

# Sparkassen-Internetkasse / paydirekt

Connection for traders and integrators

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## Table of Contents

<b>1</b>	<b>About this document</b>	
1.1	Labelling and formatting .....	4
1.2	Disclaimer .....	4
1.3	Copyright note .....	5
<b>2</b>	<b>Preface</b>	
2.1	Target group and purpose of the document .....	6
2.2	Requirements .....	6
2.3	Introduction .....	6
<b>3</b>	<b>Shop Interface</b>	
3.1	Course of transaction .....	7
3.2	Transaction details .....	8
3.2.1	Pre-authorisation / Authorisation with capture .....	9
3.2.2	Capture .....	10
3.2.3	Refund .....	11
3.2.4	Diagnosis .....	11
3.3	Parameter details .....	12
3.4	Parameter format description .....	18
<b>4</b>	<b>Form service</b>	
4.1	Course of transaction .....	21
4.2	Transaction details .....	22
4.2.1	Initialisation of the payment .....	22
4.2.2	Shop notification .....	28
<b>5</b>	<b>Appendix</b>	
5.1	Test data .....	33

# 1 About this document

## 1.1 Labelling and formatting

Please pay attention to the following labelling in the text:

### Program listings, source code

These are excerpts from the program source code or listings. Example:



#### Listing 1-1

```
#!/bin/bash

# endless loop
while [ true ]
do
    clear;
    free;
    sleep 1;
done
```

### Parameters

All parameter designations appear in the following font: parameter.



#### Caution

A note about a situation that demands caution and attention



#### Important

An especially important note



#### Note

A note referring to context or further information

## 1.2 Disclaimer

The information in this document has been compiled with the utmost diligence. However the documentation neither claims completeness nor accuracy. VÖB-ZVD Processing therefore neither assumes liability for usability or correctness nor - as far as legally allowed - for direct, indirect, accidental or consequential damage arising from the use of the information provided in this document. With the exception of cases of intention and gross negligence, liability is excluded for errors in translation as well as damages resulting from this.

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## 2 Preface

### 2.1 Target group and purpose of the document

This document is intended for online traders and Sparkassen-Internetkasse integrators. You should have basic technical programming knowledge and basic knowledge of electronic payment transactions.

This document describes how to integrate paydirekt in your shop using Sparkassen-Internetkasse. If you have questions about paydirekt that are not related to the connection to Sparkassen-Internetkasse, please refer directly to paydirekt.

This document is intended to expand on the document “Sparkassen-Internetkasse - Connection for traders and integrators” (hereinafter referred to as Main Document). General notes about system structure, communications between shop and Sparkassen-Internetkasse are in the Main Document.

### 2.2 Requirements

Please record your standing data in the paydirekt merchant portal. Then you will receive the API key and the API secret which are required to activate paydirekt for your Sparkassen-Internetkasse account.

### 2.3 Introduction

You can initialise payments using either the shop interface or the form service. The respective details of the course of payment are described in Section “Course of transaction”, p. 7 and Section “Course of transaction”, p. 21.

You can carry out the follow-up transactions capture and refund via the shop interface or the front office.

### 3 Shop Interface

General informations, access data and sample code of the shop interface can be found in the Main Document.

#### 3.1 Course of transaction

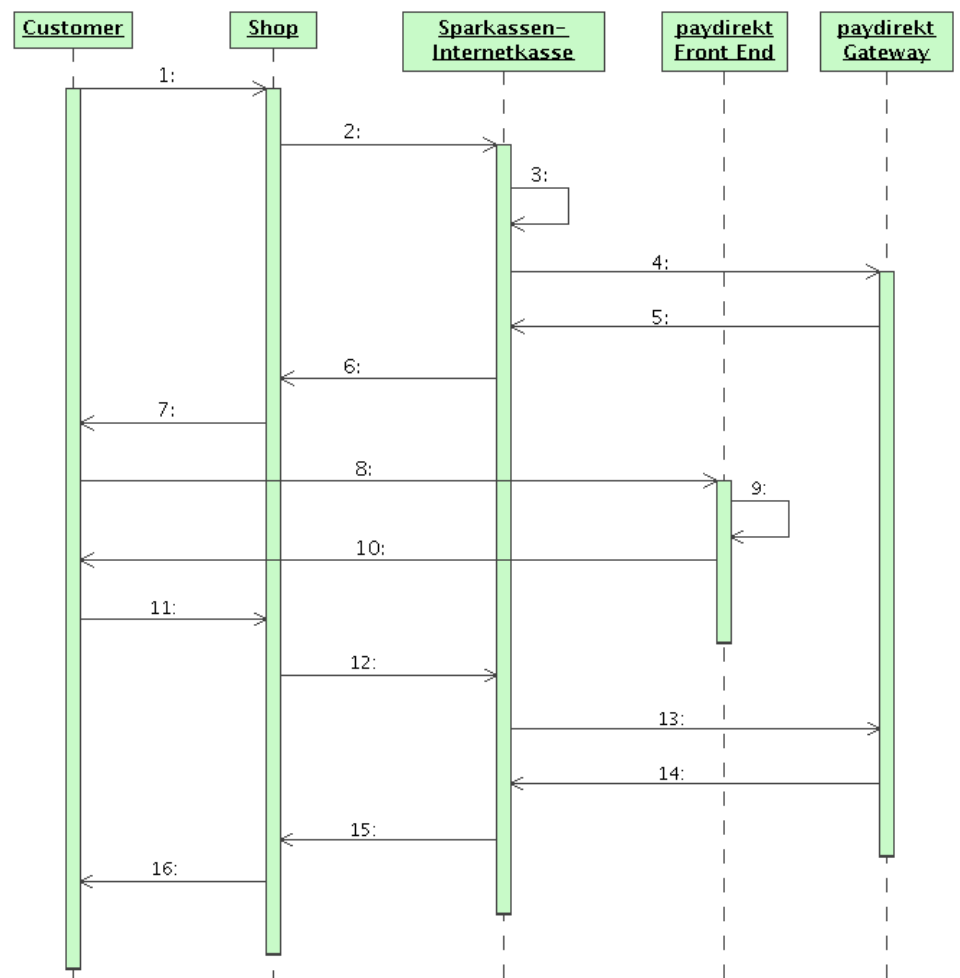


Figure 3-1: Shop interface course of transaction

The transaction proceeds as follows.

1. The customer makes a purchase in the **shop** and starts the payment process.
2. The **shop** informs Sparkassen-Internetkasse that a customer wants to pay with paydirekt. In doing so the **shop** also submits URLs to Sparkassen-Internetkasse where the customer should be redirected to after a successful payment or in the case of an error, respectively. Section “Pre-authorisation / Authorisation with capture”, p. 9 describes the details of this request.
3. Sparkassen-Internetkasse validates the submitted data. In case of an error the transaction continues with step 6.
4. Sparkassen-Internetkasse sends a checkout request to paydirekt.
5. paydirekt sends the “checkout” response to Sparkassen-Internetkasse.
6. Sparkassen-Internetkasse sends the **shop** a paydirekt URL (`redirecturl`) to redirect the customer to. In the case of an error the response does not include a `redirecturl` and the **shop** has to react to the error.
7. The **shop** sends a redirect to this URL to the customer's browser. The redirect can be initiated by means of a meta tag, an HTTP header or JavaScript.
8. The browser redirects the customer to paydirekt.
9. The customer carries out the required steps for the payment on the paydirekt web site.
10. paydirekt sends the customer a redirect to your **shop**, namely to the URL you submitted to Sparkassen-Internetkasse in step 2. If the customer aborted payment or paydirekt rejected the payment, the customer is redirected to another one of the URLs you submitted in step 2.
11. The browser redirects the customer to the **shop**.
12. The **Shop** sends a diagnosis request to Sparkassen-Internetkasse. The details of this request are described in Section “Diagnosis”, p. 11.
13. Sparkassen-Internetkasse sends a diagnosis request to paydirekt.
14. paydirekt sends the current state of the payment to Sparkassen-Internetkasse.
15. Sparkassen-Internetkasse sends the response of the diagnosis request to the **shop**.
16. The **shop** displays the result of the payment to the customer.

In the case of the follow-up transactions capture and refund the following simplified course of transaction applies: your shop sends a request to Sparkassen-Internetkasse. Sparkassen-Internetkasse sends the result of the transaction in the response.

## 3.2 Transaction details

For each transaction, the following tables show which values have to be included in the request message and which values you receive with the response.



The parameters `command` and `payment_options` are used to control the transaction type. They must be assigned the values listed in the tables.

In some cases, parameters may not be included in the response message. The conditions that cause this are stated in a cross-column table row.

### 3.2.1 Pre-authorisation / Authorisation with capture

Parameter	Request	Response
<code>command</code>	Mandatory, <code>preauthorization</code> , <code>authorization</code>	
<code>payment_options</code>	Mandatory, <code>paydirekt</code>	
<code>orderid</code>	Mandatory	Mandatory
<code>basketnr</code>	Optional	Optional
<code>amount</code>	Mandatory	Mandatory
<code>currency</code>	Mandatory	Mandatory
<code>autocapture</code>	Optional, only if <code>command=preauthorization</code>	
<code>successurl</code>	Mandatory	
<code>cancelurl</code>	Mandatory	
<code>errorurl</code>	Mandatory	
<code>basket_order_amount</code>	Mandatory	
<code>basket_shipping_costs</code>	Mandatory	
<code>basketitem_name0</code> , <code>basketitem_name1</code> , ...	Optional	
<code>basketitem_number0</code> , <code>basketitem_number1</code> , ...	Optional	
<code>basketitem_qty0</code> , <code>basketitem_qty1</code> , ...	Optional	
<code>basketitem_amount0</code> , <code>basketitem_amount1</code> , ...	Optional	
<code>customer_id</code>	Optional	
<code>customer_firstname</code>	Mandatory	
<code>customer_lastname</code>	Mandatory	
<code>customer_addr_street</code>	Optional	
<code>customer_addr_number</code>	Optional	
<code>customer_addr_zip</code>	Optional	
<code>customer_addr_city</code>	Mandatory	
<code>customer_addr_country</code>	Mandatory	

Parameter	Request	Response
customer_addr_addon	Optional	
customer_email	Optional	
minimum_age	Optional	
redirect_url_after_age_verification_failure	Mandatory if minimum_age is submitted	
posherr		Mandatory
rmsg		Mandatory
rc		Mandatory, can be blank.
retrefnr		Optional
timestamp		Mandatory, can be blank.
trefnum		Optional
redirecturl		Mandatory, If posherr=0

Table 3-1: Pre-authorisation / Authorisation with capture

### 3.2.2 Capture

Parameter	Request	Response
command	Mandatory, capture	
payment_options	Mandatory, paydirekt	
orderid	Mandatory	Mandatory
basketnr	Optional	Mandatory
clientip	Optional	
amount	Optional	Mandatory
currency		Mandatory
trefnum	Mandatory	included in the response if parameter rc contains a value.
posherr		Mandatory
rmsg		Mandatory
rc		Mandatory, can be blank.
retrefnr		Optional
timestamp		Mandatory, can be blank.

Table 3-2: Capture

### 3.2.3 Refund

Parameter	Request	Response
command	Mandatory, refund	
payment_options	Mandatory, paydirekt	
orderid	Mandatory	Mandatory
basketnr	Optional	Mandatory
clientip	Optional	
amount	Optional	Mandatory
currency		Mandatory
trefnum	Mandatory	included in the response if parameter rc contains a value.
posherr		Mandatory
rmsg		Mandatory
rc		Mandatory, can be blank.
retrefnr		Optional
timestamp		Mandatory, can be blank.

Table 3-3: Refund

### 3.2.4 Diagnosis

Parameter	Request	Response
command	Mandatory, diagnose	
payment_options	Mandatory, paydirekt	
orderid	Mandatory	Mandatory
trefnum	Mandatory	included in the response if parameter rc contains a value.
basketnr		Optional
posherr		Mandatory
rmsg		Mandatory
rc		Mandatory, can be blank.
timestamp		Mandatory, can be blank.

Table 3-4: Diagnosis

### 3.3 Parameter details

#### amount

Range of Values	N-7
Example	12000
Explanation	The amount in the smallest unit of a currency. The value 5025 for the currency euro therefore corresponds to 50 euro and 25 cents. The maximum amount is 50000 EUR or 100000 EUR for refunds. The sum of the refunds may be up to twice as high as the total amount of the purchase.

Table 3-5: Parameter amount

#### autocapture

Range of Values	N-3
Example	72
Explanation	Period - in hours - between reservation und automatic capture. If the parameter is not sent, no automatic capture will be executed.

Table 3-6: Parameter autocapture



#### Caution

In those rare cases where the "autocapture" is not successful (e.g. because the acquirer is unreachable) the automatic capture is not attempted a second time. In this case Sparkassen-Internetkasse sends an email to the technical email address configured in the front office to enable you to repeat failed captures manually if necessary. In the case that no technical email address is configured for your shop we recommend to check the affected reservations at regular intervals.

#### basket\_order\_amount

Range of Values	N-7
Example	1250
Explanation	Order value without shipping costs in the smallest currency unit. Displayed to the customer during payment.

Table 3-7: Parameter basket\_order\_amount

#### basket\_shipping\_costs

Range of Values	N-7
Example	690
Explanation	Shipping costs in the smallest currency unit. Is displayed to the customer during payment.

Table 3-8: Parameter basket\_shipping\_costs

**basketitem\_amount0, basketitem\_amount1, ...**

Range of Values	N-7
Example	1250
Explanation	Price of an article. Displayed to the customer during payment.

Table 3-9: Parameter *basketitem\_amount0, basketitem\_amount1, ...***basketitem\_name0, basketitem\_name1, ...**

Range of Values	ANL-32
Example	Fork
Explanation	Name of an article. Displayed to the customer during payment.

Table 3-10: Parameter *basketitem\_name0, basketitem\_name1, ...***basketitem\_number0, basketitem\_number1, ...**

Range of Values	ANL-32
Example	E1234CA
Explanation	Article number. Displayed to the customer during payment.

Table 3-11: Parameter *basketitem\_number0, basketitem\_number1, ...***basketitem\_qty0, basketitem\_qty1, ...**

Range of Values	N-9
Example	1
Explanation	Quantity of an article. Displayed to the customer during payment.

Table 3-12: Parameter *basketitem\_qty0, basketitem\_qty1, ...***basketnr**

Range of Values	ANLS-50
Example	874-09, Flower Shop
Explanation	Shopping basket number. Field that can be freely defined by the trader and used to transfer additional information. This field can also be used to include information (e.g. the shop name) on the buyer's and trader's account statement.

Table 3-13: Parameter *basketnr*

**cancelurl**

Range of Values	AN[:./-?;&=%]-255
Example	http://shop.mycompany.com/cancelled
Explanation	URL for the return to the shop after the customer aborted the transaction

Table 3-14: Parameter *cancelurl***clientip**

Range of Values	N[.]-15
Example	217.89.67.230
Explanation	Customer's IP address. Will be logged, does not have any other function.

Table 3-15: Parameter *clientip***command**

Range of Values	FIX
Example	
Explanation	Together with the parameter <i>payment_options</i> , describes the transaction type.

Table 3-16: Parameter *command***currency**

Range of Values	A3
Example	EUR
Explanation	The currency code as defined by ISO 4217.

Table 3-17: Parameter *currency***customer\_addr\_addon**

Range of Values	ANL-100
Example	
Explanation	Additional address information

Table 3-18: Parameter *customer\_addr\_addon***customer\_addr\_city**

Range of Values	AL-30
Example	Sheffield
Explanation	The town/city of a customer's address.

Table 3-19: Parameter *customer\_addr\_city*

**customer\_addr\_country**

Range of Values	A2
Example	DE
Explanation	The country code of a customer's address according to ISO 3166.

*Table 3-20: Parameter customer\_addr\_country***customer\_addr\_number**

Range of Values	ANL-8
Example	8
Explanation	The street number a customer's address.

*Table 3-21: Parameter customer\_addr\_number***customer\_addr\_street**

Range of Values	AL-30
Example	High Street
Explanation	The street of a customer's address.

*Table 3-22: Parameter customer\_addr\_street***customer\_addr\_zip**

Range of Values	N5
Example	04105
Explanation	The postal code of a customer's address.

*Table 3-23: Parameter customer\_addr\_zip***customer\_email**

Range of Values	AN[@-._+]-60
Example	spring72@email.com
Explanation	A customer's email address

*Table 3-24: Parameter customer\_email***customer\_firstname**

Range of Values	AL[-]-24
Example	John
Explanation	The customer's first name.

*Table 3-25: Parameter customer\_firstname*

**customer\_id**

Range of Values	AN[-_/]-20
Example	c77_06
Explanation	Customer number.

Table 3-26: Parameter *customer\_id***customer\_lastname**

Range of Values	AL[-]-30
Example	Smith
Explanation	A customer's surname.

Table 3-27: Parameter *customer\_lastname***minimum\_age**

Range of Values	N-2
Example	18
Explanation	Minimum age of the customer

Table 3-28: Parameter *minimum\_age***orderid**

Range of Values	AN[-/]-17
Example	ans-834732
Explanation	Unique transaction number that identifies the payment transaction for a shop.

Table 3-29: Parameter *orderid***payment\_options**

Range of Values	FIX
Example	
Explanation	Together with the parameter <code>command</code> , describes the transaction type.

Table 3-30: Parameter *payment\_options***posherr**

Range of Values	N-3
Example	102
Explanation	Sparkassen-Internetkasse primary return code.

Table 3-31: Parameter *posherr*



**rc**

Range of Values	N-4
Example	
Explanation	Secondary return code of the particular payment or scoring system. The actual contents are explained in the appendix.

Table 3-32: Parameter rc

**redirect\_url\_after\_age\_verification\_failure**

Range of Values	AN[:./-?;&=%]-255
Example	http://shop.mycompany.com/return/f376e3bd398a254f2c141c258773?error=age
Explanation	URL for the return to the shop after a failed age verification

Table 3-33: Parameter redirect\_url\_after\_age\_verification\_failure

**redirecturl**

Range of Values	AN[:./-?;&=%]-255
Example	
Explanation	URL to redirect the customer to.

Table 3-34: Parameter redirecturl

**retrefnr**

Range of Values	ANLS-50
Example	234231235
Explanation	Transaction number of authorising party.

Table 3-35: Parameter retrefnr

**rmsg**

Range of Values	ANLS-200
Example	Transaction approved.
Explanation	Result as text.

Table 3-36: Parameter rmsg

**successurl**

Range of Values	AN[:./-?;&=%]-255
Example	http://shop.mycompany.com/success
Explanation	URL for the return to the shop after a successful transaction

Table 3-37: Parameter *successurl***timestamp**

Range of Values	N14
Example	20030510134159
Explanation	Timestamp of the transaction in the format YYYYMMDDHHMMSS (CET).

Table 3-38: Parameter *timestamp***trefnum**

Range of Values	AN[-_/-]-20
Example	ans_834732_01
Explanation	Sparkassen-Internetkasse transaction reference number.

Table 3-39: Parameter *trefnum***3.4 Parameter format description**

All characters that define the format of a parameter are listed and explained in the following table.

Character	Meaning
A	Letter
N	Numbers
S	Special characters
L	Blanks
Xn	exactly n characters
X-n	maximum n characters
FIX	fixed string
[]	A number of permitted characters are listed between square brackets. <sup>a</sup>
Examples	

Character	Meaning
N5	Number with exactly 5 characters
ANS-10	String with up to 10 characters This string may contain letters, numbers and special characters, but no blanks.
AN[_]-10	String with up to 10 characters This string may contain letters, numbers and the character '_', but no blanks.

- a If the square bracket itself is also allowed, then it appears twice, e.g. [[]].

*Table 3-40: Format description*

## 4 Form service

General informations and access data of the form service can be found in the Main Document.

### 4.1 Course of transaction

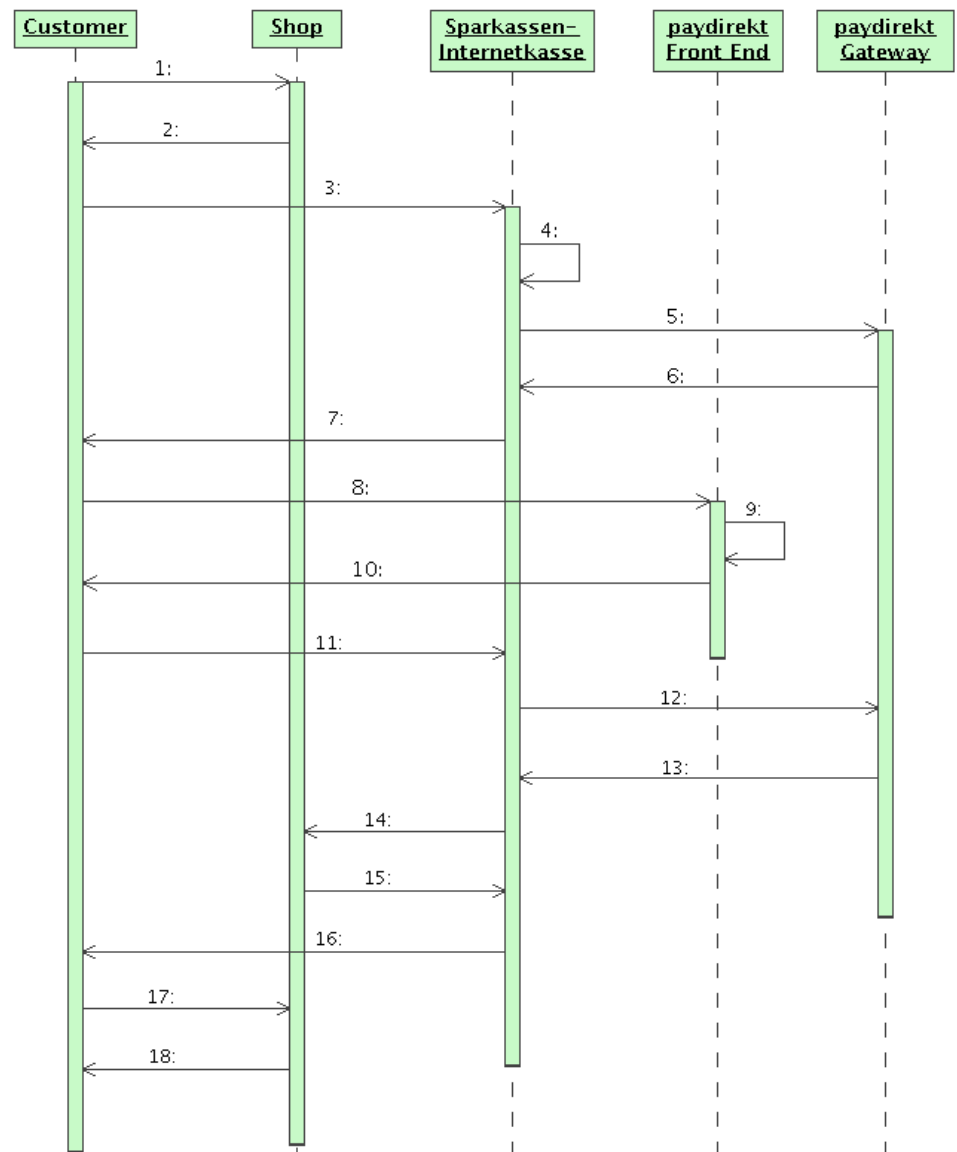


Figure 4-1: Course of transaction - form service

1. The customer buys something in the **shop** and initiates the payment process.
2. The **shop** responds with a redirect to Sparkassen-Internetkasse. The redirect can be implemented by means of a meta tag, an HTTP header or JavaScript. The redirect URL includes the data that are required to process the payment.
3. The browser redirects the customer to Sparkassen-Internetkasse.
4. Sparkassen-Internetkasse validates the submitted data. In case of an error the transaction continues with step 6.

5. Sparkassen-Internetkasse sends a checkout request to paydirekt.
6. paydirekt sends the “checkout” response to Sparkassen-Internetkasse.
7. Sparkassen-Internetkasse sends the customer a redirect to paydirekt.
8. The browser redirects the customer to paydirekt.
9. The customer carries out the required steps for the payment on the paydirekt web site.
10. paydirekt sends the customer a redirect to Sparkassen-Internetkasse.
11. The browser redirects the customer to Sparkassen-Internetkasse.
12. Sparkassen-Internetkasse sends a diagnosis request to paydirekt.
13. paydirekt sends the current state of the payment to Sparkassen-Internetkasse.
14. Sparkassen-Internetkasse informs the **shop** about the outcome of the payment.
15. The **shop** confirms the reception of the shop notification and sends Sparkassen-Internetkasse a URL where to redirect the customer to.
16. Sparkassen-Internetkasse sends the customer a redirect to the URL that was transmitted in step 15.
17. The browser redirects the customer to this URL.
18. The **shop** displays the result of the payment to the customer.

## 4.2 Transaction details

The following sections contain details on the initialisation of a paydirekt payment and how Sparkassen-Internetkasse notifies the shop.

### 4.2.1 Initialisation of the payment

The parameters listed in the subsequent table are sent to Sparkassen-Internetkasse via the customer's browser by means of a redirect (steps 2 and 3 in Section “Course of transaction”, p. 21). The redirect can be carried out with an HTTP redirect header, an HTML page with a meta tag or a JavaScript form. An example for a redirect with a meta tag is provided in the Main Document.

You can find explanations of the entries in the range of values column in Section “Parameter format description”, p. 18.

**Parameter overview request message****amount**

Range of Values	N[,]-8
Example	22,60
Explanation	Mandatory field. Amount. Cent amounts are separated with a decimal comma. Even amounts can be submitted without decimal comma and cent amounts, e.g. 22 instead of 22,00 EUR. The maximum amount is 50000 EUR.

Table 4-1: Parameter amount

**autocapture**

Range of Values	N-4
Example	72
Explanation	Optional, for reservation only: period - in hours - between reservation and automatic capture. If omitted, no automatic capture will be executed.

Table 4-2: Parameter autocapture

**Caution**

In those rare cases where the "autocapture" is not successful (e.g. because paydirekt is unreachable) the automatic capture is not attempted a second time. In this case Sparkassen-Internetkasse sends an email to the technical email address configured in the front office to enable you to repeat failed captures manually if necessary. In the case that no technical email address is configured for your shop we recommend to check the affected reservations at regular intervals.

**basket\_order\_amount**

Range of Values	N-7
Example	2895
Explanation	Mandatory. Order value without shipping costs in Cent. Is displayed to the customer during payment.

Table 4-3: Parameter basket\_order\_amount

**basket\_shipping\_costs**

Range of Values	N-7
Example	690
Explanation	Mandatory. Shipping costs in Cent. Is displayed to the customer during payment.

Table 4-4: Parameter basket\_shipping\_costs

**basketid**

Range of Values	ANL[/_+;\$]-50
Example	ba_100202
Explanation	Optional, identification of ordered shopping basket or article.

Table 4-5: Parameter *basketid***basketitem\_amount0, basketitem\_amount1, ...**

Range of Values	N-7
Example	1250
Explanation	Price of an article in Cent. Is displayed to the customer during payment.

Table 4-6: Parameter *basketitem\_amount0, basketitem\_amount1, ...***basketitem\_name0, basketitem\_name1, ...**

Range of Values	ANL-32
Example	Gabel
Explanation	Optional. Name of an article. Is displayed to the customer during payment.

Table 4-7: Parameter *basketitem\_name0, basketitem\_name1, ...***basketitem\_number0, basketitem\_number1, ...**

Range of Values	ANL-32
Example	E1234CA
Explanation	Optional. The International Article Number (EAN or GTIN) of the article. Is displayed to the customer during payment.

Table 4-8: Parameter *basketitem\_number0, basketitem\_number1, ...***basketitem\_qty0, basketitem\_qty1, ...**

Range of Values	N-9
Example	1
Explanation	Optional. Ordered quantity of an article (at least 1). Is displayed to the customer during payment.

Table 4-9: Parameter *basketitem\_qty0, basketitem\_qty1, ...*



**command**

Range of Values	FIX
Example	sslform
Explanation	Mandatory, request definition

*Table 4-10: Parameter command***currency**

Range of Values	A3
Example	EUR
Explanation	Mandatory, currency code as defined by ISO 4217. Currently only EUR is supported.

*Table 4-11: Parameter currency***customer\_addr\_addon**

Range of Values	AL-30
Explanation	Optional, additional address information.

*Table 4-12: Parameter customer\_addr\_addon***customer\_addr\_city**

Range of Values	AL-30
Example	Bonn
Explanation	Mandatory, city.

*Table 4-13: Parameter customer\_addr\_city***customer\_addr\_country**

Range of Values	[A-Z]2
Example	DE
Explanation	Mandatory, country code according to ISO 3166-1.

*Table 4-14: Parameter customer\_addr\_country***customer\_addr\_number**

Range of Values	ANL-8
Example	47
Explanation	Optional, street number.

*Table 4-15: Parameter customer\_addr\_number*

**customer\_addr\_street**

Range of Values	AL-30
Example	Hauptstraße
Explanation	Optional, street.

Table 4-16: Parameter *customer\_addr\_street***customer\_addr\_zip**

Range of Values	ANL[-]-10
Example	53115
Explanation	Mandatory, post code.

Table 4-17: Parameter *customer\_addr\_zip***customer\_email**

Range of Values	AN[@-+_-]-60
Example	fruehling72@email.de
Explanation	Optional, email address of the customer.

Table 4-18: Parameter *customer\_email***customer\_firstname**

Range of Values	AL[-]-24
Example	Klaus
Explanation	Mandatory, first name.

Table 4-19: Parameter *customer\_firstname***customer\_id**

Range of Values	ANL[-_/-]-20
Example	K1234ZX
Explanation	Optional, customer number.

Table 4-20: Parameter *customer\_id***customer\_lastname**

Range of Values	AL[-]-100
Example	Schulze
Explanation	Mandatory, surname.

Table 4-21: Parameter *customer\_lastname*

**mac**

Range of Values	N[abcdef]40
Example	0fab98c2d51992adff4732e2c5ab8599f15723e3
Explanation	Mandatory. Message Authentication Code, used to safeguard against payment data manipulation.

Table 4-22: Parameter mac

**notificationfailedurl**

Range of Values	AN[:/_-?;&=%]-255
Example	http://shop.mycompany.com/notification_failed
Explanation	Optional. If the shop cannot be informed about the outcome of the payment, a result page with a link to this URL is displayed to the customer. If not submitted Sparkassen-Internetkasse displays a standard error page in this case.

Table 4-23: Parameter notificationfailedurl

**notifyurl**

Range of Values	AN[:/_-?;&=%]-255
Example	http://shop.mycompany.com/notify
Explanation	Optional. URL where the shop notification will be sent to. If the parameter is not submitted the URL that is configured in the front office will be used, see below.

Table 4-24: Parameter notifyurl

**orderid**

Range of Values	AN[-/]-17
Example	order-10123487
Explanation	Mandatory, transaction number

Table 4-25: Parameter orderid

**paymentmethod**

Range of Values	FIX
Example	paydirekt
Explanation	Mandatory, "paydirekt"

Table 4-26: Parameter paymentmethod

**sessionid**

Range of Values	AN[-_+]-50
Example	S9805976-AB
Explanation	Optional, identification of current session in online shop, used to notify the shop

Table 4-27: Parameter *sessionid***sslmerchant**

Range of Values	ANS-16
Example	mycompany
Explanation	Mandatory, trader identification (form service login of the shop)

Table 4-28: Parameter *sslmerchant***transactiontype**

Range of Values	FIX
Example	preauthorization
Explanation	Optional, type of transaction. Possible values are preauthorization and authorization. If not submitted preauthorization is assumed.

Table 4-29: Parameter *transactiontype***MAC - Message Authentication Code**

For more information on calculating the MAC, see the Appendix of the Main Document.

Deviating from the description in the Main Document, all transferred parameters in alphabetic order of the parameter names (equivalent to the order in the table above) are used to calculate the MAC.

**Response of the Sparkassen-Internetkasse server**

As a response to this request transmitted by redirect, Sparkassen-Internetkasse sends a response to the customer which redirects the customer to paydirekt.

**4.2.2 Shop notification**

After the payment has been processed Sparkassen-Internetkasse informs the shop about the result (step 14 in Section "Course of transaction", p. 21). Sparkassen-Internetkasse sends the notification to the URL submitted in the `notify-url` parameter. If this parameter was not submitted the shop notification is sent to the URL for shop notification configured in the front office. In this request Sparkassen-Internetkasse transfers the parameters listed in the following table. The shop notification is sent even if an error or timeout occurs or if the customer aborted payment.

**Note**

In order to receive an SSL encrypted shop notification you need an SSL certificate issued by an accepted certificate authority for the server you specified in the URL for shop notification. Certificates you generated yourself are not accepted. You will not receive a shop notification if your SSL certificate is not accepted by the Sparkassen-Internetkasse server. You will also not receive a shop notification if the server name in the URL for shop notification does not match the server for which the SSL certificate was issued. This also applies if, for example, you enter the IP address instead of the server name in the URL for shop notification.

**Important**

If your shop notification is transferred SSL encrypted, please test if the shop notification still works when you have to exchange your SSL certificate.

**amount**

Range of Values	N[,]-8
Example	22,60
Explanation	Amount with decimal comma

Table 4-30: Parameter amount

**basketid**

Range of Values	ANLS-50
Example	ba_100202
Explanation	Identification of ordered shopping basket or article

Table 4-31: Parameter basketid

**currency**

Range of Values	A3
Example	EUR
Explanation	Currency code according to ISO 4217

Table 4-32: Parameter currency

**directPosErrorCode**

Range of Values	N-3
Example	0
Explanation	Primary response code of the system

Table 4-33: Parameter directPosErrorCode

**directPosErrorMessage**

Range of Values	ANSL-255
Example	
Explanation	Success or error message

Table 4-34: Parameter *directPosErrorMessage***mac**

Range of Values	N[abcdef]40
Example	0fab98c2d51992adff4732e2c5ab8599f15723e3
Explanation	Message authentication code to safeguard against manipulations of the shop notification

Table 4-35: Parameter *mac***orderid**

Range of Values	AN[-/]-17
Example	order-10123487
Explanation	Unique transaction number identifying the transaction for the shop

Table 4-36: Parameter *orderid***rc**

Range of Values	N-4
Example	000
Explanation	Secondary return code of the payment system.

Table 4-37: Parameter *rc***retrefnum**

Range of Values	ANLS-50
Example	6F781621CJ033261R
Explanation	paydirekt transactions number

Table 4-38: Parameter *retrefnum***sessionid**

Range of Values	AN[-_+]-50
Example	S9805976-AB
Explanation	Identification of the current online shop session as specified in the request

Table 4-39: Parameter *sessionid*

**trefnum**

Range of Values	AN[/_+]=50
Example	order_10123487_01
Explanation	Sparkassen-Internetkasse transaction number

*Table 4-40: Parameter trefnum***Message Authentication Code - MAC**

In the `mac` parameter the shop notification contains the message authentication code (MAC), which enables you to detect a manipulation of the shop notification. This requires your application to calculate the MAC from the parameters of the shop notification. If the MAC calculated in this way matches the MAC in the response message, you can assume that the response message has not been manipulated.

Additional information on the calculation of the MAC can be found in the Appendix of the Main Document.

Deviating from the description in the Main Document, all transferred parameters in alphabetic order of the parameter names (equivalent to the order in the table above) are used to calculate the MAC.

**URL for shop notification**

You can submit the URL for shop notification in the request message in the `notifyurl` parameter. If this parameter has not been submitted Sparkassen-Internetkasse uses the URL configured in the front office. You can configure the URL under Configuration - Form Service. Enter the URL in the input field Shop notification URL. You can also configure the key for the MAC calculation in this form. (If a MAC key has already been configured it is not displayed for security reasons.) The field CSS URL is not relevant for paydirekt payments. Click Save after you have filled in all the required input fields.

Figure 4-2: Configuring the shop notification URL

### Parameter overview shop notification

As a response to this message Sparkassen-Internetkasse expects a confirmation from your shop (step 15 in Section “Course of transaction”, p. 21).

The answer to the shop notification is a URL encoded document which contains the single parameter `rurl`s. The value of this parameter is the shop URL where Sparkassen-Internetkasse will redirect the customer to (step 16 and 17 in Section “Course of transaction”, p. 21).

The answer to a shop notification has to be given within 30 seconds.

Parameter	Range of Values	Example	Explanation
<code>rurl</code> s	AN[:./_?;&=%]-255	<code>http://www.myshop.com/cgi-bin/auth_formdata</code>	URL to redirect the customer to

Table 4-41: Parameter overview shop notification - response

### Example

A response message could look like this:



#### Listing 4-1

```
rurl=http://www.myshop.com/cgi-bin/shopres?sid=2347286yqwq6
```



## 5 Appendix

### 5.1 Test data

Payments on the test system are only simulated. The test system communicates with the paydirekt Sandbox - the paydirekt test system. If requested we will configure your test account to use paydirekt. Please contact your representative for details about the login and password of the test customer account. Use amounts greater than 3 EUR and lower than 500 EUR to carry out successful test payments.