



Adding the payment button for iDEAL

Implementation Guide

Document version 2.0

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1. HISTORY OF THE DOCUMENT

| Version | Author | Date | Comment |
|---------|--------------|------------|---|
| 2.0 | Lyra Network | 11/02/2020 | Document overhaul. |
| 1.1 | Lyra Network | 08/08/2019 | Addition of chapters: <ul style="list-style-type: none">• Operations available via the Merchant Back Office• Generating a payment request• Understanding the result of an iDeal authorization• Operations available via the Merchant Back Office |
| 1.0 | Lyra Network | 17/10/2016 | Document creation |

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2. OBTAINING HELP

Viewing online documentation

Looking for help? See our online documentation



| | |
|----------------------------------|---|
| In France | https://payzen.io/fr-FR/faq/sitemap.html |
| In Europe | https://payzen.io/en-EN/faq/sitemap.html |
| In Latin America (except Brazil) | https://payzen.io/lat/faq/sitemap.html |
| In Brazil | https://payzen.io/pt-BR/faq/sitemap.html |
| In India | https://payzen.io/in/faq/sitemap.html |

We are constantly improving the understanding and proper use of our technical documentation. We appreciate any constructive remarks on your part.

Please send your comments and suggestions about the documentation to the e-mail address support@payzen.eu.

Getting in touch with technical support

For technical inquiries or support, you can reach us from Monday to Friday, between 9 a.m. and 6 p.m.

| | By phone | By e-mail |
|----------------------------------|--|--|
| In France |  0811708709 <small>Service fee 0,06 € / min + call charge</small> | support@payzen.eu |
| In Europe |  +33 820902103 <small>Service fee 0,12 € / min + call charge</small> | support@payzen.eu |
| In Latin America (except Brazil) | N/A | soporte@payzen.lat |
| In Brazil | +55 (11) 3336-9217 +55 (11) 3336-9209 | suporte@payzen.com.br |
| In India | +91 (022) 33864910 / 932 | support.pg.in@lyra.com |

and via your Merchant Back Office, menu **Help** > **Contact support**

To facilitate the processing of your demands, you will be asked to communicate your shop ID (an 8-digit number).

This information is available in the “registration of your shop” e-mail or in the Merchant Back Office (**Settings** > **Shop** > **Configuration**).

3. PRESENTATION



iDEAL is the most frequently used payment method in the Netherlands.

Based on wire transfer, it allows the buyer to be redirected to the secure payment site of his/her bank and thus to transfer the amount to pay to the merchant's account, to pay his/her invoices, etc...

The merchant receives a real-time confirmation of payment, allowing him to ship the order more quickly.



Supported currencies

- EUR



Supported countries

- The Netherlands



Additional information

- Debit is immediate (no capture delay).
- Transaction validation is automatic (no manual validation).
- No capture file is sent to the acquirer.

4. TECHNICAL DETAILS

Important information regarding the addition of this payment method:

- **Type of integration**

Only available via integration with payment form redirection.

- **Authorization validity period**

0 day

- **Network code**

IDEAL

- **Value of the vads_card_brand field**

IDEAL

- **Supported currencies**

EUR

- **Supported countries**

NL

- **Operations available for transactions**

- None

- **Restrictions**

This payment method does not support the following functionalities:

- Integration by iframe
- Installment payment
- Tokenization and payment by token
- Recurring payment by token
- MOTO payment
- Cancellation
- Transaction duplication
- Transaction modification
- Transaction validation
- Refund (full and partial)
- Bank reconciliation and chargebacks

5. PREREQUISITES

Bank requirements

- **For the merchant**
 - Create a Rabobank bank account (bank affiliated to the iDEAL payment method linked with PayZen).
 - Create an iDEAL https://ideal.rabobank.nl/ideal/logon_rabo.do account
See chapter **Creating an iDEAL account**.
 - Sign and submit the iDEAL account to iDEAL.
 - Wait for the account to be activated at Rabobank.
The delay can be quite long considering the different validations.
- **For the buyer**
 - Use the services of a Dutch bank affiliated to the iDEAL payment.
 - Have a billing address in the Netherlands.

Prerequisites PayZen

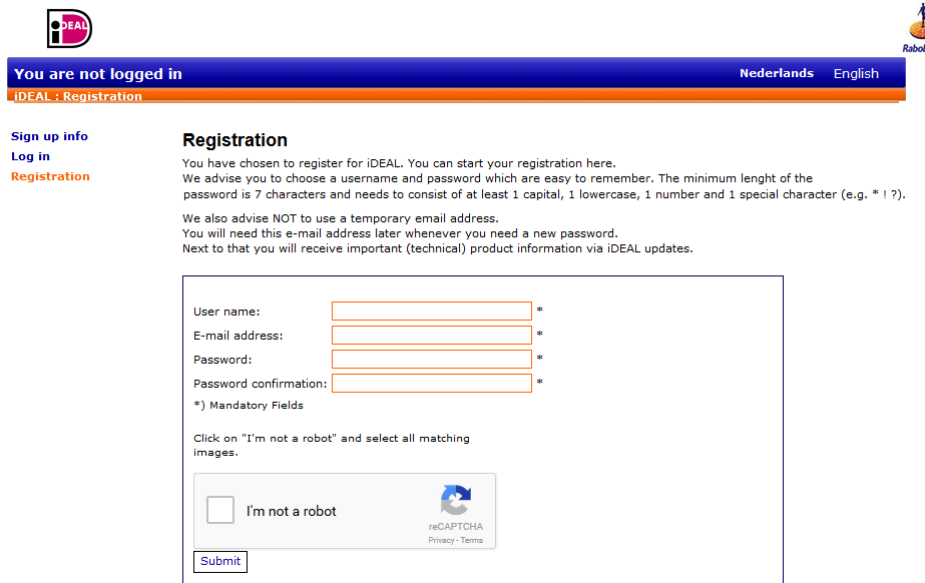
- **For the merchant**
 - Sign up for the iDEAL payment option.
 - Communicate the iDEAL contract number (Merchant ID) to the contact person of the PayZen payment platform.

Note :
PayZen signs in to the iDEAL interface so that the buyer can execute his or her payment.
- **For the buyer**
 - None

5.1. Creating an account iDEAL

To add the iDEAL payment method to the payment page, it is required to have created an iDEAL account.

1. Go to: https://ideal.rabobank.nl/ideal/logon_rabo.do
2. Create your iDEAL merchant account by filling out the following form:



The screenshot shows the iDEAL registration page. At the top, there is a navigation bar with the iDEAL logo on the left, the text "You are not logged in" in the center, and language options "Nederlands" and "English" on the right. Below the navigation bar, the page title is "iDEAL: Registration". On the left side, there are links for "Sign up info", "Log in", and "Registration" (which is highlighted in orange). The main content area is titled "Registration" and contains the following text: "You have chosen to register for iDEAL. You can start your registration here. We advise you to choose a username and password which are easy to remember. The minimum length of the password is 7 characters and needs to consist of at least 1 capital, 1 lowercase, 1 number and 1 special character (e.g. * ! ?). We also advise NOT to use a temporary email address. You will need this e-mail address later whenever you need a new password. Next to that you will receive important (technical) product information via iDEAL updates." Below this text is a registration form with four input fields: "User name:", "E-mail address:", "Password:", and "Password confirmation:". Each field has an asterisk (*) to its right, indicating it is mandatory. Below the fields, there is a note: "*) Mandatory Fields". Underneath, there is a CAPTCHA section with the text: "Click on 'I'm not a robot' and select all matching images." There is a checkbox labeled "I'm not a robot" and a reCAPTCHA logo with links for "Privacy-Terms". A "Submit" button is located at the bottom left of the form area.

Figure 1: Subscription

- **User name:** user name
 - **E-mail address :** e-mail address. This e-mail address will be used as user identifier by iDEAL.
 - **Password:** user password
For security reasons, your password must consist of minimum 8 characters and include a combination of uppercase and lowercase characters, digits and special characters, such as +, ?, *.
 - **Password confirmation:** confirm your password.
3. Click **Submit** to finalize your subscription.
An e-mail is sent to the address specified in the form. It contains a link allowing to finalize the subscription to iDEAL.
 4. Enter your **user name** and **password** to authenticate yourself once again.
 5. Specify all the required merchant details.

Application data

Please complete if necessary the application data to proceed with the application for iDEAL.

| Merchant data | Account settings | Access data | Adjust public key |
|--|------------------|-------------|-------------------|
| Merchant identification | | | |
| Merchant ID: <input type="text"/> | | | |
| Merchant name: <input type="text"/> * | | | |
| Trade name: <input type="text"/> | | | |
| IBAN: <input type="text"/> * | | | |
| BIC: <input type="text"/> * | | | |
| Account number: <input type="text"/> | | | |
| KvK number: <input type="text"/> | | | |
| Type of business: <input type="text" value="Furniture"/> * | | | |
| Place of business: <input type="text"/> * | | | |
| Website (www address): <input checked="" type="checkbox"/> http://www.***.***.*** | | | |
| E-mail address: <input type="text" value="***@***.com"/> | | | |
| Commercial contact person | | | |
| Name: <input type="text"/> * | | | |
| Phone number: <input type="text"/> * | | | |
| E-mail address: <input type="text" value="***@***.com"/> * | | | |
| Technical contact person | | | |
| Name: <input type="text"/> * | | | |
| Phone number: <input type="text"/> * | | | |
| E-mail address: <input type="text" value="***@***.fr"/> * | | | |
| Method of integration | | | |
| Way of integration: <input type="text" value="Lyra-Network GmbH"/> * | | | |
| <input checked="" type="checkbox"/> Read this information about the methods of integration. | | | |
| <input type="button" value="Submit"/> | | | |

Figure 2: Merchant details

Very important: it is mandatory to select **Lyra-Network GmbH** from the drop-down list **Way of integration**. Once the form is submitted, it is not modifiable.

6. Click the **Submit** button.

iDEAL sends an e-mail to notify the merchant that he or she will receive an e-mail with a contract to be signed and sent back.

7. Send back the signed contract to iDEAL.

8. Send your **Merchant ID** to the PayZen payment platform.

The Merchant ID can be viewed in the iDEAL dashboard (<https://ideal.rabobank.nl>), or in the activation e-mail of your iDEAL merchant account.

The activation status of the iDEAL account can be seen in the iDEAL dashboard:

The status of your application(s) is shown in the table below.

ApplicationIntegrationActivationStatus

Registration: finished ✓

Application: finished ✓

Verification: finished ✓

Integration: started —

Contract: finished ✓

Activation: none ✗

Test cases

<< Previous page << >> Next page >>

| | Test status | Name | Action |
|---|-------------|-------------------------------|-------------------------|
| — | I - Initial | Testcase 1: Success | Details |
| — | I - Initial | Testcase 2: Cancelled | Details |
| — | I - Initial | Testcase 3: Expired | Details |
| — | I - Initial | Testcase 4: Open | Details |
| — | I - Initial | Testcase 5: Failure | Details |
| — | I - Initial | Testcase 6: Directory Request | Details |
| — | I - Initial | Testcase 7: Format error | Details |

Merchant ID: Name:

Priority: Active:

Activated: Test status:

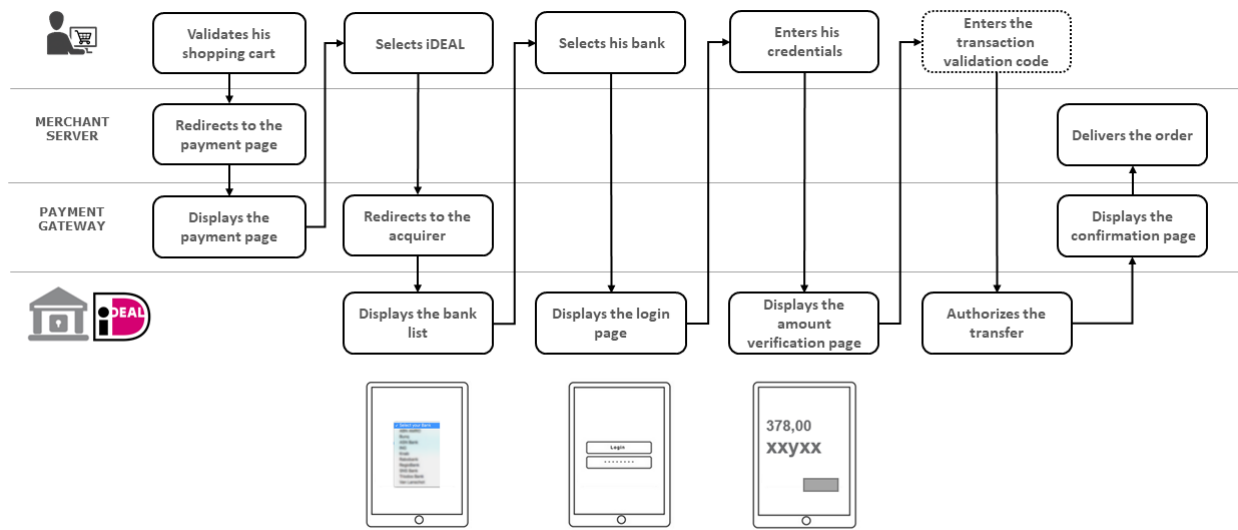
Test case group:

Figure 3: Activation tab

The iDEAL account will be active after all the statuses have been validated.

6. PAYMENT PROCESS

The diagram below presents the exchange process from the point of view of the buyer.



7. ESTABLISHING INTERACTION WITH THE PAYMENT GATEWAY

The interaction with the payment gateway is described in the *Hosted Payment Page Implementation Guide*, available in the website.

The merchant website and the payment gateway interact by exchanging data.

To create a payment, this data is sent in an HTML form via the buyer's browser.

At the end of the payment, the result is transmitted to the merchant website in two ways:

- automatically by means of notifications called Instant Notification URLs (also known as IPN for Instant Payment Notification).
- by the browser when the buyer clicks the button to return to the merchant website.

To guarantee the security of the exchange, the data is signed with a key known only to the merchant and the payment gateway.

8. SETTING UP NOTIFICATIONS

Several types of notifications are provided in the Merchant Back Office.

- Instant Payment Notification URL call
- E-mail sent to the merchant
- E-mail sent to the buyer
- SMS sent to the merchant
- SMS sent to the buyer

They allow to manage the events (payment accepted, payment abandoned by the buyer, payment canceled by the merchant, payment validated by the merchant, etc.) that will trigger a notification to the merchant website, the merchant or the buyer.

The notifications of Instant Payment Notification URL call type are the most important as they represent the only reliable way for the merchant website to obtain the payment result.

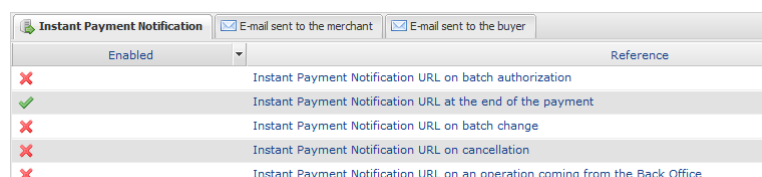
If the payment gateway is unable to access the URL of your page, an e-mail will be sent to the shop administrator.

It contains:

- The HTTP code of the encountered error
- Parts of error analysis
- Its consequences
- Instructions to resend from the Merchant Back Office the notification to the URL already specified above.

To access notification rule management:

Go to the following menu: **Settings > Notification rules.**



| Instant Payment Notification | |
|---|--|
| <input checked="" type="checkbox"/> E-mail sent to the merchant | <input checked="" type="checkbox"/> E-mail sent to the buyer |
| Enabled | Reference |
| ✘ | Instant Payment Notification URL on batch authorization |
| ✔ | Instant Payment Notification URL at the end of the payment |
| ✘ | Instant Payment Notification URL on batch change |
| ✘ | Instant Payment Notification URL on cancellation |
| ✘ | Instant Payment Notification URL on an operation coming from the Back Office |

8.1. Setting up the Instant Payment Notification

This rule allows to notify the merchant website in the following cases:

- Payment accepted
- Payment refused

This notification is required to communicate the result of a payment request.

It will inform the merchant website of the payment result even if your client has not clicked the “Return to the shop” button.

1. Right-click the **Instant Payment Notification URL at the end of payment** line.
2. Select **Manage the rule**.
3. Enter the **E-mail address(es) to notify in case of failure** field in the **General settings** section.
To specify several e-mail addresses, separate them with a semi-colon.
4. Check the box **Automatic retry in case of failure** if you wish to authorize the gateway to automatically resend the notification in case of a failure (can be done up to 4 times).
5. In the **Instant Payment Notification URL of the API form V1, V2** section, specify the URL of your page in the fields **URL to notify in TEST mode** and **URL to notify in PRODUCTION mode** if you wish to receive notifications in the form API format.
6. Save the modifications.

9. GENERATING A PAYMENT FORM

To generate a payment request, you must create an HTML form as follows:

```
<form method="POST" action="https://secure.payzen.eu/vads-payment/">
  <input type="hidden" name="parameter1" value="value1" />
  <input type="hidden" name="parameter2" value="value2" />
  <input type="hidden" name="parameter3" value="value3" />
  <input type="hidden" name="signature" value="signature"/>
  <input type="submit" name="pay" value="Pay"/>
</form>
```

It contains:

The following technical elements:

- The `<form>` and `</form>` tags that allow to create an HTML form.
- The `method="POST"` attribute that defines the method used for sending data.
- The `action="https://secure.payzen.eu/vads-payment/"` attribute that defines where to send the form data.

Form data:

- The shop ID.
- Information about the payment depending on the use case.
- Additional information depending on your needs.
- The signature that ensures the integrity of the form.

This data is added to the form by using the `<input>` tag:

```
<input type="hidden" name="parameter1" value="value1" />
```

For setting the `name` and `value` attributes, see the **Data dictionary** chapter also available in the online document archive.

All the data in the form must be encoded in **UTF-8**.

Special characters (accents, punctuation marks, etc.) will then be correctly interpreted by the payment gateway. Otherwise, the signature will not be computed correctly and the form will be rejected.

The **Pay** button that will allow to send data:

```
<input type="submit" name="pay" value="Pay"/>
```

Different use cases are presented in the chapters below. They will allow you to adapt your payment form to your needs.

The following table lists the different formats that you can encounter when building your form.

| Notation | Description |
|-----------|--|
| a | Alphabetic characters (from 'A' to 'Z' and from 'a' to 'z') |
| n | Numeric characters |
| s | Special characters |
| an | Alphanumeric characters |
| ans | Alphanumeric and special characters (except '<' and '>') |
| 3 | Fixed length of 3 characters |
| ..12 | Variable length up to 12 characters |
| json | <p>JavaScript Object Notation. Object containing key/value pairs separated by commas. It starts with a left brace "{" and ends with a right brace "}". Each key/value pair contains the name of the key between double-quotes followed by ":", followed by a value. The name of the key must be alphanumeric. The value can be:</p> <ul style="list-style-type: none"> • a chain of characters (in this case it must be framed by double-quotes) • a number • an object • a table • a boolean • empty <p>Example: {"name1":45,"name2":"value2", "name3":false}</p> |
| enum | <p>Characterizes a field with a complete list of values. The list of possible values is given in the field definition.</p> |
| Enum list | <p>List of values separated by a ";". The list of possible values is given in the field definition. Example: vads_payment_cards=VISA;MASTERCARD</p> |
| map | <p>List of key / value pair separated by a ";". Each key / value pair contains the name of the key followed by "=", followed by a value. The value can be:</p> <ul style="list-style-type: none"> • a chain of characters • a boolean • a json object • an xml object <p>The list of possible values for each key/value pair is provided in the field definition. Example: vads_theme_config=SIMPLIFIED_DISPLAY=true;RESPONSIVE_MODEL=Model_1</p> |

9.1. Creating a wire transfer request

IMPORTANT

The validation mode as well as the capture delay are not taken into account during an iDeal payment.

1. Use all the fields presented in the table below to create your payment form.

| Field name | Description | Format | Value |
|----------------------------|--|---------|---|
| vads_order_id | Order ID | ans..64 | E.g.: 2-XQ001 |
| vads_amount | Payment amount in the smallest currency unit (cents for euro). | n..12 | E.g.: 3000 for 30,00 EUR |
| vads_currency | Numeric currency code to be used for the payment, in compliance with the ISO 4217 standard (numeric code). | n3 | E.g.: 978 for euro (EUR) |
| vads_payment_config | Payment type | enum | SINGLE |
| vads_action_mode | Acquisition mode for payment method data | enum | INTERACTIVE |
| vads_page_action | Action to perform | enum | PAYMENT |
| vads_ctx_mode | Defines the mode of interaction with the payment gateway. | enum | TEST or PRODUCTION |
| vads_site_id | Shop ID | n8 | E.g.: 12345678 |
| vads_trans_date | Date and time of the payment form in UTC format | n14 | Respect the YYYYMMDDHHMMSS format E.g.: 20200101130025 |
| vads_trans_id | Transaction number | an6 | E.g.: xrT15p |
| vads_version | Version of the exchange protocol with the payment gateway | enum | V2 |

2. Add optional fields depending on your requirements (see chapter **Using additional features** of the *Hosted Payment Page Implementation Guide* available in our online document archive).
3. Compute the value of the **signature** field using all the fields of your form that start with **vads_** (see chapter **Computing the signature** of the *Hosted Payment Page Implementation Guide* available in our online document archive).

10. SENDING THE PAYMENT REQUEST

The buyer will be able to finalize his/her purchase once he/she is redirected to the payment page.

The buyer's browser must transmit the payment form data.

10.1. Redirecting the buyer to the payment page

The URL of the payment gateway is:

<https://secure.payzen.eu/vads-payment/>

Example of parameters sent to the payment gateway:

```
<form method="POST" action="https://secure.payzen.eu/vads-payment/">
<input type="hidden" name="vads_action_mode" value="INTERACTIVE" />
<input type="hidden" name="vads_amount" value="2990" />
<input type="hidden" name="vads_ctx_mode" value="TEST" />
<input type="hidden" name="vads_currency" value="978" />
<input type="hidden" name="vads_cust_country" value="FR" />
<input type="hidden" name="vads_cust_email" value="me@example.com" />
<input type="hidden" name="vads_order_id" value="CMD012859" />
<input type="hidden" name="vads_page_action" value="PAYMENT" />
<input type="hidden" name="vads_payment_config" value="SINGLE" />
<input type="hidden" name="vads_site_id" value="12345678" />
<input type="hidden" name="vads_trans_date" value="20190626101407" />
<input type="hidden" name="vads_trans_id" value="362812" />
<input type="hidden" name="vads_version" value="V2" />
<input type="hidden" name="signature" value="NM25DPLKEbtGEHCDHn8MBT4ki6aJI/ODaWhCzCnAfvY=" />
<input type="submit" name="pay" value="Pay" />
</form>
```

10.2. Processing errors

If the payment gateway detects an error while receiving the form, an error message will appear and the buyer will not be able to proceed to the payment.

In TEST mode

The message indicates the source of the error and provides a link to the error code description to help you fix it.

In PRODUCTION mode

The message simply indicates to the buyer that a technical problem occurred.

In both cases the merchant receives a notification e-mail.

It contains:

- the source of the error,
- a link to possible causes to facilitate its analysis,
- all the fields of the form.

A description of the error codes with their possible causes is available on our website

<https://payzen.io/en-EN/error-code/error-00.html>

11. ANALYZING THE PAYMENT RESULT

The analysis of the payment result is described in the *Hosted Payment Page Implementation Guide* available in our online documentation archive (<https://payzen.io/en-EN/>).

This document only describes the steps of processing data relative to the response of a payment made with iDEAL.

11.1. Processing the response data

Here is an example of analysis to guide you through processing the response data.

1. Identify the order by retrieving the value of the **vads_order_id** field if you have transmitted it in the payment form.

Make sure that the order status has not already been updated.

2. Retrieve the payment result transmitted in the **vads_trans_status** field.

Its value allows you to define the order status.

| VALUE | DESCRIPTION |
|------------------|---|
| CAPTURED | Captured The transaction is accepted. It is visible in the Captured transactions tab. Debit is immediate (no capture file is sent to the acquirer). |
| REFUSED | Declined Transaction is declined. See the following chapter to obtain more information on the rejected payment. |
| ABANDONED | Abandoned payment abandoned by the buyer. The transaction has not been created, and therefore cannot be viewed in the Merchant Back Office. |

3. Retrieve the payment reference transmitted in the **vads_trans_id** field.

4. Retrieve the value of the **vads_trans_date** field to identify the payment date.

5. Retrieve the used amount and currency. To do this, retrieve the values of the following fields:

| Field name | Description |
|----------------------|--|
| vads_amount | Payment amount in the smallest currency unit. |
| vads_currency | Numeric code of the currency used for the payment. |

6. Retrieve the used payment method by analyzing the **vads_card_brand** field.

7. Retrieve all the order, buyer and shipping details.

These details will be provided in the response only if they have been transmitted in the payment form.

Their values are identical to the ones submitted in the form.

8. Proceed to order update.

11.2. Analyzing the result of the authorization request

The result of the authorization is specified in the **vads_auth_result** field.

Below are the values returned by the acquirer:

| CODE | DESCRIPTION |
|------|--|
| 0 | Payment accepted |
| 1 | Payment on hold |
| 2 | Payment canceled |
| 3 | Payment expired (the user was redirected but did not finalize the payment) |
| 99 | Payment failed |

12. OPERATIONS AVAILABLE VIA THE MERCHANT BACK OFFICE

No operations are authorized for an iDEAL transaction, whether it is accepted or rejected.