Web Services Server to Server Documentation

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# 1 Document History

| Revision | Date                          | Change      |
|----------|-------------------------------|-------------|
| 1        | 1 <sup>st</sup> July 2005     | Version 1   |
| 2        | 1 <sup>st</sup> August 2006   | Version 1.1 |
| 3        | 1 <sup>st</sup> November 2006 | Version 1.2 |
| 4        | 31 <sup>st</sup> January 2007 | Version 1.3 |

### 2 Introduction

#### 2.1 Contents

This instructions manual contains a description of the web services provided by the PBS Payment Server.

#### 2.2 Web services

In the following the web services of the PBS Payment Server are described. The WSDL file to which this document refers can be found at

https://pay.pbs-international.dk/pipay/services/PBSService?wsdl

WSDL or Web Services Description Language is an XML format used to describe network services as a set of endpoints operating on messages containing either document-oriented or procedure-oriented information. The operations and messages are described abstractly, and then bound to a concrete network protocol and message format to define an endpoint. Related concrete endpoints are combined into abstract endpoints (services). WSDL is extensible to allow description of endpoints and their messages regardless of what message formats or network protocols are used for communication. Once the user has access to the WSDL, all necessary formats are available.

#### 2.3 Changes

When integrating to the PBS Payment Server using the web services, you should not assume that the described return parameters are the only ones possible. As the system is expanded, additional parameters may be added.

#### 2.4 Methods

The following methods are available in the PBS Payment Server:

- ping
- sendAuthorization
- sendAuthorizationPrepared (since 1.2)
- sendReauthorization (since 1.2)
- sendReauthorizationPrepared (since 1.2)
- sendReversalAdvice
- sendCapture
- sendCaptureCredit
- sendRecurringAuthorization
- sendRecurringCapture
- sendRecurringCaptureCredit
- findOrder
- findOrders
- contactSupport

Each method is described in the following chapters.

#### 2.5 Ping

### 2.5.1 Description

Purpose: To verify that the PBS Payment Gateway is up and running. The function checks each of the separate parts of the PBS Payment Gateway.

#### 2.5.2 Web service method call

METHOD: ping

**INPUT MESSAGE**: No input parameters

**OUTPUT MESSAGE**: pingResponse

| Parameter        | Description                                   |
|------------------|---|
| "pingReturn"     | Complex parameter types, see ping (following) |
| type="tns1:ping" |   |

#### ping

| Parameter             | Description  |
|-----------------------|--|
| "value"               | String containing date and time of Ping request: e.g. "Aug 24 13:09:35 |
| type="soapenc:string" | CEST 2005"   |

#### 2.6 sendAuthorization (send authorization)

#### 2.6.1 Description

Purpose: Executes the first element of a transaction, the authorization process. The amount to be captured is reserved on the cardholder account. The purpose of the authorization is to verify the validity of the card and the availability of the amount in the cardholder's account with the card issuer.

NB: This web service (sendAuthorization) is reserved for mail order and telephone order use. For internet transactions please refer to the Web-shop integration manual.

#### 2.6.2 Web service method call

**METHOD:** sendAuthorization

**INPUT MESSAGE**: sendAuthorizationRequest

| Parameter                      | Description  |
|--------------------------------|--|
| "merchantID"                   | ID to identify the merchant. Assigned to the merchant when created in the PBS Payment Server   |
| type="soapenc:string"          | 1 20 1 4, 111 311 2 31 7 31  |
| "serverFlag"                   | Marks the transaction to be performed on either the Test Gateway or the Production Gateway. "P" = production, "T" = test.                        |
| type="soapenc:string"          | Production dateway: 1 - production, 1 - test.  |
| "accountNumber"                | The card number of the payment card (between 11 and 19 digits) dependent   |
| type="soapenc:string"          | on the card type.  |
| "cardVerificationCode"         | Card verification code (CVC/CVV).  |
| type="soapenc:string" "amount" | Amount in minor unit or a 100 for DVV 1  |
| type="soapenc:string"          | Amount in minor unit - e.g. 100 for DKK 1  |
| "currencyCode"                 | Currency codes as in ISO4217.  |
| type="soapenc:string"          | Currency codes as in 1504217.  |
| "expirationDate"               | The date of expiry of the card, specified as MMYY, e.g. 0612 for June, year  |
| type="soapenc:string"          | 2012   |
|                                |  |
| "acquirerReferenceData"        | Merchant's reference, order number, used for the authorization. (max. 20   |
| type="soapenc:string"          | characters – digits and letters allowed).  |
| "functionCode"                 | Indication of type of amount:  |
| type="soapenc:string"          | • "100", exact amount  |
| 3                              | <ul> <li>"101", estimated amount (when total amount is unknown due to e.g. cost and freight)</li> </ul>  |
|                                | cost and neight)   |
|                                | *) Note that the captured amount may normally NOT exceed the authorized amount. If the captured amount is higher than the authorized amount, the |
|                                | card issuer may charge back the exceeding amount.  |
| "reasonCode"                   | Indication of transaction type:  |
| type="soapenc:string"          | "0000", normal transaction   |
|                                | "1511", merchant suspicious of fraud   |
| "pointOfServiceDataCode"       | Indication of transaction origin. See chapter 3 for values.  |
| type="soapenc:string"          | indication of transaction origin. See chapter 3 for values.  |
| "processingCode"               | Indication of type of purchase:  |
| type="soapenc:string"          | "000000", goods or services  |
| -, p                           | • "150000", quasi-cash   |
|                                |  |
| "recurring"                    | Flag to indicate whether or not the transaction should be created as a   |
| type="xsd:boolean"             | recurring transaction (i.e. subscription orders)   |
|                                | 4  |

### **OUTPUT MESSAGE**: sendAuthorizationResponse

| Parameter                      | Description  |
|--------------------------------|--|
| "sendAuthorizationReturn"      | Complex parameter type, see send_authorization (below) |
| type="tns1:send_authorization" |  |

### send\_authorization:

| Parameter   | Description   |
|---|---|
| "actionCode"  type="soapenc:string"                     | Response code from PBS indicating the status of the transaction and which action must be taken by the merchant.   |
| type soupenoisting                                      | A list of action codes can be found in chapter 5.   |
| "amount"  | Authorized amount.  |
| type="soapenc:string"                                   |   |
| "approvalCode" type="soapenc:string"                    | If "actionCode" is "000","060","061","063","900" or "901", the authorization is approved and an approval code of 6 characters is generated and sent to the merchant.  If the authorization is declined, the "approvalCode" will contain spaces. |
| "exp" type="soapenc:string"                             | Card expiration date MMYY   |
| "cardType" type="soapenc:string"                        | Card type presented as a numeric value:  0 = Dankort  2 = eDankort  3 = Visa  5 = Visa Electron  6 = MasterCard  7 = JCB  9 = Maestro  15 = American Express  16 = Diners   |
| "cardID"<br>type="soapenc:string"<br>"failed"           | The first 6 digits of the card number  TRUE if the authorization is declined, FALSE if the authorization is approved.   |
| type="xsd:Boolean" "gatewayResponseCode" type="xsd:int" | Gateway status returned from PBS, indicating 1 of 5 possible values. Response code 000 = OK. If another code is returned, the text will explain the reason for the error code.  |
| "partlyApproved"<br>type="xsd:boolean"                  | TRUE if the transaction is partly authorized (an amount smaller than the requested amount has been authorized). FALSE if the full amount is authorized.   |

### 2.7 sendAuthorizationPrepared (send authorization prepared)

#### 2.7.1 Description

Purpose: Executes the first element of a transaction, the authorization process but is different from the sendAuthorization method in the fact that this method is to be used if the transaction is expected to be reauthorized later without knowing the amount to be reauthorized or disallowing a change in the amount. This method saves the amount to actually be reathorized and performs an authorization of the amount 0 (zero). To reauthorize the transaction the sendReauthorizationPrepared method should be used which will use the amount saved by this method.

NB: This web service (sendAuthorizationPrepared) is reserved for mail order and telephone order use. For internet transactions please refer to the Web-shop integration manual.

#### 2.7.2 Web service method call

**METHOD:** sendAuthorizationPrepared

**INPUT MESSAGE**: sendAuthorizationPreparedRequest

| Parameter  | Description  |
|--|--|
| "merchantID"                                     | ID to identify the merchant. Assigned to the merchant when created in the  |
| type="soapenc:string"                            | PBS Payment Server   |
| "serverFlag"                                     | Marks the transaction to be performed on either the Test Gateway or the  |
| type="soapenc:string"                            | Production Gateway. "P" = production, "T" = test.  |
| "accountNumber"<br>type="soapenc:string"         | The card number of the payment card (between 11 and 19 digits) dependent on the card type.   |
| "cardVerificationCode" type="soapenc:string"     | Card verification code (CVC/CVV).  |
| "amount" type="soapenc:string"                   | Amount in minor unit - e.g. 100 for DKK 1  |
| "currencyCode"                                   | Currency codes as in ISO4217.  |
| type="soapenc:string"                            |  |
| "expirationDate"<br>type="soapenc:string"        | The date of expiry of the card, specified as MMYY, e.g. 0612 for June, year 2012   |
| "acquirerReferenceData"<br>type="soapenc:string" | Merchant's reference, order number, used for the authorization. (max. 20 characters – digits and letters allowed).   |
| "functionCode"                                   | Indication of type of amount:  |
| type="soapenc:string"                            | <ul> <li>"100", exact amount</li> <li>"101", estimated amount (when total amount is unknown due to e.g. cost and freight) *)</li> </ul>  |
|  | *) Note that the captured amount may normally NOT exceed the authorized amount. If the captured amount is higher than the authorized amount, the card issuer may charge back the exceeding amount. |
| "reasonCode"                                     | Indication of transaction type:  |
| type="soapenc:string"                            | <ul><li> "0000", normal transaction</li><li> "1511", merchant suspicious of fraud</li></ul>  |
| "pointOfServiceDataCode" type="soapenc:string"   | Indication of transaction origin. See chapter 3 for values.  |
| "processingCode"                                 | Indication of type of purchase:  |

| type="soapenc:string"             | <ul><li>"000000", goods or services</li><li>"150000", quasi-cash</li></ul>  |
|-----------------------------------|---|
| "prepared"<br>type="xsd:boolean"  | Flag to indicate whether or not the transaction should be prepared meaning a pre-authorization to later be re-authorized. |
| "recurring"<br>type="xsd:boolean" | Flag to indicate whether or not the transaction should be created as a recurring transaction (i.e. subscription orders)   |

### **OUTPUT MESSAGE**:

## send Authorization Prepared Response

| Parameter                      | Description  |
|--------------------------------|--|
| "sendAuthorizationReturn"      | Complex parameter type, see send_authorization (below) |
| type="tns1:send_authorization" |  |

### send authorization:

| Parameter   | Description   |
|---|---|
| "actionCode" type="soapenc:string"                | Response code from PBS indicating the status of the transaction and which action must be taken by the merchant.   |
| type- soapenc.string                              | A list of action codes can be found in chapter 5.   |
| "amount"  | Authorized amount.  |
| type="soapenc:string"                             |   |
| "approvalCode" type="soapenc:string"              | If "actionCode" is "000","060","061","063","900" or "901", the authorization is approved and an approval code of 6 characters is generated and sent to the merchant.  If the authorization is declined, the "approvalCode" will contain spaces. |
|   | If the authorization is declined, the approvaicode will contain spaces.   |
| "exp" type="soapenc:string"                       | Card expiration date MMYY   |
| "cardType"  | Card type presented as a numeric value:   |
| type="soapenc:string"                             | 0 = Dankort 2 = eDankort 3 = Visa 5 = Visa Electron 6 = MasterCard 7 = JCB 9 = Maestro 15 = American Express 16 = Diners  |
| "cardID"  | The first 6 digits of the card number   |
| type="soapenc:string" "failed" type="xsd:Boolean" | TRUE if the authorization is declined, FALSE if the authorization is approved.  |
| "gatewayResponseCode" type="xsd:int"              | Gateway status returned from PBS, indicating 1 of 5 possible values. Response code $000 = OK$ . If another code is returned, the text will explain the reason for the error code.   |
| "partlyApproved"<br>type="xsd:boolean"            | TRUE if the transaction is partly authorized (an amount smaller than the requested amount has been authorized). FALSE if the full amount is authorized.   |

### 2.8 sendReauthorizationPrepared (Send reauthorization prepared)

#### 2.8.1 Description

Purpose: Reauthorizes a previously pre-authorized transaction. This method is only to be used in conjuction with sendAuthorizationPrepared which will save the amount to be authorized by this method.

NB: This web service (sendReauthorizationPrepared) is reserved for mail order and telephone order use. For internet transactions please refer to the Web-shop integration manual.

#### 2.8.2 Web service method call

**METHOD:** sendReauthorizationPrepared

**INPUT MESSAGE**: sendReauthorizationPreparedRequest

| Parameter  | Description  |
|--|--|
| "merchantID"                                     | ID to identify the merchant. Assigned to the merchant when created in the  |
| type="soapenc:string"                            | PBS Payment Server   |
| "acquirerReferenceData"<br>type="soapenc:string" | Merchant's reference, order number, used for the authorization. (max. 20 characters – digits and letters allowed). |

#### **OUTPUT MESSAGE**: sendReauthorizationPreparedResponse

| Parameter                      | Description  |
|--------------------------------|--|
| "sendAuthorizationReturn"      | Complex parameter type, see send_authorization (below) |
| type="tns1:send_authorization" |  |

#### send authorization:

| Parameter                            | Description   |
|--------------------------------------|---|
| "actionCode"                         | Response code from PBS indicating the status of the transaction and which   |
| type="soapenc:string"                | action must be taken by the merchant.   |
|                                      | A list of action codes can be found in chapter 5.   |
| "amount"                             | Authorized amount.  |
| type="soapenc:string"                |   |
| "approvalCode" type="soapenc:string" | If "actionCode" is "000","060","061","063","900" or "901", the authorization is approved and an approval code of 6 characters is generated and sent to the merchant.  If the authorization is declined, the "approvalCode" will contain spaces. |
| "exp"                                | Card expiration date MMYY   |
| type="soapenc:string"                |   |
| "cardType"                           | Card type presented as a numeric value:   |
| type="soapenc:string"                | 0 = Dankort   |
|                                      | 2 = eDankort  |
|                                      | 3 = Visa  |

|                       | 5 = Visa Electron  |
|-----------------------|--|
|                       | 6 = MasterCard   |
|                       | 7 = JCB  |
|                       | 9 = Maestro  |
|                       | 15 = American Express  |
|                       | 16 = Diners  |
| "cardID"              | The first 6 digits of the card number  |
| type="soapenc:string" |  |
| "failed"              | TRUE if the authorization is declined, FALSE if the authorization is approved.                             |
| type="xsd:Boolean"    |  |
| "gatewayResponseCode" | Gateway status returned from PBS, indicating 1 of 5 possible values. Re-                                   |
| type="xsd:int"        | sponse code $000 = OK$ . If another code is returned, the text will explain the reason for the error code. |
| "partlyApproved"      | TRUE if the transaction is partly authorized (an amount smaller than the re-                               |
| type="xsd:boolean"    | quested amount has been authorized).   |
| .,                    | FALSE if the full amount is authorized.  |

### 2.9 sendReauthorization (send reauthorization)

### 2.9.1 Description

Purpose: Reauthorizes a transaction previously authorized with an amount of 0 (zero).

NB: This web service (sendReauthorization) is reserved for mail order and telephone order use. For internet transactions please refer to the Web-shop integration manual.

#### 2.9.2 Web service method call

**METHOD:** sendReauthorization

**INPUT MESSAGE**: sendReauthorizationRequest

| Parameter               | Description   |
|-------------------------|---|
| "merchantID"            | ID to identify the merchant. Assigned to the merchant when created in the |
| type="soapenc:string"   | PBS Payment Server  |
| "amount"                | Amount in minor unit - e.g. 100 for DKK 1                                 |
| type="soapenc:string"   |   |
| "acquirerReferenceData" | Merchant's reference, order number, used for the authorization. (max. 20  |
| type="soapenc:string"   | characters – digits and letters allowed).                                 |

**OUTPUT MESSAGE**: sendReauthorizationResponse

| Parameter                      | Description  |
|--------------------------------|--|
| "sendAuthorizationReturn"      | Complex parameter type, see send_authorization (below) |
| type="tns1:send_authorization" |  |

#### send authorization:

| Parameter                            | Description  |
|--------------------------------------|--|
| "actionCode"                         | Response code from PBS indicating the status of the transaction and which  |
| type="soapenc:string"                | action must be taken by the merchant.  |
|                                      | A list of action codes can be found in chapter 5.  |
| "amount"                             | Authorized amount.   |
| type="soapenc:string"                |  |
| "approvalCode" type="soapenc:string" | If "actionCode" is "000","060","061","063","900" or "901", the authorization is approved and an approval code of 6 characters is generated and sent to the merchant. |
|                                      | If the authorization is declined, the "approvalCode" will contain spaces.  |
| "exp"                                | Card expiration date MMYY  |
| type="soapenc:string"                |  |
| "cardType"                           | Card type presented as a numeric value:  |
| type="soapenc:string"                | 0 = Dankort  |
|                                      | 2 = eDankort   |
|                                      | 3 = Visa   |

|                       | 5 = Visa Electron  |
|-----------------------|--|
|                       | 6 = MasterCard   |
|                       | 7 = JCB  |
|                       | 9 = Maestro  |
|                       | 15 = American Express  |
|                       | 16 = Diners  |
| "cardID"              | The first 6 digits of the card number  |
| type="soapenc:string" |  |
| "failed"              | TRUE if the authorization is declined, FALSE if the authorization is approved.                             |
| type="xsd:Boolean"    |  |
| "gatewayResponseCode" | Gateway status returned from PBS, indicating 1 of 5 possible values. Re-                                   |
| type="xsd:int"        | sponse code $000 = OK$ . If another code is returned, the text will explain the reason for the error code. |
| "partlyApproved"      | TRUE if the transaction is partly authorized (an amount smaller than the re-                               |
| type="xsd:boolean"    | quested amount has been authorized).   |
| 3/1                   | FALSE if the full amount is authorized.  |

The following web services are applicable to all transaction types.

### 2.10 sendReversalAdvice (Reversal Advice)

#### 2.10.1 Description

Purpose: Cancellation of an authorization. The reservation of the authorized amount on the cardholder account is cancelled.

#### 2.10.2Web service method call

**METHOD:** sendReversalAdvice

**INPUT MESSAGE**: sendReversalAdviceRequest

| Parameter             | Description  |
|-----------------------|--|
| "merchantID"          | ID to identify the merchant. Assigned to the merchant when created in the      |
| type="soapenc:string" | PBS Payment Server   |
| "password"            | Password required for reversal advice  |
| type="soapenc:string" |  |
| "orderid"             | Merchant's reference, order number, used for the authorization. (max. 20       |
| type="soapenc:string" | characters – digits and letters allowed).                                      |
| "reasonCode"          | Indication of transaction type for use by recipient (PBS). There are 4 options |
| type="soapenc:string" | "4000", customer cancellation  |
|                       | "4001", unspecified, no action taken   |
|                       | "4002", suspected malfunction  |
|                       | "4004", completed partially  |

### **OUTPUT MESSAGE**: sendAuthorizationResponse

| Parameter                       | Description   |
|---------------------------------|---|
| "sendReversalAdviceReturn"      | Complex parameter type, see send_reversaladvice (below) |
| type="tns1:send_reversaladvice" |   |

#### send reversaladvice:

| Parameter                               | Description   |
|---|---|
| "actionCode"                            | Response code from PBS indicating status of transaction and which action the merchant must take.  |
| type="soapenc:string"                   | merchant must take.   |
|   | If "actionCode" is "000","060","061","063","900" or "901", the reversal advice is approved.   |
|   | A list of actions codes can be found in chapter 5.  |
| "failed" type="xsd:boolean"             | TRUE if the reversal advice failed, FALSE if the reversal advice succeeded.   |
| "gatewayResponseCode"<br>type="xsd:int" | Gateway status returned from PBS, indicating 1 of 5 possible values. Response code $000 = OK$ . If another code is returned, the text will explain the reason for the error code. |

#### 2.11 sendCapture (Capture)

### 2.11.1Description

Purpose: Executes the second element of a transaction, the capture process. When the goods are shipped to the customer, the authorized amount is captured, i.e. deposited with the acquirer for settlement.

#### 2.11.2Web service method call

**METHOD:** sendCapture

**INPUT MESSAGE**: sendCaptureRequest

| Parameter             | Description   |
|-----------------------|---|
| "merchantID"          | ID to identify the merchant. Assigned to the merchant when created in the         |
| type="soapenc:string" | PBS Payment Server  |
| "orderid"             | Merchant's reference, order number, used for the authorization. (max. 20          |
| type="soapenc:string" | characters – digits and letters allowed).   |
| "amount"              | Amount in minor unit - ex. 100 for DKK 1,-  |
| type="soapenc:string" |   |
| "functionCode"        | Indication of type of amount:   |
| type="soapenc:string" | <ul> <li>"201", Previously approved authorization, same amount</li> </ul>         |
|                       | <ul> <li>"202", Previously approved authorization, different amount *)</li> </ul> |
|                       | *) Note that the captured amount may normally NOT exceed the authorized           |
|                       | amount. If the captured amount is higher than the authorized amount, the          |
|                       | card issuer may charge back the exceeding amount.                                 |

### **OUTPUT MESSAGE**: sendCaptureResponse

| Parameter                | Description                                      |
|--------------------------|--|
| "sendCaptureReturn"      | Complex parameter type, see send_capture (below) |
| type="tns1:send_capture" |  |

#### send capture:

| Parameter             | Description   |
|-----------------------|---|
| "actionCode"          | Response code from PBS indicating the status of the transaction and which action must be taken by the merchant. |
| type="soapenc:string" | If "actionCode" is "000","060","061","063","900" or "901", the capture is approved.                             |
|                       | A list of action codes can be found in chapter 5.   |
| "failed"              | TRUE if the capture failed, FALSE if the capture succeeded.   |
| type="xsd:boolean"    |   |
| "gatewayResponseCode" | Gateway status returned from PBS, indicating 1 of 5 possible values.  |
| type="xsd:int"        | Response code 000 = OK. If another code is returned, the text will explain the reason for the error code.       |

### 2.12 sendCaptureCredit (CaptureCredit)

### 2.12.1Description

Purpose: Cancels a successful capture and transfers the amount to the cardholder's account.

#### 2.12.2Web service method call

**METHOD:** sendCaptureCredit

**INPUT MESSAGE**: sendCaptureCreditRequest

| Parameter             | Description   |
|-----------------------|---|
| "merchantID"          | ID to identify the merchant. Assigned to the merchant when created in the |
| Type="soapenc:string" | PBS Payment Server.   |
| "password"            | Password required for capture credit                                      |
| Type="soapenc:string" |   |
| "orderid"             | Merchants reference, order number, used for the authorization. (max. 20   |
| Type="soapenc:string" | chars – digits and letters allowed).                                      |
| "amount"              | Amount in minor unit - ex. 100 for DKK 1,-                                |
| type="soapenc:string" |   |

**OUTPUT MESSAGE**: sendCaptureCreditResponse

| Parameter                      | Description  |
|--------------------------------|--|
| "sendCaptureCreditReturn"      | Complex parameter type, see send_capturecredit (Following) |
| type="tns1:send_capturecredit" |  |

#### send capturecredit:

| Parameter             | Description   |
|-----------------------|---|
| "actionCode"          | Response code from PBS indicating the status of the transaction and which                                 |
| type="soapenc:string" | action must be taken by the merchant.   |
|                       | If "actionCode" is "000","060","061","063","900" or "901", the capture credit is approved.                |
|                       | A list of action codes can be found in chapter 5.   |
| "failed"              | TRUE if the capture credit failed, FALSE if the capture credit succeeded.                                 |
| type="xsd:boolean"    |   |
| "gatewayResponseCode" | Gateway status returned from PBS, indicating 1 of 5 possible values.                                      |
| type="xsd:int"        | Response code 000 = OK. If another code is returned, the text will explain the reason for the error code. |

#### 2.13 sendRecurringAuthorization (Authorization)

#### 2.13.1 Description

Purpose: Executes the first element of a transaction, the authorization process, when the order concerns a subscription (RecurringAuthorization).

This method is used after the authorization has been performed as a normal authorization (the sendAuthorization method) with the "recurring" flag set to TRUE. This method verifies that the card is still valid and reserves the amount in the cardholder's account to be captured at the time of delivery of the goods/services (RecurringCapture).

#### 2.13.2Web service method call

**METHOD:** sendRecurringAuthorization

**INPUT MESSAGE**: sendRecurringAuthorizationRequest

| Parameter                                 | Description  |
|---|--|
| "merchantID"                              | ID to identify the merchant. Assigned to the merchant when created in the PBS Payment Server   |
| type="soapenc:string"                     | rbs rayment server   |
| "subscriptionid"<br>type="soapenc:string" | Merchant's reference, subscription number, used for the authorization (max. 20 characters – digits and letters allowed).   |
| "orderid" type="soapenc:string"           | Merchant's reference, order number, used for the authorization (max. 20 characters – digits and letters allowed).  |
| "amount" type="soapenc:string"            | Amount in minor unit - e.g. 100 for DKK 1,-  |
| "functionCode" type="soapenc:string"      | Indication of type of amount:  • "100", exact amount   |
| type- soapenc.string                      | <ul> <li>"100", estimated amount (when total amount is unknown due to e.g. cost and freight)</li> </ul>  |
|   | *) Note that capture may normally NOT exceed the authorized amount. If the captured amount is higher than the authorized amount, the card issuer may charge back the exceeding amount. |
| "reasonCode"                              | Indication of transaction type:  |
| type="soapenc:string"                     | <ul><li>"0000", normal transaction</li><li>"1511", merchant suspicious of fraud</li></ul>  |
| "processingCode"                          | Indication of type of purchase:  |
| type="soapenc:string"                     | • "000000", goods or services  |
|   | • "150000", quasi-cash   |

#### **OUTPUT MESSAGE**: sendRecurringAuthorizationResponse

| Parameter                          | Description  |
|------------------------------------|--|
| "sendRecurringAuthorizationReturn" | Complex parameter type, see send_authorization (below) |
| type="tns1:send_authorization"     |  |

### send authorization:

| Parameter             | Description   |
|-----------------------|---|
| "actionCode"          | Response code from PBS indicating the status of the transaction and which action must be taken by the merchant. |
| type="soapenc:string" | action must be taken by the merchant.   |
|                       | A list of action codes can be found in chapter 5.   |
| "amount"              | Authorized amount.  |
| type="soapenc:string" |   |
| "approvalCode"        | If "actionCode" is "000", "060", "061", "063", "900" or "901", the authorization                                |
| type="soapenc:string" | is approved and an approval code of 6 characters is sent to the merchant.                                       |
|                       | If the authorization is declined the "approvalCode" will contain spaces.  |
| "failed"              | TRUE if the authorization is declined, FALSE if the authorization is approved.                                  |
| type="xsd:boolean"    |   |
| "gatewayResponseCode" | Gateway status returned from PBS, indicating 1 of 5 possible values.  |
| type="xsd:int"        | Response code $000 = OK$ . If another code is returned, the text will explain the reason for the error code.    |
| "partlyApproved"      | TRUE if the transaction is partly authorized (an amount smaller than the  |
| type="xsd:boolean"    | requested amount has been authorized). FALSE if the full amount is authorized.                                  |

#### 2.14 sendRecurringCapture(Capture)

#### 2.14.1 Description

Purpose: Executes the second element of a transaction, the capture process (RecurringCapture). When the goods are shipped or services rendered to the customer, the authorized amount is captured, i.e. the transaction is deposited with the acquirer for settlement.

#### 2.14.2Web service method call

**METHOD:** sendRecurringCapture

**INPUT MESSAGE**: sendRecurringCaptureRequest

| Parameter             | Description  |
|-----------------------|--|
| "merchantID"          | ID to identify the merchant. Assigned to the merchant when created in the  |
| Type="soapenc:string" | PBS Payment Server.  |
| "orderid"             | Merchant's reference, order number, used for the authorization. (max. 20   |
| Type="soapenc:string" | characters – digits and letters allowed).                                  |
| "amount"              | Amount in minor unit - e.g. 100 for DKK 1,-                                |
| type="soapenc:string" |  |
| "functionCode"        | Indication of type of amount:  |
| type="soapenc:string" | "201", Previously approved authorization, same amount                      |
|                       | "202", Previously approved authorization, different amount *)              |
|                       | *) Note that capture may normally NOT exceed the authorized amount. If the |
|                       | captured amount is higher than the authorized amount, the card issuer may  |
|                       | charge back the exceeding amount.  |

**OUTPUT MESSAGE**: sendRecurringCaptureResponse

| Parameter                | Description                                      |
|--------------------------|--|
| "sendRecurring           | Complex parameter type, see send_capture (below) |
| CaptureReturn"           |  |
| type="tns1:send_capture" |  |

#### send\_capture:

| Parameter                   | Description   |
|-----------------------------|---|
| "actionCode"                | Response code from PBS indicating the status of the transaction and which                                 |
| type="soapenc:string"       | action must be taken by the merchant.   |
|                             | If "actionCode" is "000","060","061","063","900" or "901", the capture is approved.                       |
|                             | A list of action codes can be found in chapter 5.   |
| "failed" type="xsd:boolean" | TRUE if the capture is declined, FALSE if the capture is approved.  |
| "gatewayResponseCode"       | Gateway status returned from PBS, indicating 1 of 5 possible values.                                      |
| type="xsd:int"              | Response code 000 = OK. If another code is returned, the text will explain the reason for the error code. |

#### 2.15 sendRecurringCaptureCredit (CaptureCredit)

### 2.15.1Description

Purpose: Cancels a successful capture and transfers the amount to the cardholder's account. The maximum amount to be transferred equals the amount previously captured as a recurring capture.

#### 2.15.2Web service method call

**METHOD:** sendRecurringCaptureCredit

**INPUT MESSAGE**: sendRecurringCaptureCreditRequest

| Parameter             | Description   |
|-----------------------|---|
| "merchantID"          | ID to identify the merchant. Assigned to the merchant when created in the |
| type="soapenc:string" | PBS Payment Server.   |
| "password"            | Password required for recurring capture credit                            |
| type="soapenc:string" |   |
| "orderid"             | Merchant's reference, order number, used for the authorization. (max. 20  |
| type="soapenc:string" | characters – digits and letters allowed).                                 |
| " amount "            | Amount in minor unit - e.g. 100 for DKK 1,-                               |
| type="soapenc:string" |   |

**OUTPUT MESSAGE**: sendRecurringCaptureCreditResponse

| Parameter                      | Description  |  |
|--------------------------------|--|--|
| "sendRecurring                 | Complex parameter type, see send_capturecredit (following) |  |
| CaptureCreditReturn"           |  |  |
| type="tns1:send_capturecredit" |  |  |
|                                |  |  |

#### send capturecredit:

| Parameter                               | Description   |
|---|---|
| "actionCode"                            | Response code from PBS indicating the status of the transaction and which action must be taken by the merchant.   |
| type="soapenc:string"                   | detail must be taken by the merchant.   |
|   | If "actionCode" is "000","060","061","063","900" or "901", the capture credit is approved.  |
|   | A list of action codes can be found in chapter 5.   |
| "failed" type="xsd:boolean"             | TRUE if the capture credit is declined, FALSE if the capture credit is approved.  |
| "gatewayResponseCode"<br>type="xsd:int" | Gateway status returned from PBS, indicating 1 of 5 possible values. Response code $000 = OK$ . If another code is returned, the text will explain the reason for the error code. |

#### 2.16 findOrder

### 2.16.1Description

Purpose: Find a specific order (transaction) by means of merchantID and order number.

### 2.16.2Web service method call

**METHOD:** findOrder

**INPUT MESSAGE**: findOrderRequest

| Parameter                 | Description   |
|---------------------------|---|
| "merchantID"              | Unique name identifying the merchant in the PBS Payment Server. |
| type="soapenc:string"     |   |
| "password"                | Password required for showing order                             |
| type="soapenc:string"     |   |
| " acquirerReferenceData " | Unique order number assigned by merchant.                       |
| type="soapenc:string"     |   |

**OUTPUT MESSAGE**: findOrderResponse

| Parameter              | Description                                    |
|------------------------|--|
| "findOrderReturn"      | Complex parameter type, see find_order (below) |
| type="tns1:find_order" |  |

### find order:

| Parameter                                     | Description   |
|---|---|
| "PAN"   | Card number (truncated)   |
| type="soapenc:string"                         |   |
| "acquirerReferenceData" type="soapenc:string" | Unique order number assigned by merchant  |
| "authorisationtype"                           | Integer value indicating authorization type:  |
| type="xsd:int"                                | • 1 = Ecommerce without authentication  |
|   | • 2 = eDankort  |
|   | • 3 = 3D-secure   |
| "created"                                     | The time when the order was created   |
| type="xsd:dateTime"                           |   |
| "currencyCode"                                | ISO4217 code identifying the currency used (e.g. "DKK" for Danish Kroner)                   |
| type="soapenc:string"                         | A P. St. A. L. AMANON   |
| "dateExpiration"                              | 4 digit expiration date (MMYY)  |
| type="soapenc:string" "maxCaptureAmount"      | Value indicating the maximum amount which can be captured in Major units                    |
| type="xsd:double"                             | of currency   |
| "maxCaptureCreditAmount"<br>type="xsd:double" | Value indicating the maximum amount which can be credited in <i>Major units</i> of currency |
| "recurring"                                   | Flag indicating whether or not this order is recurring (i.e. subscription)                  |
| type="xsd:boolean" "state"                    | Transaction status of the order:  |
| type="soapenc:string"                         | • "A" = Authorized  |
| type- soupene.string                          | • "C" = Captured  |
|   | • "R" = Credited  |
|   | • "N" = Cancelled   |
|   |   |

#### 2.17 findOrders

### 2.17.1Description

Purpose: Searches one or more orders by means of merchantID and order number. The maximum number of transactions that can be listed is 100.

#### 2.17.2Web service method call

**METHOD:** findOrders

**INPUT MESSAGE**: findOrdersRequest

| Parameter                              | Description   |
|--|---|
| "merchantID"                           | Unique name identifying the merchant in the PBS Payment Server.   |
| type="soapenc:string"                  |   |
| "password"                             | Password required for showing orders  |
| type="soapenc:string"                  |   |
| "serverFlag" type="soapenc:string"     | <ul> <li>Single letter indicating Test or Production environment search</li> <li>"T" = Test environment</li> <li>"P" = Production environment</li> </ul>                |
| "createdAfter"<br>type="xsd:dateTime"  | Return only orders created after this time. Set createdAfter to NULL (xsi:nil="true") to perform an open ended search   |
| "createdBefore"<br>type="xsd:dateTime" | Return only orders created before this time. Set createdBefore to NULL (xsi:nil="true") to perform an open-ended search   |
| "states" type="soapenc:string"         | String value created by combining the single letter order states. If for example state is set to value = "AC", only Authorized and Captured transactions will be shown. |

**OUTPUT MESSAGE**: findOrdersResponse

| Parameter                           | Description                                    |
|-------------------------------------|--|
| "findOrderReturn"                   | Complex parameter type, see find_order (below) |
| type="impl:ArrayOf_tns1_find_order" |  |

### find order:

| Parameter                                     | Description   |
|---|---|
| "PAN"   | Card number (truncated)   |
| type="soapenc:string"                         |   |
| "acquirerReferenceData" type="soapenc:string" | Unique order number assigned by merchant  |
| "authorisationtype"                           | Integer value indicating authorization type:  |
| type="xsd:int"                                | • 1 = Ecommerce without authentication  |
|   | • 2 = eDankort  |
|   | • 3 = 3D-secure   |
| "created"                                     | The time when the order was created   |
| type="xsd:dateTime"                           |   |
| "currencyCode"                                | ISO4217 code identifying the currency used (e.g. "DKK" for Danish Kroner)                   |
| type="soapenc:string"                         | 4 11 11 11 11 11 11 11 11 11 11 11 11 11  |
| "dateExpiration"                              | 4 digit expiration date (MMYY)  |
| type="soapenc:string" "maxCaptureAmount"      | Value indicating the maximum amount which can be captured in <i>Major units</i>             |
| type="xsd:double"                             | of currency   |
| "maxCaptureCreditAmount"<br>type="xsd:double" | Value indicating the maximum amount which can be credited in <i>Major units of currency</i> |
| "recurring" type="xsd:boolean"                | Flag indicating whether or not this order is recurring (i.e. subscription)                  |
| "state"                                       | Single letter order state determined from the last successful transaction:                  |
| type="soapenc:string"                         | • "A" = Authorized  |
|   | • "C" = Captured  |
|   | • "R" = Credited  |
|   | • "N" = Cancelled   |

#### 2.18 contactSupport

### 2.18.1Description

Purpose: Sends an email to PBS support centre that will subsequently contact the merchant.

### 2.18.2Web service method call

**METHOD:** contactSupport

**INPUT MESSAGE**: contactSupportRequest

| Parameter             | Description  |
|-----------------------|--|
| "merchantID"          | Unique name identifying the merchant in the PBS Payment Server               |
| type="soapenc:string" |  |
| "subject"             | Subject or nature of problem.  |
| type="soapenc:string" |  |
| "message"             | Detailed description of the problem encountered by the merchant. No need to  |
| type="soapenc:string" | append contact information as this is obtained from the supplied merchantID. |

**OUTPUT MESSAGE**: contactSupportResponse

| Parameter                   | Description  |
|-----------------------------|--|
| "contactSupportReturn"      | Complex parameter type, see contact_support (below). |
| type="tns1:contact_support" |  |

### contact\_support:

| Parameter             | Description   |  |
|-----------------------|---|--|
| "value"               | String containing the value "SUCCESS" indicating that an email has been |  |
| type="soapenc:string" | sent.   |  |

### **3 POS codes (POINT OF SERVICE DATA CODE)**

- Mail order transactions:
  - '100020100110'
- Phone order transactions:
  - '100030100110'
- Recurring transaction:
  - 'K00540K00130'

#### 4 Test cards

The following test card numbers may be used for testing purposes. The card number might either be approved or declined depending on the currently provided action code specified as the last digits of the card number. For the available action codes and meaning see Section 5. Any other card number may be either approved or declined in the test phase.

#### Authorization (and Capture) is approved.

The date of expiration of all cards is: date of expiry (mm/YY): 03/10 and CVC/CVV: 741

| Card type        | Card number         |
|------------------|---------------------|
| Visa             | 4111 0000 0000 0000 |
| MasterCard       | 5111 0000 0000 0000 |
| JCB              | 3528 0000 0000 0000 |
| Dankort          | 5019 0000 0000 0000 |
| Visa/Dankort     | 4571 0000 0000 0000 |
| Diners Club      | 3614 000000 0000    |
| American Express | 3747 000000 00000   |

#### **Authorization declined:**

The date of expiration of all cards is: date of expiry (mm/YY): 03/10 and CVC/CVV: 741

 $\boldsymbol{x}\boldsymbol{x}\boldsymbol{x}$  is filled in with the requested action code

| Card type        | Card number         |
|------------------|---------------------|
| Visa             | 4111 0000 0000 0xxx |
| MasterCard       | 5111 0000 0000 0xxx |
| JCB              | 3528 0000 0000 0xxx |
| Dankort          | 5019 0000 0000 0xxx |
| Visa/Dankort     | 4571 0000 0000 0xxx |
| Diners Club      | 3614 000000 0xxx    |
| American Express | 3747 000000 00xxx   |

### Capture is declined (authorization is approved):

The date of expiration of all cards is: **date of expiry (mm/YY)**: 03/10 and **CVC/CVV**: 741 **xxx** is filled in with the requested action code

| Card type        | Card number         |
|------------------|---------------------|
| Visa             | 4111 9000 0000 0xxx |
| MasterCard       | 5111 9000 0000 0xxx |
| JCB              | 3528 9000 0000 0xxx |
| Dankort          | 5019 9000 0000 0xxx |
| Visa/Dankort     | 4571 9000 0000 0xxx |
| Diners Club      | 3614 900000 0xxx    |
| American Express | 3747 900000 00xxx   |

## **5** Action Codes

| Action Code | Merchant text                                    | Action against cardholder   |
|-------------|--|-----------------------------|
| 000         | Approved   | Approved                    |
| 001         | Honor with identification                        | Decline                     |
| 002         | Approved for partial amount                      | Partly Approved             |
| 060         | Approved   | Approved                    |
| 061         | Approved   | Approved                    |
| 063         | Approved   | Approved                    |
| 100         | Do not honor                                     | Decline                     |
| 101         | Expired Card                                     | Decline/Expired Card        |
| 102         | Suspected Fraud                                  | Decline                     |
| 103         | Card acceptor contact acquirer                   | Decline                     |
| 104         | Restricted card                                  | Decline                     |
| 105         | Card Acceptor call Acquirers security department | Decline                     |
| 106         | Allowable pin tries exceeded                     | Decline                     |
| 107         | Refer to card issuer                             | Decline                     |
| 108         | Refer to card issuer special conditions          | Decline                     |
| 109         | Invalid merchant                                 | Decline                     |
| 110         | Invalid amount                                   | Decline/Amount Error        |
| 111         | Invalid card number                              | Decline                     |
| 112         | Pin data required                                | Decline                     |
| 113         | Unacceptable fee                                 | Decline                     |
| 114         | No account of type requested                     | Decline                     |
| 115         | Requested function not supported                 | Decline                     |
| 116         | Not sufficient funds                             | Decline                     |
| 117         | incorrect pin                                    | Decline                     |
| 118         | No card record                                   | Decline                     |
| 119         | Transaction not permitted to cardholder          | Decline/Invalid Transaction |
| 120         | Transaction not permitted to terminal            | Decline/Invalid Transaction |
| 121         | Exceeds withdrawal amount limit                  | Decline                     |

| 122 | Security violation                                    | Decline               |
|-----|---|-----------------------|
| 123 | Exceeds withdrawal frequency limit                    | Decline               |
| 124 | Violation of law                                      | Decline               |
| 125 | Card not effective                                    | Decline               |
| 126 | Invalid pin block                                     | Decline               |
| 127 | Pin length error                                      | Decline               |
| 128 | Pin key synch error                                   | Decline               |
| 129 | Suspected counterfeit card                            | Decline               |
| 160 | Invalid date  | Decline               |
| 161 | Allowable number of pin tries exceeded                | Decline               |
| 162 | Unable to locate previous message                     | Decline               |
| 164 | Card entry found, below low range                     | Decline               |
| 165 | Pan length not according to table                     | Decline               |
| 167 | Match on previous transaction not allowed             | Decline               |
| 200 | Do not honor  | Decline               |
| 201 | Expired card  | Decline/Expired Card  |
| 202 | Suspected fraud                                       | Decline               |
| 203 | Card acceptor contact acquirer                        | Decline               |
| 204 | Restricted card                                       | Decline               |
| 205 | Card acceptor call acquires security department       | Decline               |
| 206 | Allowable pin tries exceeded                          | Decline               |
| 207 | Special conditions                                    | Decline               |
| 208 | Lost cards  | Decline               |
| 209 | Stolen card   | Decline               |
| 210 | Suspected counterfeit card                            | Decline               |
| 900 | Advice acknowledged, no financial liability accepted. | Approved              |
| 901 | Advice acknowledged, financial liability accepted.    | Approved              |
| 902 | Invalid transaction Decline/Invalid                   | Transaction           |
| 903 | Re-enter transaction                                  | Decline               |
| 904 | Format error  | Decline/ System Error |
| 905 | Acquirer not supported by switch                      | Decline/System Error  |
| 906 | Cut over in process                                   | No Reply              |
| 907 | Card issuer or switch inoperative                     | No Reply              |
| 908 | Transaction destination cannot find routing           | Decline               |
| 909 | System malfunction                                    | Decline/ System Error |
| 910 | Card issuer signed off                                | No Reply              |
| 911 | Card issuer timed out                                 | No Reply              |
| 912 | Card issuer unavailable                               | No Reply              |
| 913 | Duplicate transmission                                | Decline/ System Error |
| 914 | Not able to trace back to original transaction        | Decline               |
| 915 | Reconciliation cut over or checkpoint error           | No Reply              |
| 916 | MAC incorrect   | Decline/System Error  |

| 917 | MAC key sync error                          | Decline/System Error  |
|-----|---|-----------------------|
| 918 | No communication keys available             | Decline/System Error  |
| 919 | Encryption key error                        | Decline/System Error  |
| 920 | Security software/hardware error, try again | System Error          |
| 921 | Security software/hardware error, no action | System Error          |
| 922 | Message number out of sequence              | System Error          |
| 923 | Request in progress                         | System Error          |
| 940 | Invalid date and time, local transaction    | System Error          |
| 945 | KIR (PBS host) timeout                      | No Reply              |
| 946 | PGW error occurred, unspecified             | No Reply              |
| 950 | Violation of business arrangement           | Decline/ System Error |
| 984 | No valid conversion for a field             | Decline/ System Error |