Bits Norwegian specific PSD2 API appendix

Implementation of Norwegian payment products with Berlin Group XS2A API

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Contents

1 Introduction

1.1 Background

This document is a national appendix to the Berlin Group Interface specification document. The goal of the document is to specify the usage of the Berlin Group interface specification for domestic payments in NOK in the Norwegian market.

This document does not stand alone, but relies on the Berlin Group XS2A interface specification and operational rules documentation. References to these documents are made where relevant.

2 Services

2.1 Payment Initiation Request

2.1.1 Payment Initiation with JSON encoding of the Payment Instruction

POST /v1/payments/{**payment-product**}

The payment product indicates the type of payment to be initiated. In addition to the SEPA and cross currency payment types supported by the generic Berlin Group interface, the following payment types will be supported by Norwegian banks.

Request path

Berlin Group generic payments	- sepa-credit-transfers - instant-sepa-credit-transfers - target-2-payments - cross-currency-credit-transfers
Norwegian domestic payment products	- norwegian-domestic-credit-transfers (supported by all ASPSP's by default) - instant-norwegian-domestic-credit-transfers-straks (supported by participating banks – support to be published by bank) - instant-norwegian-domestic-credit-transfers (reserved for future realtime payment)

The requested payment type is to be included in the path of the request.

Request header

No specific requirements.

Request body

No specific requirements

Response header

No specific requirements

Response body

No specific requirements

2.2 Account Information Request

No specific requirements

2.3 Confirmation of funds service request

No specific requirements

3 KID – Customer identification for payee

3.1 Payments with KID parameter

The Norwegian KID (Customer identification) service is widely used for C2B and B2B payments. The KID parameter, included in the payment information identifies the payer and the payment, enabling the payee to update its ERP-system with the received reconciliation data.

Payments with KID are currently only valid for domestic payments (norwegian-domestic-credit-transfers), ref. table in chapter 2.1.1.

3.1.1 Generic KID rules

To use the KID service the payee is required to enter into an OCR agreement with its ASPSP.

The KID syntax is defined by the payee.

The unique KID for a specific payment is specified by the payee and shall be included in the invoice or payment information given to the payer.

The Payers ASPSP will always check if there is an OCR agreement on the payees account, if the entered KID is valid, or if KID is mandatory.

If the payee has an OCR agreement for the recipient account, a KID with error is entered, the payer's ASPSP shall rejected the payment with a reason code.

The bank is mandated to reject any payment initiation with invalid KID, according to the below table adapted from section 5 the document "Regler om kontroll av krediteringstransaksjoner og distribusjon av informasjon som grunnlag for slik kontroll".

https://www.bits.no/document/regler-om-kontroll-av-krediteringstransaksjoner-og-distribusjon-av-informasjon-som-grunnlag-for-slik-kontroll/

Agreement level ->	Without mandatory KID Control code 0	Mandatory KID Control code 2
Payment initiation with correct KID	Payment initiation approved. `OK`	Payment initiation approved. `OK`
Payment initation with missing KID	Payment initation approved, but sent with/without message. `OK`	Payment initation rejected (payee requires KID). `KID_MISSING`
Payment initation with invalid KID	Payment initation rejected (invalid KID). `KID_INVALID`	Payment initation rejected (invalid KID). `KID_INVALID`

3.1.2 Mandatory KID

A payee may choose to require that there must be a valid KID for all electronic payments.

If the payee has an OCR agreement for the recipient account where KID is made mandatory, a payment without KID shall be rejected by the payers ASPSP with a reason code.

3.1.3 Rejection of payment due to invalid or missing KID

The payer shall via the TPP immediately be informed if a payment is rejected due to invalid or missing KID.

3.2 Usage of KID in the Berlin Group interface

The KID parameter shall be included in the following data element:

remittanceInformationStructured

```
POST https://api.testbank.com/v1/payments/norwegian-domestic-credit-
transfers
Content-Encoding : gzip
Content-Type: application/json
X-Request-ID: 99391c7e-ad88-49ec-a2ad-99ddcb1f7721
PSU-IP-Address: 192.168.8.78
PSU-GEO-Location: GEO:52.506931,13.144558
PSU-User-Agent: Mozilla/5.0 (Windows NT 10.0; WOW64; rv:54.0)
```

```
Gecko/20100101 Firefox/54.0
Date: Thu, 04 Apr 2018 07:03:28 GMT

{
    "instructedAmount": {"currency": "NOK" , "amount": "499.50"},
    "debtorAccount": { "bban" : "99991012345"},
    "creditorName": "Merchant123" ,
    "creditorAccount": {"bban" : "99990554321"},
    "remittanceInformationStructured": {"reference" :
"01002206283832929020202022"}
}
```

If the KID value is not valid or not entered when required, the payer's ASPSP shall reject the payment request and return an error code via the PSD2 interface in the Payment initiation response.

This error/warning element can be embedded in all JSON based response messages of the Berlin Group XS2A Interface.

Example where KID is required but missing:

This error message implicitly indicates that KID is required, hence there is no need to include that 'required' condition in the error message.

```
{
 "transactionStatus" : "Rejected",
 "tppMessages": [ {

       "category" : "ERROR",
       "code" : "KID_MISSING",
       "text" : "additional text information of the ASPSP up to 512
characters",

    } ]

}
```

Example where KID value is not valid:

This error-message may occur both when KID is required and not required.

```
{

 "transactionStatus" : "Rejected",

 "tppMessages": [ {

        "category" : "ERROR",
        "code" : "KID INVALID",
        "text" : "additional text information of the ASPSP up to 512
characters",

    } ]

}
```

3.3 Usage of Payment Message in the Berlin Group interface

The message parameter is supported for all Norwegian domestic payment types.

The message parameter shall be included in the following data element:

remittanceInformationUnstructured

Example:

```
POST https://api.testbank.com/v1/payments/norwegian-domestic-credit-
transfers
Content-Encoding : gzip
Content-Type: application/json
X-Request-ID: 99391c7e-ad88-49ec-a2ad-99ddcb1f7721
PSU-IP-Address: 192.168.8.78
PSU-GEO-Location: GEO:52.506931,13.144558
PSU-User-Agent: Mozilla/5.0 (Windows NT 10.0; WOW64; rv:54.0)
Gecko/20100101 Firefox/54.0
Date: Thu, 04 Apr 2018 07:03:28 GMT

{
    "instructedAmount": {"currency": "NOK" , "amount": "499.50"},
    "debtorAccount": { "bban" : "99991012345"},
    "creditorName": "Merchant123" ,
    "creditorAccount": {"bban" : "99990554321"},
    "remittanceInformationUnstructured": "eg. invoicenumber"
}
```

The value of this parameter is a data string, hence there is no validation of the data.

4 Core Payment Structures

4.1 Norway domestic Single Payments

See chapter 10 in Berlin Group Implementation Guidelines for further context information.This table will also be included in chapter 15.1.1 of the Implementation Guidelines.

Data Element	Type	norwegian-domestic-credit-transfers	instant-norwegian-domestic-credit-transfers-straks	instant-norwegian-domestic-credit-transfers (FUTURE)
endToEndIdentification	Max35Text	n.a.	n.a.	n.a.
debtorAccount (incl. type)	Account Reference	mandatory	mandatory	mandatory
ultimateDebtor	Max70Text	optional	optional	optional
instructedAmount (inc. Curr.)	Amount	mandatory	mandatory	mandatory
creditorAccount	Account Reference	mandatory	mandatory	mandatory
creditorAgent	BICFI	optional	optional	optional
creditorName	Max70Text	mandatory	mandatory	mandatory
creditorAddress	Address	optional	optional	optional
ultimateCreditor	Max70Text	optional	optional	optional
purposeCode	Purpose Code	optional	optional	optional
remittanceInformationUnstructured	Max140Text	optional	optional	optional
remittanceInformationStructured	Remittance	conditional	optional	optional
requestedExecutionDate	ISODate	Optional	n.a.	n.a.
requestedExecutionTime	ISODateTime	n.a.	n.a.	optional