## iDEAL mobile Quick Guide

iDEAL version 3.3.1



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For any questions concerning this document or requests for further information, please contact your iDEAL Acquiring bank or Collecting Payment Service Provider.





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## 1 Introduction

### 1.1 Target audience

This document provides iDEAL Merchants with information on the implementation of iDEAL for mobile platforms (referred to as 'iDEAL mobile'). This information is additional to the information provided in the Merchant Integration Guide and the Mobile Addendum and does not result in any changes in the current iDEAL specifications. The use of iDEAL mobile only affects the implementation at the Consumer bank (Issuer). It has no influence on the messages exchanged between the iDEAL Merchant and his bank. However, it is important for Merchants to understand the differences with a regular iDEAL implementation, especially when it comes to the process of redirecting the Consumer from Merchant to Issuing bank and vice versa.

This Quick Guide builds on the iDEAL Merchant Integration Guide and the accompanying Mobile Addendum. Readers not familiar with the general information about iDEAL are advised first to take note of the information presented in these documents, so that the mobile specific information contained in this Quick Guide can be placed in the proper context.

### 1.2 Document structure

Chapter 1 provides an introduction to this document. Chapter 2 of this document provides an overview of the possible differences in the redirect from the Merchant to the Issuer between regular iDEAL and iDEAL mobile. Chapter 3 describes four possible scenarios between Merchant and Issuer in the completion of an iDEAL mobile payment, including some notes for the Merchant regarding the use of the merchantReturnURL and the use of the issuerAuthenticationURL.

### 1.3 Revisions

| Version | Description   | Release date |
|---------|---------------|--------------|
| 1.0     | Final Version | 16-1-2014    |





## 2 Redirect to the Issuer; mobile app or (mobile) web page

The iDEAL mobile transaction flow is almost identical to the transaction flow in a regular iDEAL transaction. The only additional step is the redirect to the 'landing page' (using the issuerAuthenticationURL) where the Consumer, using a mobile device, can choose to be redirected to the Issuer's (mobile) web page or to the Issuer's mobile banking app.



Figure 1: Representation of the steps in an iDEAL mobile transaction.

Relevant details about this redirect from the Merchant to the Issuer's mobile channel:

- The Issuer decides which Consumer to redirect to which channel. For example, some Issuers may treat users of tablet devices the same as mobile users while others will treat them like PC users;
- The Merchant has no influence on this redirect by the Issuer, there is only one issuerAuthenticationURL for the Merchant to use in all transactions, not a separate URL for mobile iDEAL transactions;
- 3. The issuerAuthenticationURL will always start with 'https', redirecting the Consumer to this URL will usually open a page on the mobile device's browser. Please note that for the Merchant's mobile app it is mandatory to offer the issuerAuthenticationURL to the mobile device's Operating System (OS). The OS will open this URL in its native browser app. <u>It is NOT allowed to open the issuerAuthenticationURL inside the Merchant's mobile app via, for example, webview;</u>





- 4. If the Issuing bank has integrated iDEAL mobile in its mobile banking app, the Consumer is offered the option, on a 'landing page', to open the app or pay via the (mobile) web page. On this 'landing page' the Consumer might be offered the option to download the latest version of the mobile banking app, if it is not yet installed on the Consumer's device;
- 5. After the Consumer has been authenticated by the Issuer in either the (mobile) web page or mobile banking app and has approved the payment, he is redirected back to the Merchant in the normal way, using the merchantReturnURL. The merchantReturnURL can start with 'http(s)'. If the Consumer has initiated the payment from the Merchant's mobile app, the merchantReturnURL may start with the Merchant's *app handler*, which will redirect the Consumer directly to the Merchant app.





## 3 Four scenarios for completion of a mobile iDEAL payment

There are currently four different scenarios for the completion of an iDEAL payment. The Merchant can use a (mobile) web page or a mobile app to present his shop to the Consumer. The Issuer can offer a (mobile) web page or a mobile banking app to the Consumer for completion of the iDEAL payment. In the following paragraphs these four scenarios are illustrated.

| §   | Merchant          | Issuing Bank       |
|-----|-------------------|--------------------|
| 3.1 | (Mobile) web page | (Mobile) web page  |
| 3.2 | (Mobile) web page | Mobile banking app |
| 3.3 | Mobile app        | (Mobile) web page  |
| 3.4 | Mobile app        | Mobile banking app |

Table 1 Four possible scenarios for the completion of an iDEAL mobile payment

## 3.1 Consumer is redirected from the Merchant's (mobile) web page to the Issuer's (mobile) web page

This is currently the most common iDEAL scenario, as it is identical to the regular desktop iDEAL payment flow. As such there are no specific notes for use in a mobile setting, but this scenario has been added for reasons of completeness.

The Consumer starts the transaction on the Merchant's (mobile) web page and follows these steps:

| Step | Description  | Important notes   |
|------|--|---|
| 1    | The Consumer selects the items to purchase.  |   |
| 2    | The Consumer selects iDEAL as the payment method.  |   |
| 3    | The Consumer selects his Issuing Bank.   |   |
| 4    | The Consumer is redirected to the Issuer of his choice.  |   |
| 5    | The Issuer presents the Issuer<br>'landing page' to the Consumer,<br>which offers the option to complete<br>the iDEAL payment in the Issuer's<br>mobile banking app or in the<br>Issuer's (mobile) web page.                       |   |
| 6    | The Consumer selects the (mobile) web page.  |   |
| 7    | The Consumer is redirected to the<br>Issuer's (mobile) web page where<br>he can log in and authorize the<br>iDEAL payment. After completion of<br>the payment the consumer is shown<br>the result of the payment by the<br>Issuer. |   |
| 8    | The Consumer is redirected back,   | The merchantReturnURL starts with https:// and contains |





|   | by the Issuer, to the Merchant's<br>(mobile) web page using the<br>merchantReturnURL, which was<br>received from the Merchant. | two parameters (entranceCode and transactionID) that<br>can be used to correctly identify the Consumer upon his<br>return. See 3.6 for more information. |
|---|--|--|
| 9 | The Merchant shows the Consumer the result of the iDEAL payment.   |  |

# 3.2 Consumer is redirected from the Merchant's (mobile) web page to the Issuer's mobile banking app

The Consumer starts his customer journey on the Merchant's mobile page and follows these steps:

| Step | Description  | Take note   |
|------|--|---|
| 1    | The Consumer selects the items to purchase.  |   |
| 2    | The Consumer selects iDEAL as the payment method.  |   |
| 3    | The Consumer selects his Issuing Bank.   |   |
| 4    | The Consumer is redirected to the Issuer of his choice.  |   |
| 5    | The Issuer presents the Issuer<br>'landing page' to the Consumer,<br>which offers the option to complete<br>the iDEAL payment in the Issuer's<br>mobile banking app or in the Issuer's<br>(mobile) web page.         |   |
| 6    | The Consumer selects the mobile banking app.   |   |
| 7    | The Consumer is redirected to the<br>Issuer's mobile banking app where he<br>can authorize the iDEAL payment.<br>After completion of the payment the<br>consumer is shown the result of the<br>payment by the Issuer |   |
| 8    | The Consumer is redirected back, by<br>the Issuer, to the Merchant's (mobile)<br>web page using the<br>merchantReturnURL, which was<br>received from the Merchant.   | Because the payment takes place in the bank's app,<br>outside of the web-browser setting, the browser session<br>may be lost. This means the Merchant may not be able to<br>recognize the Consumer using the browser session.<br>Next to this, when redirecting the Consumer back to the<br>Merchant from the bank-app, the MerchantReturnURL is<br>handled by the Operating System of the mobile device.<br>The OS uses the native (default) browser to handle this<br>URL. This discontinues the original browser session if the<br>transaction was initiated in a non-native browser.<br>The merchantReturnURL starts with https:// and contains<br>two parameters (entranceCode and transactionID) that<br>can be used to correctly identify the Consumer upon his<br>return. See 3.6 for more information. |
| 9    | The Merchant shows the Consumer the result of the iDEAL payment.   |   |





## 3.3 Consumer is redirected from the Merchant's mobile app to the Issuer's (mobile) web page

The Consumer starts his customer journey in the Merchant's mobile app and follows these steps:

| Step | Description  | Take note  |
|------|--|--|
| 1    | The Consumer selects the items to purchase.  |  |
| 2    | The Consumer selects iDEAL as the payment method.  |  |
| 3    | The Consumer selects his Issuing Bank.   |  |
| 4    | The Consumer is redirected to the Issuer of his choice.  | It is mandatory for the Merchant to let the Operating<br>System, which is installed on the Consumer's mobile<br>device, handle the issuerAuthenticationURL. See 3.5 for<br>more information.                   |
| 5    | The Issuer presents the Issuer<br>'landing page' to the Consumer, which<br>offers the option to complete the<br>iDEAL payment in the Issuer's mobile<br>banking app or in the Issuer's (mobile)<br>web page.                     |  |
| 6    | The Consumer selects the (mobile) web page.  |  |
| 7    | The Consumer is redirected to the<br>Issuer's mobile banking page where<br>he can log in and authorize the iDEAL<br>payment. After completion of the<br>payment the Consumer is shown the<br>result of the payment by the Issuer |  |
| 8    | The Consumer is redirected back, by<br>the Issuer, to the Merchant's app<br>using the merchantReturnURL, which<br>was received from the Merchant.  | The merchantReturnURL contains an app handler with<br>two parameters (entranceCode and transactionID) that<br>can be used to correctly identify the Consumer upon his<br>return. See 3.6 for more information. |
| 9    | The Merchant shows the Consumer the result of the iDEAL payment.   |  |

# 3.4 Consumer is redirected from the Merchant's mobile app to the Issuer's mobile banking app

The Consumer starts his customer journey in the Merchants mobile app and follows these steps:

| Step | Description   | Take note  |
|------|---|--|
| 1    | The Consumer selects the items to purchase.                             |  |
| 2    | The Consumer selects iDEAL as the payment method.                       |  |
| 3    | The Consumer selects his Issuing Bank.                                  |  |
| 4    | The Consumer is redirected to the Issuer of his choice.                 | It is mandatory for the Merchant to let the Operating<br>System, which is installed on the Consumer's mobile<br>device, handle the issuerAuthenticationURL. See 3.5 for<br>more information. |
| 5    | The Issuer presents the Issuer<br>'landing page' to the Consumer, which |  |





|   |  | -  |
|---|--|--|
|   | offers the option to complete the<br>iDEAL payment in the Issuer's mobile<br>banking app or in the Issuer's (mobile)<br>web page.  |  |
| 6 | The Consumer selects the mobile banking app.   |  |
| 7 | The Consumer is redirected to the<br>Issuer's mobile banking app where he<br>can authorize the iDEAL payment.<br>After completion of the payment the<br>consumer is shown the result of the<br>payment by the Issuer |  |
| 8 | The Consumer is redirected back, by<br>the Issuer, to the Merchant (mobile)<br>web page using the<br>merchantReturnURL, which was<br>received from the Merchant.   | The merchantReturnURL contains an app handler with<br>two parameters (entranceCode and transactionID) that<br>can be used to correctly identify the Consumer upon his<br>return. See 3.6 for more information. |
| 9 | The Merchant shows the Consumer the result of the iDEAL payment.   |  |

#### 3.5 Redirect to Issuer

The Merchant needs to provide the redirect to the Issuer from the browser window or mobile app where the Consumer selected the Issuing bank.

In case the payment is initiated from a Merchant app, it is mandatory to let the Operating System of the mobile device handle the issuerAuthenticationURL.

Because of security risks, it is <u>not allowed</u> to present the Issuer screens in a webview within the Merchant's own app (in-app browser). The complete payment flow, up to the redirect back to the Merchant's app or website, <u>must</u> take place in an app that is known to the Consumer for making payments. This is either the Consumer's chosen browser or the Issuer's mobile app.

### 3.6 Redirect to Merchant

After the Consumer has performed the necessary authorization and payment steps at the Issuer he will be redirected back to the (mobile) website or app of the Merchant with the merchantReturnURL as supplied in the TransactionRequest by the Merchant.

Two GET parameters are added to this URL: the entranceCode<sup>1</sup> with 'ec' as GET parameter name and the transactionID<sup>2</sup> with 'trxid' as GET parameter name. It is also possible for a Merchant to add additional parameters. For example, if the Merchant defines the merchantReturnURL as follows:

http://www.webshop.nl/processpayment?producttype=electronics

<sup>&</sup>lt;sup>2</sup> The TransactionID is a unique 16-digit number within iDEAL. The transactionID is generated by the Acquirer. The number consists of the acquirerID (first four positions) and a unique number generated by the Acquirer (12 positions). It ultimately appears on the payment confirmation (bank statement or account overview of the Consumer and Merchant).



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<sup>&</sup>lt;sup>1</sup> The Transaction.entranceCode is an 'authentication identifier' to facilitate continuation of the session between Merchant and Consumer, even if the existing session has been lost. It is created by the Merchant and sent to the Acquirer and Issuer in messages B and C. The Transaction.entranceCode enables the Merchant to recognise the Consumer associated with a (completed) transaction. The Transaction.entranceCode is sent to the Merchant as part of the merchantReturnURL. The Transaction.entranceCode must have a minimum variation of 1 million and should comprise letters and/or figures (maximum 40 positions). The Transaction.entranceCode is created by the Merchant and passed to the Issuer via messages B (Merchant to Acquirer) and C (Acquirer to Issuer).

#### The final MerchantReturnURL will look something like:

http://www.webshop.nl/processpayment?producttype=electronics&trxid=00
10123456789012&ec=4hd7TD9wRn76w6gGwGFDgdL7jEtb



