callback URL	Free text, system configuration requirements are described in the Callback section in this document.	AN(256)	
subscriptiontype	Type of subscription	See recurring card payments	AN(64)	
simulatorcode	Desired statuscode. Only used for testing	E,g. 0	Ν	
externalpaymentref	Reference to be sent to card acquirer	Only characters a-z,A-Z and 0-9	AN(15)	
excludepaymentmethods	Methods to exclude	List of <exclude> elements</exclude>	Complex type	
customer	Customer data	See Appendix 1	Complex type	
orderrows	Orderrows	List of <row> element</row>	Complex type	
payeralias	Cellular phone number	E.g. 46701234567	Ν	
storedcardalias	The alias for the stored card	GUID	AN(36)	Y
showstorecarddialog	Allow customer to store carddetails for later use. Defaults to false.	e.g. true	Boolean	

<lang>

The available languages are:

da – Danish, de – German, en – English (incl. USA), es – Spanish, fi – Finnish, fr – French, it – Italian, no – Norwegian, pl – Polish, sv – Swedish

If the <lang> element is not used, the value will default to the language used in the browser.



Please note that amount is in minor currency, including VAT. For example, if the currency is SEK, 1001 in minor currency equals 10.01 SEK. For the currency of Island, the smallest unit is 1 ISK, which becomes "100" in the xml.

Example: Suppose that the product price is 4 SEK, excluding VAT. If the VAT percentage is 25%, the VAT will be 1 SEK, so the total amount will be 5 SEK. The elements for amount and VAT will be: <a href="mailto:<a href="mailto:<a href="mailto:<a href="mailto:sex">amount=<a href="mailto:>sex">sex</a>, the elements for amount and VAT will be: <a href="mailto:<a href="mailto:<a href="mailto:<a href="mailto:sex">sex</a>, the elements for amount and VAT will be: <a href="mailto:<a href="mailto:<a href="mailto:<a href="mailto:sex">sex</a>, the elements for amount and VAT will be: <a href="mailto:<a href="mailto:<a href="mailto:<a href="mailto:<a href="mailto:<a href="mailto:>sex">sex</a>, 100</a>, wat >

The <simulatorcode> element is used in the test environment only. It is used to simulate a response code, e.g. 0, which means SUCCESS. In the production environment this element is ignored.

#### <excludepaymentmethods>

This element holds a list of payment methods that are not to be presented as payment choices. Each payment method is contained in a separate exclude element.

Element name	Description	Value	Format	Mandatory
<exclude></exclude>	Payment method	See Appendix 1	AN(32)	

Example: <excludepaymentmethods><exclude>SWISH</exclude><excludepaymentmethods>

#### <externalpaymentref>

This optional element is only valid for the payment method SVEACARDPAY. It is a reference to be sent to the acquirer to be displayed on reconciliations reports. Please note that it may only contain characters a-z, A-Z and 0-9 with a maximum length of 15. If any other characters are given, or length exceeds 15 characters, the payment request will be rejected.

#### <payeralias>

This element is only valid for the payment methods SWISH, VIPPS and MOBILEPAY. For SWISH and VIPPS, it is mandatory. The payeralias elements contains the customers cellular phone number in international format. For more information, see chapter SWISH, VIPPS and MOBILEPAYPAYMENTS.

#### <storedcardalias>

This element is optionally used for the payment method SVEACARDPAY and SVEACARDPAY\_PF. The step where card data is entered is skipped if storedcardalias is used but 3DSecure authentication is still required.

#### <showstorecarddialog>

This element is only valid for the payment methods SVEACARDPAY and SVEACARDPAY\_PF. If set to true a checkbox will be displayed on the card-payment page with a disclaimer stating that the customer can store their card in order to simplify upcoming payments.

#### **ORDER ROWS**

Order rows are used to send information about the products. Each order row is represented by a row element <row>. Row elements are all contained in the element <orderrows>.

<row></row>				
Element name	Description	Value	Format	Mandatory
name	Product name	Free text	AN(256)	Υ
description	Product description	Free text	AN(512)	
amount	Price per item in minor currency, including VAT	e.g. 1001	Ν	Y
vat	VAT per item in minor curreny	e.g. 200	Ν	
quantity	Quantity	e.g. 5	N	
sku	Article number	Free text	AN(256)	Υ
unit	Unit	Free text	AN(64)	
discountamount	Discount amount in minor currency.	e.g. 200	Ν	



discountpercent	Discount percent; numerical value of the ratio	e.g. 25.5; 26, 32	N
vatpercent	Vat percent; numerical value of the ratio	e.g. 25.5; 26, 32	Ν

Please note that **amount** is in minor currency, including VAT. For example, if the currency is SEK, 1001 in minor currency equals 10.01 SEK.

The **discountpercent** is the numerical value of the ration. For example: 25.5% will be sent as 25.5; 12%, will be sent as 12 ...

The **vatpercent** is the numerical value of the ratio. For example: 7% will be sent as 7; 19.2% will be sent as 19.2

#### PAYMENT RESPONSE MESSAGE

After performing the payment, the consumer is redirected back to the store's returnurl through a HTTP POST or a HTTP GET (a variation is when rescue payment is activated, see RESCUE PAYMENT for details). Please contact your premium user to choose the required response type.

The response contains the following parameters:

POST/GET Parameters	
response	PD94bWwgdmVyc2lvbj0iMS4wliBlbmNvZGluZz0iVVRGLTgiPz48cmVzcG9uc2U+PHR yYW5zYWN0aW9ulGlkPSI1MjM4NjliPjxwYXltZW50bWV0aG9kPkRCTk9SREVBU0U 8L3BheW1lbnRtZXRob2Q+PG1lcmNoYW50aWQ+MTEwOTwvbWVyY2hhbnRpZD48 Y3VzdG9tZXJyZWZubz5yZUdFUkdlUIJldGg8L2N1c3RvbWVycmVmbm8+PGFtb3Vud D41MDAwMTwvYW1vdW50PjxjdXJyZW5jeT5TRUs8L2N1cnJlbmN5PjwvdHJhbnNhY 3Rpb24+PHN0YXR1c2NvZGU+MDwvc3RhdHVzY29kZT48L3Jlc3BvbnNIPg==
mac	88cea01f3c1acfcbb40c532ea8be1b0027f77f7d92586619672720ac80d8c6f09bb0c51b bc8b07f2958d64633e36ee938a82fa532d393c0aaa297579829576f8
merchantid	1109

• response - Base64 encoded message (that needs to be decoded)

mac – calculated mac (see section MAC)

• merchantid - your merchantid that you have received from the integrator

The response parameter contains the Base64 encoded XML message that contains a <response> root element. It contains information about the payment status.

<response></response>			
Element name	Description	Value	Format
transaction	Optional attribute id containing the Transaction ID	Complex type	Complex type
statuscode	Status of the payment request	See Appendix 1	Ν

#### The <transaction> element contains some values:

<transaction></transaction>			
Element name	Description	Value	Format
paymentmethod	Payment method	See Appendix 1	AN(32)
merchantid	ID of the merchant		Ν
customerrefno	ID given by the merchant	Free text	AN(64)
amount	Total amount in minor currency, including VAT	e.g. 1001	Ν
currency	Currency	ISO 4217 (e.g. SEK)	AN(3)
subscriptionid	Subscription ID (optional)	e.g. 2002	N



subscriptiontype Subscription type (optional)

AN(64)

Please note that amount is in minor currency, including VAT. For example, if the currency is SEK, 1001 in minor currency equals 10.01 SEK.

In some cases, the transaction will not be assigned an ID. This happens when the payment page is used and, for some reason, the transaction is stopped at an early stage, before the payment method is chosen by the customer. These orders are discarded and will not show up in the transaction list in the admin GUI.

e.g.

RECURRINGCAPTURE

Subscription ID and Subscription type are only returned if it's a subscription payment.

#### **RESCUE PAYMENT**

If rescue payment is activated for the merchant via a setting in the admin console, a payment that fails at the payment provider, or is cancelled by the customer, will result in a redirect to the PayPage instead of a redirect back to the merchant site. In this case, any selected or excluded payment methods are cleared from the original payment specification, and *all* active payment methods will be shown on the PayPage.

Every new payment attempt will result in a new transaction, hence there might be several failed transactions tied to one <customerrefno>.

#### CALLBACK

A callback is a message that is sent to the merchant. The sending of this message is initiated by the Payment Gateway.

- Certificates, if used on the merchant's system, should be signed by well-known Certificate Authorities.
- The callback URL must use one of these ports: 80 or 443.
- The hostname that should receive that callback must be communicated to Svea Bank for whitelisting.
- If the integrating party uses ip filtering, whitelisting or similar, ip range 193.13.207.0/24 and 193.105.138.0/24 must be allowed for incoming callback messages.

#### CALLBACK, PAYMENT RESPONSE

This callback is an additional response message that is sent to the callback URL of the merchant, with the same format as the response message. It is always sent as a POST. It is for merchants who want to be sure to receive a response even if the normal response message has not been sent. This could happen e.g. if a user that has been redirected to a bank closes their browser before completing the payment, or before being redirected back to the merchant. It may take several minutes before the callback message is sent. If enabled, a callback is always sent, even when the normal response message has also been sent. Even though it is not necessary, we recommend everyone to use the callback functionality if possible.

If a callback URL was not given in the payment message, the default callback URL that may have been configured for the merchant will be used instead. If no callback URL has been given anywhere, no callback will be sent.

**NOTE:** If callback urls are set dynamically (in the payment request) then all domains/hosts used must be communicated to Svea Bank for whitelisting.

#### CALLBACK, STORED CARD ALIAS EXPIRED

A merchant who uses the store card functionality may choose to handle the callback with information about expired card alias, i.e. the card alias cannot be used for further payments.



The callback URL is configured on merchant level in the payment gateway.

The callback URL must not use other ports than: 80 or 443. It is always sent as a POST. Certificates, if used, on the merchant's system should be signed by well-known Certificate Authorities. The hostname that should receive that callback must be communicated to Svea Bank for whitelisting. If the integrating party uses ip filtering, whitelisting or similar, ip range 193.13.207.0/24 must be allowed for incoming traffic.

Example of XML structure: <?xml version="1.0" encoding="UTF-8"?> <expiredcardalias> <storedcardalias>21ff4c0e-b398-42c3-9a60-f971dde92b95</storedcardalias> </expiredcardalias>

#### MOBILEPAY PAYMENTS

The customer will be redirected to a page, MobilePay landing-page, where the user is asked to open the MobilePay app and sign the payment.

After the interaction in the MobilePay app is completed, the customer will be redirected to the url in the element <returnurl>.

If <payeralias> element is provided, the phone number will be prefilled in the MobilePay landing page. The phone number must be fully specified including country code, for example: 004512345678. If the element is not provided or in the wrong format, the payment will still be processed but the prefill will not work.

When integrating MOBILEPAY, the callback must be implemented.

#### A MOBILEPAY payment example

Example XML-message
xml version="1.0" encoding="UTF-8"?
<payment></payment>
<pre><paymentmethod>MOBILEPAY</paymentmethod></pre>
<pre><payeralias>004512345678</payeralias></pre>
<currency>DKK</currency>
<amount>500</amount>
<vat>100</vat>
<pre><customerrefno>test_1612427935683</customerrefno></pre>
<returnurl>https://webpaypaymentgatewaystage.svea.com/webpay-</returnurl>
admin/admin/merchantresponsetest.xhtml <returnurl></returnurl>

#### SWISH PAYMENTS

The customer will be redirected to a page (with a spinner symbol) where the user is asked to open the Swish-app on the device where the app is installed and sign the payment. If the swish app is installed on the same device that was used for the payment the app can be opened directly by clicking a button "Open Swish".

On this page there is a Cancel button. If clicked the user will be redirected to the <returnurl> with the statuscode 108 which means CANCELLED.

After the interaction in the swish app is completed the customer will be redirected to the url in the element <returnurl> provided the page is not actively closed.



The SWISH payment method requires the <payeralias> element to be present in the payment request. The <payeralias> element contains the customer's cellular phone number in international format i.e. starting with country code followed by the cellular phone number, see below.

The <customerrefno> element is forwarded to the Swish payment system, to be used for reconciliation. The Swish payment system accepts only alphanumeric characters (A-Z,a-z, 0-9), and in case the customerrefno contains other characters, these will be removed before sent to the Swish payment system. The length supported is 34 characters.

In case the customer closes the web browser or clicks cancel on the page (as described above) the payment will be in a pending state. The merchant will not get the payment if the redirect flow is broken.

It is highly recommended to implement the callback when using Swish.

A swish payment example

#### **Example XML-message**

xml version="1.0" encoding="UTF-8"?
<pre><pre>cpayment&gt;</pre></pre>
<paymentmethod>SWISH</paymentmethod>
<payeralias>46701234567</payeralias>
<currency>SEK</currency>
<amount>500</amount>
<vat>100</vat>
<customerrefno>unique_id</customerrefno>
<returnurl>https://webpaypaymentgatewaystage.svea.com/webpay-</returnurl>
admin/admin/merchantresponsetest.xhtml

As an alternative a merchant can use SWISH via a payment facilitator (SWISH\_PF).

#### Difference between SWISH and SWISH\_PF

SWISH	SWISH_PF
Merchant needs to sign a separate agreement with Swish	Merchant needs to sign a separate agreement with Svea Bank
Complicated onboarding process	Easy onboarding process
The consumers money goes from their account directly to merchants account	Looks the same for the consumer; their money goes from their account to a Svea account and from there to merchants account
Svea cannot offer Swish reports to merchant	Svea offers Swish reports to merchant

#### **VIPPS PAYMENTS**

The customer will be redirected to a page, Vipps landing-page, where the user is asked to open the VIPPS-app on the device where the app is installed and sign the payment.

On this page there is a Cancel button. If clicked the user will be redirected to the <returnurl> with the statuscode 108 which means CANCELLED.

After the interaction in the vipps app is completed the customer will be redirected to the url in the element <returnurl> provided the page is not actively closed.

The VIPPS payment method will use a <payeralias> element if present in the payment request. The <payeralias> element contains the customer's cellular phone number, and it must have exactly eight digits. If the <payeralias> doesn't match the criteria statuscode 329 meaning BAD\_MOBILE will be returned.



If the there is no <payeralias> the user will, still be redirected to Vipps landing-page where the user must type in the phone number.

The <customerrefno> element is forwarded to the VIPPS payment system, to be used for reconciliation. The VIPPS payment system accepts only alphanumeric characters and minus sign (a-z, 0-9, -), and in case the customerrefno contains other characters, these will be removed. The length supported is 50 characters.

The <message> element is displayed in the VIPPS application; it is not mandatory.

When integrating VIPPS, the callback must be implemented.

A VIPPS payment example

#### Example XML-message

<?xml version="1.0" encoding="UTF-8"?> <payments <paymentmethod>VIPPS</paymentmethod> <payeralias>48060316</payeralias> <currency>NOK</currency> <amount>500</amount> <vat>100</vat> <customerrefno>1612427935683</customerrefno> <returnurl>https://webpaypaymentgatewaystage.svea.com/webpayadmin/admin/merchantresponsetest.xhtml<returnurl> <message>Buying a mobile</message> </payment>



#### CARD PAYMENTS

One way to make card payments is to use the payment method SVEACARDPAY. The customer will be sent to a webpage maintained by the card payment service provider, where the customer is asked to fill in their card number and details.

Enter your card	details	
Debit card	Credit card	
Card number		
Expiry date	() CVV2/CVC2	(
VISA 🌓		
VISA 🌓	5.00 kr	
VISA 🌓	<b>5.00 kr</b> Amount payable	
VISA 🌓	<b>5.00 kr</b> Amount payable	

If the SVEACARDPAY payment is approved, it will get the status AUTHORIZED. After midnight it will automatically be given the status CONFIRMED (unless the merchant is configured for manual confirm). After it is confirmed, it is automatically sent to the card payment service provider for capture. If this goes well, it will reach the final status SUCCESS, which means that the money has been transferred.

SVEACARDPAY supports the following currencies: SEK, DKK, EUR, GBP, NOK, PLN, USD, CHF.

The currency used must be supported by the acquiring agreement.

To choose language on the card payment page, the element <lang> can be used. Available language codes are: sv, da, de, en, fi, fr, no, pl.

SVEACARDPAY and SVEACARDPAY\_PF require a number of customer data fields in the customer element. See Appendix 1 for all available customer data. To begin with, one must provide at least one of firstname, or lastname, or companyname. The other required fields are: address, city, zip, country, phone, and email.

For an example XML message, see Appendix 2.



#### CARD RESPONSE MESSAGE

For card payments, the <transaction> element of the response message contains some additional information:

Element name	Description	Value	Format
cardtype	Type of card	e.g. VISA	AN
maskedcardno	Truncated card no	e.g. 444433xxxxx3300	AN(32)
authcode	Authorization number at EDB	Free text	AN(10)
expiryyear	Card expiry year	e.g. 13	Ν
expirymonth	Card expiry month	e.g. 04	Ν
storedcardalias	The alias for the stored card	GUID	AN(36)

#### <storedcardalias>

This element is returned in case the customer has chosen to store his card details.

#### **RECURRING CARD PAYMENTS**

Our card payment provider has the capability to store the card details of the customer so that money can be drawn from the card by the merchant at regular intervals. E.g. for a membership fee or for a subscription to a magazine or service.

First, the merchant has to be configured for recurring payments. To enable recurring payments for a particular customer, a subscription must be created. This is done by posting an initial transaction so that the customer can fill in their card number to be stored at the card payment page of the card payment provider. Later payments can be created by posting to the webservice recur. To set up a subscription, add the element <subscriptiontype> to the XML body of the initial transaction. It can have one of two values:

#### RECURRING RECURRINGCAPTURE

The merchant should use RECURRING if they only want to create a subscription, as a preparation for future payments, without immediately creating a payment. This is also called account verification, since it is a way to check if the customer's card is valid without drawing money from it. You should always set the initial amount to 0 since no money is to be transferred. A successful initial transaction will reach the "REGISTERED" status, and it will never be captured. To use RECURRING, the merchant must be set to allow account verification by someone at Svea.

The merchant should use RECURRINGCAPTURE if they also want to immediately create a new payment from the new subscription. I.e., two separate things will happen: a subscription will be created, and then a payment will be created from the subscription. The amount of the payment should be present in the request. If the initial payment is approved, it will reach the "AUTHORIZED" status, to be confirmed and captured later.

Regardless of the subscription type, if the initial transaction is successful, a subscription will be created. The corresponding subscriptionid is returned in the output XML body as <subscriptionid>. This ID is what the merchant should use when sending recur requests to our webservice. See the chapter about the webservice recur.

A successful recur operation that is made on the subscription will result in a normal SVEACARDPAY payment where the status is set to "AUTHORIZED", and it will be confirmed and captured later.



If no successful recur operation takes place, the subscription will become invalid after 12 months. Whenever a successful recur operation takes place, the subscription is extended to become valid for the coming 12 months.

For example payment XML, see Appendix 2.



#### AUTOMATIC RECUR

Card subscriptions created with the subscriptiontype RECURRING or RECURRINGCAPTURE can be configured to draw money from the card periodically, e.g. once a month. This is done manually on the subscription administration page. Open the subscription, tick the box, and fill in the rest of the information, including the amount that is to be drawn from the card every time. Automatic recur can be turned off again by unticking the box.

gere annual double		
Activate automatic recur:	*	
Interval between automatic deb	its: 1	MONTH
Date for next debit:		
Amount to be debited:		
VAT:		

Merchants who expect so many customers that manual administration will be impractical may implement their own code for calculating when recurs are to be posted to our webservice.

#### PAYMENT FACILITATORS

A payment facilitator is a super merchant that can have sub merchants and can handle card payment acquirer agreements for those sub merchants, to simplify the integration. At the time being, only two payment facilitators are planned to be set up, internally in Svea.

To make payments through a payment facilitator, one first needs a specific agreement for this. The payment is made using the payment method SVEACARDPAY\_PF, which is based on SVEACARDPAY, and the end customer will not notice any difference.

SVEACARDPAY\_PF has the same requirements as SVEACARDPAY when it comes to customer data.

For an example payment, see Appendix 2.



#### STORED CARDS

When a card payment is made, it is possible to store the card data of the customer for future use. If the same customer makes a new payment, this data can be retrieved, so that the customer doesn't need to fill in their card number etc. the second time, thus speeding up the payment process and making it more convenient for the customer. This works for both SVEACARDPAY and SVEACARDPAY\_PF.

The shop must first be configured for this in Payment Gateway. Contact Svea if you want this.

It must also be activated on the individual payment, and it can be controlled on a payment by payment basis. This is done by adding the following line in the payment request on the initial payment: <showstorecarddialog>true</showstorecarddialog>

This is an optional element in the payment request. See the chapter THE HTTP PAYMENT REQUEST STRUCTURE.

When the showstorecarddialog has been set to true on a card payment, the card payment page will display an additional checkbox with a text asking the customer if they agree to storing their card details. It also says that the customer can contact Svea to cancel this consent. The card data of the customer will only be stored if the customer checks the checkbox.

If the customer checks the checkbox, the payment response message will contain an extra element called storedcardalias. For more info about this element, see the chapter CARD PAYMENTS, specifically the section called CARD PESPONSE MESSAGE.

The storedcardalias is an alias that represents the card number, and it can be used to make payments with the same card. If the same customer is about to make a new payment, the shop can choose to add this storedcardalias to the payment message. The new payment can then be completed without the need for the customer to enter the card number and data again. The storedcardalias element is described in the chapter THE HTTP PAYMENT REQUEST STRUCTURE.

If the alias is not used within a year, it will expire. Each time the alias is used, the expiry date is renewed, so that the alias can be used for a year from that point. If you want to check if the alias is still valid, you can use the webservice getstoredcard. See the chapter GETSTOREDCARD.



#### WEBSERVICES

Send a request consisting of the following parameters:

HTTP POST	
Parameter name	Description
message	Base64 encoded XML message
merchantid	Merchant ID
mac	Checksum

• merchantid - is the store ID that you received from your integrator.

• message - contains the Base64 encoded XML you have generated as described in the section the query request structure.

• mac - includes the control numbers that have been developed in order to verify the sender of the call. In order to generate this you must have received a secret word from your integrator. See more under section MAC.

THE WEBSERVICE REQUEST

A request contains the three parameters: message, merchantid and mac. The message has to be Base64 encoded.

#### Example of a POST:

```
<form action="https://webpaypaymentgatewaystage.svea.com/webpay/rest/payment" method="post">
    <input type="hidden" name="mac" value="dd57e26612b586a1d55efb91b3bc21902e3ae09499bf074d0c0624820fcdc61b
243f24b4f3c9b1feac06ffd3cfe14fb8165a7c83d9fcd550196f7e7fb20e43c2" />
    <input type="hidden" name="merchantid" value="1109" />
    <input type="hidden" name="merchantid" value="1109" />
    <input type="hidden" name="message" value="PD94bWwgdmVyc21vbj0iMS4wIiBlbmNvZGluZz0iVVRGLTgiPz4NCjxjYXB0
dXJlPg0KPHRyYW5zYWN0aW9uaWQ+NTIxNjc3PC90cmFuc2FjdGlvbmlkPg0KPC9jYXB0dXJlPg==" />
    <input type="submit" value="payment" />
    </form>
```

THE WEBSERVICE RESPONSE

The response contains the three parameters: message, merchantid and mac. The message is Base64 encoded. The contents of the message is different for different webservices.

#### Example of response:

```
<?xml version="1.0" encoding="UTF-8"?><response><message>PD94bWwgdmVyc2lvbj0iMS4wIiBlbmNvZGluZz0iVVRG
LTgiPz48cmVzcG9uc2U+PHRyYW5zYWN0aW
9uIGlkPSI1MjE4MzIiPjxjdXN0b21lcnJlZm5vPjU2NTUyNTQ1UkI8L2N1c3RvbWVycmVmbm8+PC90cmFuc2FjdGlvbj48c3RhdHV
zY29kZT4wPC9zdGF0dXNjb2RlPjwvcmVzcG9uc2U+</message>
<merchantid>1109</merchantid>
<mac>70d118d8ff816fbc7244305ada2f335719dc5a680c91f00b88679b348f007ab5cec746d4fd7002e3bfccb8a72c0f524
fe28f2a9bd9efbc392fea8a8386625ae4</mac>
</response>
```



#### ANNUL

The annul request can be used to cancel a payment before it has been captured. It can only be performed on card, invoice, or payment plan transactions having the status AUTHORIZED or CONFIRMED.

URL to POST for test requests: https://webpaypaymentgatewaystage.svea.com/webpay/rest/annul

URL to POST for production requests: https://webpaypaymentgateway.svea.com/webpay/rest/annul

#### THE ANNUL REQUEST STRUCTURE

The call is structured in XML with the root element <annul>. It contains the transaction id of the transaction to annul.

<annul></annul>				
Element name	Content	Value	Format	Mandatory
transactionid	Transaction ID		Ν	Y

# Example of XML structure: <?xml version="1.0" encoding="UTF-8"?> <annul> <transactionid>521677</transactionid> </annul>

#### THE ANNUL RESPONSE

The response is Base64 encoded. See the chapter WEBSERVICES for an example.

The Base64 decoded message contains a <response> tag.

<response></response>			
Element name	Description	Value	Format
transaction	Transaction ID	Complex type	Complex type
statuscode	Status of the webservice request	See Appendix 1	N

The <transaction> element contains an attribute id representing the Transaction ID. The element contains the following information.

<transaction></transaction>				
Element name	Description	Value	Format	
customerrefno	Order ID	Free text	AN(64)	



#### CANCELRECURSUBSCRIPTION

This request inactivates an existing recur subscription so that no more recurs can be made on it.

URL to POST for test requests:

#### https://webpaypaymentgatewaystage.svea.com/webpay/rest/cancelrecursubscription

URL to POST for production requests: https://webpaypaymentgateway.svea.com/webpay/rest/cancelrecursubscription

#### THE REQUEST STRUCTURE

The call is structured in XML with a root element <cancelrecursubscription>. This element contains the subscription ID (not transaction ID) of the subscription you want to inactivate.

<cancelrecursubscription></cancelrecursubscription>				
Element name	Content	Value	Format	Mandatory
subscriptionid	Subscription ID		Ν	Y

Example of XML structure:	
<pre><?xml version="1.0" encoding="UTF-8"?></pre>	
<cancelrecursubscription></cancelrecursubscription>	
<subscriptionid>1234</subscriptionid>	

#### THE CANCELRECURSUBSCRIPTION RESPONSE

The response is Base64 encoded. See the chapter WEBSERVICES for an example.

The Base64 decoded message contains a <response> tag.

<response></response>			
Element name	Description	Value	Format
statuscode	Status of the webservice requ	lest See Appendix 1	Ν



#### CONFIRM

The confirm request is intended for card transactions. It can only be performed on card transactions having the status AUTHORIZED. This will result in a CONFIRMED transaction that will be captured (settled) on the given capture date. Confirm is mainly used by merchants who are configured to confirm their transactions themselves. Otherwise the transactions are confirmed automatically.

URL to POST for test requests: https://webpaypaymentgatewaystage.svea.com/webpay/rest/confirm

URL to POST for production requests: https://webpaypaymentgateway.svea.com/webpay/rest/confirm

#### THE CONFIRM REQUEST STRUCTURE

The call is structured in XML with the root element <confirm>. The <confirm> element contains the transaction ID of the transaction to confirm, as well as the capture date. The capture date tells when to capture the transaction. The date format used is the ISO-8601 extended date format, a.k.a. E8601DAw ("yyyy-MM-dd").

<confirm></confirm>				
Element name	Content	Value	Format	Mandatory
transactionid	Transaction ID		Ν	Y
capturedate	Capture date		D	Y

#### Example of XML structure:

<?xml version="1.0" encoding="UTF-8"?>
<confirm>
<transactionid>521527</transactionid>
<capturedate>2011-09-21</capturedate>
</confirm>

#### THE CONFIRM RESPONSE

The response is Base64 encoded. See the chapter WEBSERVICES for an example.

The Base64 decoded message contains a <response> tag.

<response></response>			
Element name	Description	Value	Format
transaction	Transaction ID	Complex type	Complex type
statuscode	Status of the webservice request	See Appendix 1	Ν

The <transaction> element contains an attribute id representing the Transaction ID. The element also contains the following information.

<transaction></transaction>				
Element name	Description	Value	Format	
customerrefno	Order ID	Free text	AN(64)	



#### CREDIT

The credit request can be used to return money to the customer. Only transactions that have reached the status SUCCESS can be credited.

URL to POST for test requests:

https://webpaypaymentgatewaystage.svea.com/webpay/rest/credit

URL to POST for production requests: https://webpaypaymentgateway.svea.com/webpay/rest/credit

#### THE CREDIT REQUEST STRUCTURE

The call is structured in XML with the root element <credit>. The <credit> element should contain the transaction ID and the amount to credit.

<credit></credit>				
Element name	Content	Value	Format	Mandatory
transactionid	Transaction ID		Ν	Y
amounttocredit	The amount that you want to credit in minor currency	E.g. 1001	Ν	Y

Example	of XML	structure

```
<?xml version="1.0" encoding="UTF-8"?>
<credit>
<transactionid>521527</transactionid>
<amounttocredit>100</amounttocredit>
</credit>
```

#### THE CREDIT RESPONSE

The response is Base64 encoded. See the chapter WEBSERVICES for an example.

The Base64 decoded message contains a <response> tag.

<response></response>			
Element name	Description	Value	Format
transaction	Transaction ID	Complex type	Complex type
statuscode	Status of the webservice request	See Appendix 1	N

The <transaction> element contains an attribute id representing the Transaction ID. The element contains the following information.

<transaction></transaction>			
Element name	Description	Value	Format
customerrefno	Order ID	Free text	AN(64)



#### GETPAYMENTMETHODS

This request is used to fetch a list of the payment methods available for the merchant.

URL to POST for test requests:

https://webpaypaymentgatewaystage.svea.com/webpay/rest/getpaymentmethods

URL to POST for production requests: <a href="https://webpaypaymentgateway.svea.com/webpay/rest/getpaymentmethods">https://webpaypaymentgateway.svea.com/webpay/rest/getpaymentmethods</a>

THE GETPAYMENTMETHODS REQUEST STRUCTURE The call is structured in XML and you need a root element <getpaymentmethods>.

<getpaymentmethods></getpaymentmethods>				
Element name	Content	Value	Format	Mandatory

#### Example of XML structure:

<?xml version="1.0" encoding="UTF-8"?>
<getpaymentmethods></getpaymentmethods>

#### THE GETPAYMENTMETHODS RESPONSE

The response is Base64 encoded. See the chapter WEBSERVICES for an example.

#### The Base64 decoded message contains a <response> tag.

<response></response>			
Element name	Description	Value	Format
paymentmethods	Containing an array of paymentmethod elements		array
statuscode	Status of the webservice request	See Appendix 1	Ν

#### The <paymentmethods> element contains the following information.

#### <paymentmethods>

Element name	Description	Value	Format
paymentmethod	Payment method name	See Appendix 1	enum



#### GETRECONCILIATIONREPORT

The getreconciliation report request will return a list of the transactions that were captured or credited at a specified date or during a date span.

URL to POST for test requests:

#### https://webpaypaymentgatewaystage.svea.com/webpay/rest/getreconciliationreport

URL to POST for production requests: https://webpaypaymentgateway.svea.com/webpay/rest/getreconciliationreport

#### THE GETRECONCILIATION REPORT REQUEST STRUCTURE

The call is structured in XML with the root element <getreconciliationreport>.

<getreconciliationreport></getreconciliationreport>						
Element name	Content	Value	Format	Mandatory		
date	Date	Ex: 2011-11-07	AN	Y		

Exa	ample of XML structure:
	<pre><?xml version="1.0" encoding="UTF-8"?></pre>
	<pre><getreconciliationreport></getreconciliationreport></pre>
	<pre><date>2011-11-07</date></pre>

#### If a span of dates are desired the structure will be:

<getreconciliationreport></getreconciliationreport>					
Element name	Content	Value	Format	Mandatory	
fromdate	Date	Ex: 2014-11-01	AN	Y	
todate	Date	Ex: 2014-11-30	AN	Y	

Exa	Example of XML structure:			
	<pre><?xml version="1.0" encoding="UTF-8"?></pre>			
	<pre><getreconciliationreport></getreconciliationreport></pre>			
	<pre><fromdate>2014-11-01</fromdate></pre>			
	<todate>2014-11-30</todate>			

#### THE GETRECONCILIATIONREPORT RESPONSE

The response is Base64 encoded. See the chapter WEBSERVICES for an example.

#### The Base64 decoded message contains a <response> tag.

<response></response>			
Element name	Description	Value	Format
reconciliation	An array of reconciliationtransaction	Complex type	Complex type
	types	array	array
statuscode	Status of the webservice request	See Appendix 1	Ν

#### Content of the <reconciliation> tag

<reconciliation></reconciliation>					
Element name	Description	Value	Format		
reconciliationtransaction	Information about a	Complex	Complex		
	reconciliationtransaction	type	type		



Content of the <reconciliationtransaction> ta</reconciliationtransaction>	q
---	---

<reconciliationtransaction></reconciliationtransaction>			
Element name	Description	Value	Format
transactionid	Transaction ID		Ν
customerrefno	Merchant's referense		AN
paymentmethod	Payment method	See Appendix 1	AN(32)
amount	Amount in minor currency. + or -	Eg 1900 or -	N
		1900	
time	Time of the transaction	yyyy-MM-dd	AN
		HH:mm:ss z	



#### GETSTOREDCARD

This request can be used to check if the alias of a stored card is valid. The alias can only be used to create payments if it is valid. If the alias is not used within a year, it will expire. Each time the alias is used, the expiry date is renewed, so that the alias can be used for a year from that point.

Please only use this web service if needed. Repetitive polling is not allowed.

URL to POST for test requests: https://webpaypaymentgatewaystage.svea.com/webpay/rest/getstoredcard

URL to POST for production requests: https://webpaypaymentgateway.svea.com/webpay/rest/getstoredcard

#### THE GETSTOREDCARD REQUEST STRUCTURE

The call is structured in XML with the root element <getstoredcard>.

<getstoredcard></getstoredcard>				
Element name	Content	Value	Format	Mandatory
storedcardalias	The alias for the stored card	GUID	AN(36)	Y

Example of XML structure:			
<pre><?xml version="1.0" encoding="UTF-8"?></pre>			
<getstoredcard></getstoredcard>			
<pre><storedcardalias>21ff4c0e-b398-42c3-9a60-f971dde92b95</storedcardalias></pre>			

#### THE GETSTOREDCARD RESPONSE

The response is Base64 encoded. See the chapter WEBSERVICES for an example.

#### The Base64 decoded message contains a <response> tag.

<response></response>			
Element name	Description	Value	Format
statuscode	Status of the request	See Appendix 1	N
cardvalid	Tells if the stored card alias is valid	true or false	Boolean



#### LOWERAMOUNT

The loweramount operation is intended for card transactions having the status AUTHORIZED or CONFIRMED. It can be used e.g. if the merchant is unable to deliver all of the items that was ordered by the customer, and wants to lower the total amount to pay. If the <a href="https://www.amount.com">amount.com</a> and wants to lower the total amount to pay. If the <a href="https://www.amount.com">amount.com</a> and wants to lower the total amount to pay. If the <a href="https://www.amount.com">amount.com</a> and wants to lower the total amount to pay. If the <a href="https://www.amount.com">amount.com</a> amount, the transaction status will change to annulled.

URL to POST for test requests: https://webpaypaymentgatewaystage.svea.com/webpay/rest/loweramount

URL to POST for production requests: https://webpaypaymentgateway.svea.com/webpay/rest/loweramount

#### THE LOWERAMOUNT REQUEST STRUCTURE

The call is structured in XML with the root element <loweramount>. The <loweramount> element contains the transaction id of the transaction you want to annul.

<loweramount></loweramount>				
Element name	Content	Value	Format	Mandatory
transactionid amounttolower	Transaction ID The amount you wish to lower the transaction by.		N N	Y Y

Example of XML structure:		
<pre><?xml version="1.0" encoding="UTF-8"?></pre>		
<loweramount></loweramount>		
<transactionid>521677</transactionid>		
<pre><amounttolower>2000</amounttolower></pre>		

#### THE LOWERAMOUNT RESPONSE

The response is Base64 encoded. See the chapter WEBSERVICES for an example.

The Base64 decoded message contains a <response> tag.

<response></response>			
Element name	Description	Value	Format
transaction	Transaction ID	Complex type	Complex type
statuscode	Status of the webservice request	See Appendix 1	Ν

The <transaction> element contains an attribute id representing the Transaction ID. The element also contains the following information.

<transaction></transaction>			
Element name	Description	Value	Format
customerrefno	Order ID	Free text	AN(64)



#### PREPAREPAYMENT

The preparepayment request can be used to let Svea Bank do the necessary pre-processing of a payment in advance. This allows the merchant to send the customer to the payment gateway through a HTTP GET instead of a HTTP POST. To complete the payment, the customer visits a certain URL containing the ID of the prepared payment. The customer can either be redirected to this URL by the merchant, or the merchant can give it to the customer, e.g. in an email, so that they can visit it themselves. A prepared payment is valid up to one hour after creation.

Preparepayment is not the standard method for creating payments, and should only be used when there is a specific reason to use it.

URL to POST for test requests: https://webpaypaymentgatewaystage.svea.com/webpay/rest/preparepayment

URL to POST for production requests: https://webpaypaymentgateway.svea.com/webpay/rest/preparepayment

#### THE PAYMENT REQUEST STRUCTURE

The request is structured in XML and you need a root element <payment>. The <payment> element contains information needed to create a new payment.

Information needed is the same as in a request to our payment gateway except two additional required parameters.

Additional parameters				
Element name	Content	Value	Format	Mandatory
lang	Language according to ISO 639-1	Ex: sv	AN	Y
Ipaddress	Customer's IP address		AN	Y



Exa	ample of XML structure:
	xml version="1.0" encoding="UTF-8"?
	<pre><payment></payment></pre>
	<currency>SEK</currency>
	<pre><amount>1000</amount></pre>
	<vat>200</vat>
	<lang>sv</lang>
	<ipaddress>127.0.0.1</ipaddress>
	<customerrefno>unique_id</customerrefno>
	<pre><returnurl>https://webpaypaymentgatewaystage.svea.com/webpay-</returnurl></pre>
adm	in/admin/merchantresponsetest.xhtml
	<ssn>460509-2222</ssn>
	<pre></pre> <pre></pre>
	<row></row>
	<name>ASUS P8P67 PRO Socket-1155</name>
	<amount>1000</amount>
	<pre><description>ATX P67 DDR3 3xPCIe(2.0)x16 CFX SLI SATA 6Gb/s</description></pre>
	<vat>200</vat>
	<quantity>1</quantity>
	< <u>sku</u> >SK-54f-3S23-AB <u sku>
	<unit>st</unit>

#### THE PREPAREPAYMENT RESPONSE

The response is Base64 encoded. See the chapter WEBSERVICES for an example.

<response></response>			
Element name	Description	Value	Format
preparedpayment	Information about your prepared payment	Complex type	Complex type
statuscode	Status of the webservice request	See Appendix 1	N

#### Content of the <preparedpayment> tag

<preparedpayment></preparedpayment>			
Element name	Description	Value	Format
id	Prepared payment id	e.g 7	Ν
created	Date when the object was created	e.g. 2011-09-27 16:55:01.21	AN

When redirecting the customer to let them complete their payment, the prepared payment ID should be appended to the URL.

Example URL for a test redirect: https://webpaypaymentgatewaystage.svea.com/webpay/preparedpayment/123456

Example URL for a production redirect: <u>https://webpaypaymentgateway.svea.com/webpay/preparedpayment/123456</u>



#### QUERY

Query is used to get information about a specific transaction. To do this one must know either the transactionid set by Svea Bank, or the customerrefno that has been set by the merchant. These have different URL: s.

Please only use this web service when needed. Repetitive polling is not allowed.

URL to POST for test requests:

https://webpaypaymentgatewaystage.svea.com/webpay/rest/querytransactionid https://webpaypaymentgatewaystage.svea.com/webpay/rest/querycustomerrefno

URL to POST for production requests:

https://webpaypaymentgateway.svea.com/webpay/rest/querytransactionid https://webpaypaymentgateway.svea.com/webpay/rest/querycustomerrefno

#### THE QUERY REQUEST STRUCTURE

The call is structured in XML and you need a root element <query>. The <query> element contains either the orderid or transaction ID that you want to query.

Query based on the order ID:

<query></query>				
Element name	Content	Value	Format	Mandatory
customerrefno	Order ID		AN(32)	Y

Example:
<pre><?xml version="1.0" encoding="UTF-8"?></pre>
<query></query>
<customerrefno>temping1238u96896</customerrefno>

#### Query based on the transaction ID

<query></query>				
Element name	Content	Value	Format	Mandatory
transactionid	Transaction ID		Ν	Y

Example:
<pre><?xml version="1.0" encoding="UTF-8"?></pre>
<query></query>
<pre><transactionid>521527</transactionid></pre>

#### THE QUERY RESPONSE

The response is Base64 encoded. See the chapter WEBSERVICES for an example.

The Base64 decoded message contains a <response> tag.

<response></response>			
Element name	Description	Value	Format
transaction	Transaction ID	Complex type	Complex type
statuscode	Status of the webservice request	See Appendix 1 1	N

The <transaction> element contains an attribute id representing the Transaction ID. The element also contains the following information.



.

<transaction></transaction>			
Element name	Description	Value	Format
<customerrefno></customerrefno>	Order id	Free text	AN(64)
<merchantid></merchantid>	Merchant id		Ν
<status></status>	Latest transaction status.	e.g SUCCESS	AN(32)
<amount></amount>	Total amount in minor currency, including VAT	e.g 1000	Ν
<currency></currency>	Currency	ISO 4217 alphabetic (e.g. SEK)	AN(3)
<vat></vat>	VAT in minor currency	e.g. 1000	Ν
<capturedamount></capturedamount>	Captured amount	e.g. 1000	Ν
<authorizedamount></authorizedamount>	Authorized amount	e.g. 1000	Ν
<created></created>	Timestamp when transaction was created	e.g. 2011-09-27 16:55:01.21	
<creditstatus></creditstatus>	Status of the last credit attempt		AN(32)
<creditedamount></creditedamount>	Total amount that has been credited	e.g. 1000	Ν
<merchantresponsecode></merchantresponsecode>	Last statuscode response returned to merchant. See Appendix 1		Ν
<paymentmethod></paymentmethod>	Paymentmethod. See Appendix 1		AN(32)
<orderrows></orderrows>	Element containing <row> elements.</row>		Complex type
<capturedate></capturedate>	When the transaction was captured	e.g. 2011-09-27 16:55:01.21	



If you are querying a card payment you will get more information within the <transaction> element.

Element name	Description	Value	Format
<cardtype></cardtype>	Brand of the card	e.g. VISA or MASTERCARD	AN(64)
<eci></eci>	Enrollement status from MPI. If the card is 3Dsecure enabled or not.		Ν
<mdstatus></mdstatus>	Value calculated from eci as requested by acquiring bank		Ν
<expiryyear></expiryyear>	Expire year of the card		AN(4)
<expirymonth></expirymonth>	Expire month of the card		AN(2)
<chname></chname>	Cardholder name as entered by cardholder		AN(100)
<authcode></authcode>	EDB authorization code		AN(10)



#### RECUR

The recur request creates a new transaction from a subscription. (As we have seen, a subscription is created by making a transaction that has a subscriptiontype.)

URL to POST for test requests:

#### https://webpaypaymentgatewaystage.svea.com/webpay/rest/recur

URL to POST for production requests: https://webpaypaymentgateway.svea.com/webpay/rest/recur

#### THE RECUR REQUEST STRUCTURE

The request XML should have the root element <recur>. The <recur> element may contain the following elements.

<recur></recur>				
Element name	Content	Value	Format	Mandatory
customerrefno	The new unique customerrefno	E.g. 10003	AN	Y
subscriptionid	The subscription id	E.g. 1005	Ν	Y
currency	Currency	E.g. SEK	AN	Ν
amount	The amount to recur in minor currency	E.g. 1001	Ν	Y
vat	VAT amount	E.g. 250	Ν	Ν
orderrows	Order rows	List of <row> elements</row>	Complex type	Ν

If the subscription type is RECURRING or RECURRINGCAPTURE, the currency for the recur request must be the same as the currency in the initial transaction. To avoid errors, the currency parameter can be omitted.

The amount on the recur request does not need to be the same as the amount on the initial transaction that created the subscription. It can be smaller or larger. VAT is not needed on the recur request.

#### Example of XML structure:

```
<?xml version="1.0" encoding="UTF-8"?>
<recur>
<customerrefno>10003</customerrefno>
<subscriptionid>2003</subscriptionid>
<currency>SEK</currency>
<amount>600</amount>
</recur>
```

#### THE RECUR RESPONSE

The response is Base64 encoded. See the chapter WEBSERVICES for an example.

The Base64 decoded message contains a <response> tag.

<response></response>			
Element name	Description	Value	Format
transaction	Transaction details	Complex type	Complex type
statuscode	Status of the webservice request	See Appendix 1	Ν



The <transaction> element contains an information regarding the transaction that was created as a result of the recur operation. The element contains a transaction id as attribute as well as the following information.

<transaction></transaction>		
Element name	Description	Format
customerrefno	Order ID	AN(64)
paymentmethod	Payment method	AN
merchantid	Merchant id	Ν
amount	Total amount in minor currency	Ν
currency	Currency	Ν
cardtype	Card type	AN
maskedcardno	Masked card number	Ν
expirymonth	Expiry month	N(2)
expiryyear	Expiry year	N(2)
authcode	Authorization code	Ν
subscriptionid	Subscription id	Ν



#### MAC

In this context, MAC stands for Message Authentication Key. In order to verify a request, the merchant needs to create a MAC-string for each request (payment or webservice).

The MAC is calculated by taking the Base64 encoded XML string and appending the "secret word". Hash the resulting string by using SHA-512.

#### FORMULA

MAC = SHA512Hash(Base64Encoded(xmlMessage) + secretWord);

Step1

Example of XML-message:
<pre><?xml version="1.0" encoding="UTF-8"?></pre>
<pre><pre><pre><pre><pre><pre><pre><pre></pre></pre></pre></pre></pre></pre></pre></pre>
<paymentmethod>DBSHBSE</paymentmethod> <currency>SEK</currency>
<pre><returnurl>https://webpaypaymentgatewaystage.svea.com/webpay-</returnurl></pre>
admin/admin/merchantresponsetest.xhtml
<pre><amount>50001</amount><customerrefno>testingnrglkjhhohjf</customerrefno></pre>

Step 2

#### Example of Base64 encoded XML-message

PD94bWwgdmVyc2lvbj0iMS4wliBlbmNvZGluZz0iVVRGLTgiPz4gPHBheW1lbnQ+IDxwYXltZW50b WV0aG9kPkRCU0hCU0U8L3BheW1lbnRtZXRob2Q+PGN1cnJlbmN5PlNFSzwvY3VycmVuY3k+ID xyZXR1cm51cmw+aHR0cHM6Ly90ZXN0LnN2ZWFla29ub21pLnNIL3dlYnBheS1hZG1pbi9hZG1pbi 9tZXJjaGFudHJlc3BvbnNldGVzdC54aHRtbDwvcmV0dXJudXJsPiA8YW1vdW50PjUwMDAxPC9hb W91bnQ+PGN1c3RvbWVycmVmbm8+dGVzdGluZ25yZ2xramhob2hqZjwvY3VzdG9tZXJyZWZubz 4gPC9wYXltZW50Pg==

Step 3

Example of 'secret word' received from your integrator:

df74ce933f1d367d4100b4d34ad6970760c6040e13d49b94b36bd81239c2c3a724435ab5dc4e1065c86 1944f9a1e56fa1f53f1cd22d71564e69d5256fba24d43

Step 4

#### Example of generated MAC value:

e70959517368c0873481979922b6d02ec15fba44e27e71abe56eea15c97ec6c970b7f19d2ea3baecec6 aacc1f3d8a0096f2231a37352d228e46e0055f5281586



# **APPENDIX 1**

#### **PAYMENT METHODS**

Payment method	Description	Country availability
MOBILEPAY	Card payments	Finland, Denmark
SVEACARDPAY	Card payments, Svea Bank	All
SVEACARDPAY_PF	SVEACARDPAY via a payment facilitator	All
SWISH	Bank payments	Sweden
SWISH_PF	Bank payments via a payment facilitator	Sweden
VIPPS	Card payments	Norway



					UNE	
	annul	Confirm	redit	lowers	in other	recut
MOBILEPAY	Х	Х	Х		Х	
SVEACARDPAY (CARD)	Х	Х	Х	Х	Х	Х
SVEACARDPAY_PF	Х	Х	Х	Х	Х	Х
SWISH			Х		Х	
SWISH_PF			Х		Х	
VIPPS	Х	Х	Х	Х	Х	





# INDEPENDENT WEBSERVICES

These webservices are not tied to any particular payment method:

getpaymentmethods getreconciliationreport preparepayment



#### THE CUSTOMER ELEMENT

For any payment method, the shop may add a customer element to the payment message. For some payment methods this is required, e.g. for card payments (SVEACARDPAY and SVEACARDPAY\_PF). In some cases it is unnecessary, e.g. for SWISH and TRUSTLY.

The customer element may contain the following parameters:

<customer></customer>				
Element name	Description	Value	Format	Mandatory
ssn	Social security number or organization number	e.g. 123456- 7890	AN(13)	
firstname	First name of customer	Free text	AN(128)	
lastname	Last name of customer	Free text	AN(128)	
initials	Initials of customer	Free text	AN(32)	
address	Address	Free text	AN(256)	
address2	c/o	Free text	AN(256)	
housenumber	House number	Free text	AN(32)	
zip	Postal code	e,g. 12345	Ν	
city	City	Free text	AN(45)	
country	Country code	e.g. SE	AN(45)	
phone	Phone number	e.g. 555- 123456	AN(45)	
email	Email	Free text	AN(256)	
companyname	Use if customer is company	Free text	AN(128)	
companyid	ld of the company		Ν	
vatnumber	Vat number of the company	e.g. DE123456789	AN(32)	
industrycode	Activity classification. For government use 99998, private person use 99999.	e.g. 47523	Ν	
iscompany	If the customer is a company. Defaults to false	e.g. true	Boolean	
unknowncustomer	Deprecated	e.g. true	Boolean	



#### **TRANSACTION STATUS**

Below are all possible states that a transaction can be in. During the lifetime of a transaction, the status may change many times, most often ending up as either SUCCESS or FAILED.

The status can be obtained in several different ways, e.g. by looking in the Transaction Details window, or by making a request to the query webservice. The range of possible statuses for a specific transaction depends on its payment method.

Status	Description
NEW	The request was authenticated and accepted
	(syntactically correct)
RECEIVED	The request is saved, ready to be processed
VALID	Request has passed all the antifraud checks and
	method (e.g.: currency is not allowed, phone
PENDING	Payment has been initialized: waiting for the
	external provider/bank to respond
REGISTERED	Recurring payment was authorized by the end-user [only card payments]
RESPONSE_RECEIVED	Callback from the external provider/bank was received
FAILED	Request did not pass the validation checks
	); Unexpected error while processing payment
	(internal or external error); Payment was not
	accepted by the external provider/bank
ERROR	Payment status could not be retrieved from the
	external provider/bank system.
CANCELLED	Payment was cancelled before payer authorized it
ANNULLED	Payment was cancelled after payer authorized it
CLEARING	Payer authorized the request; waiting for the
AUTHORIZED	Paver authorized the request. The amount is
AOMONIZED	blocked but not withdrawn from the end-user
	account [only card payments]
CONFIRMED	Payment was confirmed: ready to be captured. The
	confirmation can be done automatically or
	manually by the merchant [only card payments]
CAPTPENDING	The process of withdrawing money from end-user
	account started [only card payments]
CAPTFAILED	The withdraw could not be performed [only card
	payments]
SUCCESS	Payment completed; money was withdrawn from
	the end-user account

#### **STATUS CODES**

Status codes are also used in the response message to webservice calls, to convey the result. A webservice call that was successful will have the statuscode SUCCESS in the response message. If the call failed, another status code will be given to act as an error code.

Another way to view status codes is to see them as extra information that clarifies the status of a transaction. All but one of them are error codes and those will most often be seen together with the status FAILED, to explain what went wrong. A transaction with the status SUCCESS will most often have the status code SUCCESS.



Code	Name	Description
0	SUCCESS	Request performed successfully
1	REQUIRES_MANUAL_REVIEW	Request performed successfully but requires manual review by merchant
100	INTERNAL_ERROR	Internal system error
101	XMLPARSEFAIL	Invalid XML
102	ILLEGAL_ENCODING	Invalid encoding
104	ILLEGAL_URL	Invalid URL
105	ILLEGAL_TRANSACTIONSTATUS	Invalid transaction status
106	EXTERNAL_ERROR	Failure at third party e.g. the bank
107	DENIED_BY_BANK	Transaction rejected by bank
108	CANCELLED	Transaction cancelled
110	ILLEGAL_TRANSACTIONID	Invalid transaction ID
111	MERCHANT_NOT_CONFIGURED	Merchant not configured
112	MERCHANT_NOT_CONFIGURED_AT_BANK	Merchant not configured at bank
113	PAYMENTMETHOD_NOT_CONFIGURED	Payment method not configured for merchant
114	TIMEOUT_AT_BANK	Timeout at bank
115	MERCHANT_NOT_ACTIVE	The merchant is inactivated
116	PAYMENTMETHOD_NOT_ACTIVE	The payment method is inactivated
117		Amount cannot be authorized
118	ILLEGAL_CAPTURED_AMOUNT	Amount cannot be captured
119	ILLEGAL_CREDITED_AMOUNT	Amount cannot be credited
124	EXCEEDS_AMOUNT_LIMIT	Amount exceeds the limit
126	IRANSACTION_NOT_BELONGING_TO_MERCHA	merchant
127	CUSTOMERREFNO_ALREADY_USED	already used in another transaction
128	NO_SUCH_TRANS	I ransaction does not exist
129		the given customerrefno
130		payment method
131		Company inactivated
133		Subscription not active
134	SUBSCRIPTION_NOT_SUPPORTED	subscriptions
130	ILLEGAL_DATE_FORMAT	Invalid date format
130	ILLEGAL_RESPONSE_DATA	Currency pot configured
130		
140		Currency is already configured
142	NO VALID PAYMENT METHODS	No valid payment methods
143	CREDIT DENIED BY BANK	Credit denied by bank
144	ILLEGAL_CREDIT_USER	User is not allowed to perform
146	CUSTOMER NOT FOUND	Customer not found
147	AGE_LIMIT_EXCEEDED	E.g. the transaction is too old
148	BROWSER_NOT_SUPPORTED	The browser version is too old
149	PENDING	The request is still being processed



150	CREDIT_PENDING	The credit could not be handled
		instantly. It is put in a queue it will
152		Card is closed
301	BAD TRANSACTION ID	Invalid transaction ID
303	BAD MERCHANT ID	Invalid marchant ID
304		
304		Invalid amount
306		Invalid customerrefno
307		
308		Invalid currency
300		Invalid payment method
311	BAD_MAC	Invalid retainan
316	BAD CARDNUMBER OR CARDTYPE NOT CON	Card type not configured for
010	FIGURED	merchant
317	BAD_SSN	Invalid ssn
318	BAD_VAT	Invalid vat
319	BAD_CAPTURE_DATE	Invalid capture date
320	BAD_CAMPAIGN_CODE	Invalid campaign code
321	BAD SUBSCRIPTION TYPE	Invalid subscription type
322	BAD SUBSCRIPTION ID	Invalid subscription ID
323	BAD BASE64	Invalid Base64
325	BAD_CALLBACKURL	Invalid callbackurl
326	THREE D CHECK FAILED	3D check failed
327		Card not enrolled in 3D Secure
328	BAD IPADDRESS	Provided IP address is invalid
329	BAD MOBILE	Invalid mobile phone number
330		Invalid country
331	THREE D CHECK NOT AVAILABLE	Merchant 3D configuration invalid
332		Timeout at Svea
332		The reconciliation period is invalid
224		Address Selector is not valid for this
334	BAD_ADDRESS_ID	CountryCode
335	BAD_CUSTOMER_DATA	The supplied customer data is
336	BAD LINIT	Invalid Invalid unit
337	BAD EXTERNAL PAYMENT REF	Invalid external navment reference
338		Invalid external payment reference
330		Stored card alias inactive
3/0	STORED CARDS NOT ENABLED	
3/1		
3/2	TRANSACTION ALREDY IN PROGRESS	
2/2		Invalid Capcol url
243	BAD_CANCELORE	Invalid Calicer un
344		Invalid value for Order Pour
345	DAD_ORDER_ROW	Invalid format for Davar Alica
340	DAD_FATER_ALIAS	Phone number
347	BAD_SHOW_STORE_CARD_DIALOG	Invalid value for Show Store Card Dialog
373	SERVICE_UNAVAILABLE_TRY_LATER	Temporary problem, try later
500	ANTIFRAUD_CARDBIN_NOT_ALLOWED	Antifraud - cardbin not allowed



501	ANTIFRAUD_IPLOCATION_NOT_ALLOWED	Antifraud – iplocation not allowed
502	ANTIFRAUD_IPLOCATION_AND_BIN_DOESNT_M ATCH	Antifraud – ip-location and bin does not match
503	ANTIFRAUD_MAX_AMOUNT_PER_IP_EXCEEDED	Antofraud – max amount per ip exceeded
504	ANTIFRAUD_MAX_TRANSACTIONS_PER_IP_EXC EEDED	Antifraud – max transactions per ip exceeded
505	ANTIFRAUD_MAX_TRANSACTIONS_PER_CARDN O_EXCEEDED	Antifraud – max transactions per card number exceeded
506	ANTIFRAUD_MAX_AMOUNT_PER_CARDNO_EXC EEDED	Antifraud – max amount per cardnumer exceeded
507	ANTIFRAUD_IP_ADDRESS_BLOCKED	Antifraud – IP address blocked.
600	SWISH_NOT_ENROLLED	Payer alias is invalid, or payee not enrolled
601	SWISH_REFUND_ORDER_NOT_FOUND	Original Payment not found or original payment is more than 13 months old
602	SWISH_REFUND_PAYER_ERROR	Payer alias in the refund does not match the payee alias in the original payment
603	SWISH_REFUND_PAYER_ORGNR_ERROR	Payer organization number do not match original payment payee organization number
604	SWISH_REFUND_PAYEE_SSN_ERROR	The Payer SSN in the original payment is not the same as the SSN for the current Payee

#### GLOSSARY

N = Number

D = Date in the ISO-8601 extended date format, E8601DAw ("yyyy-MM-dd"), e.g. "2011-09-17" AN = Alphanumeric

MAC = Message Authentication Key

Secret Word = Used in calculating the MAC, unique for each Merchant

Paypage = Payment selection page, where the buyer chooses which payment method to use



#### **APPENDIX 2**

These are example payments with minimal, required and full data . More optional data can be added as desired.

#### **BASIC CARD PAYMENTS WITH UNKNOWN CUSTOMER**

<?xml version="1.0" encoding="UTF-8"?> <payments <paymentmethod>SVEACARDPAY</paymentmethod> <currency>SEK</currency> <amount>500</amount> <vat>100</vat> <customerrefno>unique\_id</customerrefno> <returnurl>https://webpaypaymentgatewaystage.svea.com/webpayadmin/admin/merchantresponsetest.xhtml</returnurl> <customer> <country>SE</country> <unknownCustomer>true</unknownCustomer> </customer> </payment>

#### BASIC CARD PAYMENTS WITH REQUIRED CUSTOMER DATA

<?xml version="1.0" encoding="UTF-8"?> <payment> <paymentmethod>SVEACARDPAY PF</paymentmethod> <currency>SEK</currency> <amount>500</amount> <vat>100</vat> <customerrefno>unique id</customerrefno> <returnurl>https://webpaypaymentgatewaystage.svea.com/webpayadmin/admin/merchantresponsetest.xhtml</returnurl> <customer> <firstname>jane</firstname> <lastname>doe</lastname> <email>JaneDoe@test.test</email> <ssn>460509-2222</ssn> <address>test</address> <country>SE</country> <city>test</city> <zip>99999</zip> <industrycode>12345</industrycode> <companyname>testAB</companyname> <unknownCustomer>false</unknownCustomer> </customer> </payment>

#### BASIC CARD PAYMENTS WITH FULL CUSTOMER DATA

<?xml version="1.0" encoding="UTF-8"?> <payments <paymentmethod>SVEACARDPAY\_PF</paymentmethod> <currency>SEK</currency> <amount>500</amount> <vat>100</vat>



<customerrefno>unique\_id</customerrefno> <returnurl>https://webpaypaymentgatewaystage.svea.com/webpayadmin/admin/merchantresponsetest.xhtml</returnurl> <customer> <firstname>jane</firstname> <lastname>doe</lastname> <email>JaneDoe@test.test</email> <ssn>460509-2222</ssn> <address>test</address> <address2>test</address2> <country>SE</country> <city>test</city> <zip>99999</zip> <houseNumber>13</houseNumber> <phone>test</phone> <vatNumber>100</vatNumber> <initials>JD</initials> <companyname>testAB</companyname> <industrycode>12345</industrycode> <unknownCustomer>false</unknownCustomer> </customer> </payment>

#### **BASIC RECURRING CARD PAYMENTS**

<?xml version="1.0" encoding="UTF-8"?> <payment> <paymentmethod>SVEACARDPAY</paymentmethod> <currency>SEK</currency> <amount>0</amount> <customerrefno>unique id</customerrefno> <returnurl>https://webpaypaymentgatewaystage.svea.com/webpayadmin/admin/merchantresponsetest.xhtml</returnurl> <subscriptiontype>RECURRING</subscriptiontype> <customer> <firstname>jane</firstname> <lastname>doe</lastname> <email>JaneDoe@test.test</email> <address>test</address> <address2>test</address2> <country>SE</country> <city>test</city> <zip>99999</zip> <houseNumber>13</houseNumber> <phone>test</phone> <vatNumber>100</vatNumber> <initials>JD</initials> <unknownCustomer>false</unknownCustomer> </customer> </payment> <?xml version="1.0" encoding="UTF-8"?> <payment> <paymentmethod>SVEACARDPAY</paymentmethod> <currency>SEK</currency> <amount>500</amount>

<customerrefno>unique\_id</customerrefno>



<returnurl>https://webpaypaymentgatewaystage.svea.com/webpayadmin/admin/merchantresponsetest.xhtml</returnurl> <subscriptiontype>RECURRINGCAPTURE</subscriptiontype> <customer> <firstname>test</firstname> <lastname>test</lastname> <address>test</lastname> <address>test</address> <city>test</city> <zip>99999</zip> <country>SE</country> <phone>test</phone> <email>test@test.test</email> </customer> </payment>