Íslenskir staðlar

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Technical specification - Foreign payments

Íslenskir staðlar

ÍST TS 313:2021

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1. edition

Foreword

This IST Technical Specification was developed in accordance with "ÍST Reglur um tækniforskriftir, tækniskýrslur og vinnustofusamþykktir" (*e.* IST rules on Technical Specifications, Technical Reports and Workshop Agreements). The TS (Technical specification) was prepared by the technical committee TN-FMÞ within FUT (Sector committee for ICT standardisation) following a public call for participation within TN-FMÞ. Committee draft was sent to TN-FMÞ on the 2020-12-08 and approved by correspondence on the 2020-12-22.

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This ÍST TS is based on the results of the work of workgroup TN-FMÞ-VH-1 Business claims.

The text of ÍST TS-313 was based on the work of following specialists working in TN-FMÞ-VH-1 in cooperation with the consultant Guðmundur Jón Halldórsson.

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The text of ÍST TS-313 was submitted to IST for publication on 2021-2-2.

The Technical Committee's participants have made every effort to ensure the reliability and accuracy of the technical and non-technical content of ÍST TS-313, but this does not guarantee, either explicitly or implicitly, its correctness. Users of ÍST TS-313 should be aware that neither the TN-FMÞ, nor IST can be held liable for damages or losses of any kind whatsoever which may arise from its application. Users of ÍST TS-313 do so on their own responsibility and at their own risk.

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Introduction

This Technical Specification (TS) is written to present a preferred way to implement foreign payments according to the requirements of the Icelandic banks and will extend the European initiative Berlin Group for implementing PSD2 in Icelandic finance and banking transactions.

API interfaces enable accounting systems, payment systems, information systems and other systems to exchange data with the banks without registering in traditional online banking. An example of exchanging data with the banks can be through the accounting systems interface. With a click of a button in the accounting system, exchange of data is performed by the system in the background and latest relevant data is shown in the accounting system.

The Icelandic banks together with RB (Clearing House of Iceland), Central Bank of Iceland, software companies, billing companies, fintech companies and other stakeholders within the TN FMÞ at the Icelandic Standards Council have written a standard on how the banks should conduct electronic interconnection in the construction of interfaces APIs. The first version of that standard was published in 2007 and was named IOBWS (Icelandic Online Banking Web Service). Six years later, version 2, IOBWS 2.0 of the standard was published. The work was developed to make corrections and upgrade to business operations that were not foreseen in the earlier standard. This document describes the partial results of the third phase of the third IOBWS project, IOBWS 3.0.

It was decided on a TN-FMÞ meeting to give fintech companies and other stakeholders the ability to get more detailed information about foreign payments. This ability will support requesting information details and statement detail about all foreign payments.

This document is based on the results from the working group of the TN-FMÞ, VH-1 Financial claims. The following technical specification describes domestic extensions to Berlin-group NextGenPSD2 technical specifications version 1.3.6.

The purpose is to supplement the foreign payments in the IOBWS standard to better support the Payment Service Directive 2 (PSD2) by a domestic open banking and thereby enable stakeholders to trust the Icelandic banking environment.

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1. Scope

The joint effort to create third version of the IOBWS (Icelandic Online Banking Web Service) is described in ÍST-WA-310. This document describes the foreign payments products and is a part of the third version of IOBWS that will also support the domestic implementation of the Payment Service Directive (EU 2015/2366, also known as PSD2).

This document reflects the agreement made by TN-FMÞ and is based on the analysis of the working group TN-FMÞ-VH1 business claims.

2. Normative references, definitions, and symbols

2.1 Definitions

- **Kennitala**: The Icelandic identification number (Icelandic: kennitala, abbreviated kt.) is a unique national identification number used by the Icelandic government to identify individuals and organisations in Iceland.
- **Icelandic IBAN** definition https://en.wikipedia.org/wiki/International_Bank_Account_Number ISO 13616:1997
- **ISO 20022** is an ISO standard for electronic data interchange between financial institutions.
- **eIDAS** – Regulation (EU) No 910/2014 of the European Parliament and of the Council of 23 July 2014 on electronic identification and trust services for electronic transactions in the internal market and repealing Directive 1999/93/EC
- **AISP** – Account Information Service Provider – Being an authorised AISP means that business can ask for permission to connect to a bank account and use that bank account information to provide a service.
- **PISP** – Payment Initiation Service Provider – Businesses that are authorised PISP's can ask for permission to connect to a bank account and initiate payments on the customer's behalf, from their bank account.
- **3D** – 3D Secure (3DS) is an additional layer of security for online credit and debit card payments – the most well-known examples being Verified by Visa, Mastercard Secure-Code and American Express Safe-Key. At the final stage of checkout, it asks the buyer for a password so the bank can authorise the payment.
- **IOBWS 3.0** – This is the acronym of the third version of the Icelandic Open Banking Web Services project and its product.
- **FUT** is the IT sector council at Icelandic standards.
- **TN-FMÞ** - Technical committee on finance services, working under FUT.
- **Berlin group** – The 'Berlin Group' is a pan-European payments interoperability standards and harmonisation initiative with the primary objective of defining open and common scheme- and processor-independent standards in the inter-banking domain between Creditor Bank (Acquirer) and Debtor Bank (Issuer), complementing the work carried out by e.g., the European Payments Council. As such, the Berlin Group has been established as a pure technical standardisation body, focusing on detailed technical and organisational requirements to achieve this primary objective.
- **NextGenPSD2 framework - PSD2** – With [PSD2] the European Union has published a new directive on payment services in the internal market. Among others [PSD2] contains regulations of new services to be operated by so-called Third-Party Payment Service Providers (TPP) on behalf of a Payment Service User (PSU). These new services are:
  - **Payment Initiation Service** (PIS) to be operated by a Payment Initiation Service Provider (PISP) TPP as defined by article 66 of [PSD2]
  - **Account Information Service** (AIS) to be operated by an Account Information Service Provider (AISP) TPP as defined by article 67 of [PSD2], and
  - **Confirmation of the Availability of Funds Service** to be used by Payment Instrument Issuing Service Provider (PIISP) TPP as defined by article 65 of [PSD2].
- **PSU** – Payment Service User. The end-user of payment service.
- **SCA** – Strong Customer Authentication. Defined by the EBA in its RTS on SCA as "an authentication based on the use of two or more elements categorised as knowledge (something only the user knows [for example, a password]), possession (something only the user possesses [for example, a particular cell phone and number]) and inherence (something the user is [or has, for example, a fingerprint or iris pattern]) that are independent, [so] the breach of one does not compromise the others, and is designed in such a way as to protect the confidentiality of the authentication data."
- **Payment service directive** – PSD2 overview.
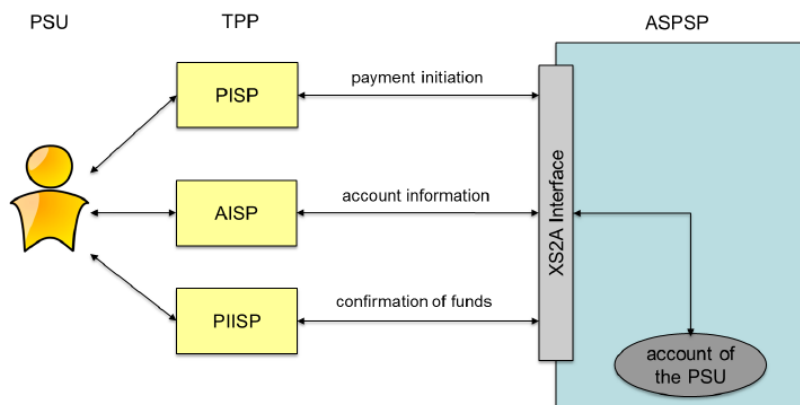
2.2 Definition of the foreign payment products

The following elements are used to define the foreign payment product. It is important to understand the meaning of each element to see how it fits in the big picture:

The Icelandic domestic requirements are defined in Annex A.1. and A.2.

3. Icelandic domestic adaptions

This chapter concludes the domestic adaptation to the foreign payment products and data model changes.

3.1 Foreign payments products

The workgroup concluded to define the following foreign products product, defined in detail in Annex:

- **SEPA credit transfers:** SEPA credit transfer for single or bulk payment. Periodic payments are not supported.
- **Cross border credit transfers**: SWIFT payments

3.2 Functional changes & data model changes

The Icelandic adaption to the Berlin Group data model NextGenPSD2 framework is described in the latest version of the document IOBWS3-0.yaml located at https://github.com/stadlar/IST-FUT-FMTH/tree/master/Deliverables

4 Presumptions, future work, maintenance

4.1 Presumptions

The Icelandic financial sector wants to have unified way to perform foreign payments within the SEPA or cross border.

4.2 Future work

- TN-FMÞ has the intention to keep working on developing this document amongst others developed in the IOBWS 3.0 project based on domestic needs and Berlin Group changes of cited documents.
- TN-FMÞ have arranged for that the delivery of the YAML document will in the Github location https://github.com/stadlar/IST-FUT-FMTH/tree/master/Deliverables

4.3 Maintenance

As other products of the IOBWS 3.0 project will the maintained by TN-FMÞ.

TN FMÞ agrees that FUTs Github (https://github.com/stadlar/IST-FUT-FMTH/issues) should be used in this maintenance task and issues shall be raised and processed by TN-FMÞ.

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Annex A

The following annex extends the Berlin group document:

NextGenPSD2 Access to Account Interoperability Framework - Implementation Guidelines V1.3.6_20200203.pdf

and has been modified to fulfil the Icelandic foreign payments requirements.

The Icelandic foreign payment products are as follows:

A.1 Single payment products

A.1.1 Single payment

Generic Body for a payment initiation via JSON.

This generic JSON body can be used to represent valid payment initiations for the following JSON based payment product, which were defined in the Implementation Guidelines:

- sepa-credit-transfers

- cross-border-credit-transfers

Data Element	Type	SEPA credit transfers	Cross border credit transfers
debtorAccount	Account Reference	Mandatory	Mandatory
chargesAccount	Account Reference	Optional	Optional
instructedAmount	Amount	Mandatory	Mandatory
creditorAccount	Account Reference	Mandatory	Mandatory
creditorName	Max70Text	Mandatory	Mandatory
creditorAddress	Address	Optional	Mandatory
creditorAgent	BICFI	n/a	Optional
creditorAgentAddress	Address	n/a	Optional
chargeBearer	ChargeBearer	Optional	Optional

serviceLevel	Service Level Code ExternalServiceLevel1Code*	n/a	Optional
centralBankPurposeCode	CentralBankPurpose	Mandatory	Mandatory
remittanceInformation UnStructured	Max140Text	Optional	Optional

- **ExternalServiceLevel1Code** A set of codes defined outside the schema. The suggested values are { SDVA, URGP }. For full list of codes, see §0 ISO ExternalServiceLevel1Code.

Example - SEPA Credit transfers

Request

```
POST https://psd2.openbankingapi.is/v1/payments/sepa-credit-transfers
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:                Sun, 06 Aug 2017 15:02:37 GMT
```

```
{

  "debtorAccount": {
    "iban": "IS40100100103307118608"
  },
  "costDebtorAccount": {
    "iban": "IS40100100103307118609"
  },
  "instructedAmount": {
    "currency": "EUR",
    "amount": "123.50"
  },
  "creditorAccount": {
    "iban": "DE02100100109307118603"
  },
  "creditorName": "Jón Jónsson",
  "creditorAddress": {
    "streetName": "Lambhagi",
    "buildingNumber": "10",
    "townName": "Reykjvík",
    "postCode": "101",
    "country": "IS"
  },
  "centralBankPurposeCode":"099",
  "remittanceInformationUnstructured": "Ref Number Merchant"
}
```

Example – Cross border credit transfers

Request

```
POST https://psd2.openbankingapi.is/v1/payments/cross-border-credit-transfers
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: Sun, 06 Aug 2017 15:02:37 GMT

{
  "debtorAccount": {
    "iban": "IS40100100103307118608"
  },
  "costDebtorAccount": {
    "iban": "IS40100100103307118609"
  },
  "instructedAmount": {
    "currency": "EUR",
    "amount": "123.50"
  },
  "creditorAccount": {
    "iban": "DK02100100109307118603"
  },
  "creditorName": "Jón Jónsson",
  "creditorAddress": {
    "streetName": "Lambhagi",
    "buildingNumber": "10",
    "townName": "Reykjvík",
    "postCode": "101",
    "country": "IS"
  },
  "creditorAgent": "DABADKKK",
  "creditorAgentAddress": {
    "streetName": " BROGADE",
    "buildingNumber": "3",
    "townName": " KØGE",
    "postCode": "4600",
    "country": "DK"
  },
  "serviceLevel": "PRPT",
  "centralBankPurposeCode":"099",
  "remittanceInformationUnstructured": "Ref Number Merchant"
}

A.2 Bulk payment products

Generic Body for a bulk payment initiation.

Data Element	Type	SEPA credit transfers	Cross border credit transfers
debtorAccount	Account Reference	Mandatory	Mandatory
chargesAccount	Account Reference	Optional	Optional
paymentInformationId	Max35Text	Optional	Optional
Payments	List of Payment Bulk	Mandatory	Mandatory

The payment information id is unique identification as assigned by the sending party to unambiguously identify this bulk payment.

A.2.1 Bulk payment

Generic body for a bulk payment initiation entry.

The bulk entry type is a type which follows the JSON formats for the supported products for single payments excluding the data elements (if supported):

The debtorAccount data element may not be used in any bulk entry.

Bulk payments (creditor) are required to be in the same currency, the withdrawal account (debtor) can be in different currency.

Data Element	Type	SEPA credit transfers	Cross border credit transfers
instructedAmount	Amount	Mandatory	Mandatory
creditorAccount	Account Reference	Mandatory	Mandatory
creditorName	Max70Text	Mandatory	Mandatory
creditorAddress	Address	Optional	Optional
creditorAgent	Max35Text	n/a	Optional
creditorAgentAddress	Address	n/a	Optional
chargeBearer	ChargeBearer	Optional	Optional
serviceLevel	Service Level Code ExternalServiceLevel1Code	n/a	Optional
centralBankPurposeCode	CentralBankPurpose	Mandatory	Mandatory
remittanceInformation UnStructured	Max140Text	Optional	Optional

Request
```
POST https://psd2.openbankingapi.is/v1/bulk-payments/sepa-credit-transfers
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:               Sun, 06 Aug 2017 15:02:37 GMT
```

```json
{
  "debtorAccount": {
    "iban": "IS40100100103307118608"
  },
  " chargesAccount": {
    "iban": "IS40100100103307118609"
  },
  "paymentInformationId": "my-bulk-identification-1234",
  "payments": [
        {
          "instructedAmount": {
            "currency": "EUR",
            "amount": "123.50"
          },
          "creditorAccount": {
            "iban": "DE02100100109307118603"
          },
          "creditorName": "Jón Jónsson",
          "creditorAddress": {
            "streetName": "Lambhagi",
            "buildingNumber": "10",
            "townName": "Reykjvík",
            "postCode": "101",
            "country": "IS"
          },
          "centralBankPurposeCode": "099",
          "remittanceInformationUnstructured": "Ref Number Merchant"
        }
  ]
}
```

A.3 Introduction

A.4. Character Sets and Notations

For definition on character Sets and Notations as well as for request and response notations refer to Chapter 2 of [XS2A-IG].

A.5. Transport Layer

The communication between the TPP and the ASPSP is always secured by using a TLS connection using TLS version 1.2 or higher. For the choice of cipher suite selections, NIST recommendations on the cryptographical strength should be followed. For ASPSPs, further cipher suite requirements of their national IT security agency might apply.

This TLS-connection is set up by the TPP. It is not necessary to set up a new TLS-connection for each transaction, however the ASPSP might terminate an existing TLS-connection if required by its security setting.

The TLS-connection must be established always including client (i.e., TPP) authentication. For this authentication, the TPP must use a qualified certificate for website authentication. This qualified certificate must be issued by a qualified trust service provider according to the eIDAS regulation [eIDAS]. The content of the certificate must be compliant with the requirements of [EBA-RTS]. The certificate of the TPP has to indicate all roles the TPP is authorized to use.

A.6 Application Layer: Guiding Principles

Guidelines principles are defined in NextGenPSD2 Access to Account Interoperability Framework - Implementation Guidelines V1.3.6_20200203.pdf

A.7. Payment Initiation Service

A.7.1 Payment Initiation Flows

The payment initiation flows are described in the NextGenPSD2 implementation guidelines version 1.3.6, chapter 5.

A.7.2 Data Overview Payment Initiation Service

The Data Overview Payment Initiation Service are described in the NextGenPSD2 implementation guidelines version 1.3.6, chapter 5.

A.7.3 Payment Initiation Request

A.7.3.1 Payment Initiation Single Payment

Call

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

Creates a payment initiation request at the ASPSP.

Path Parameters

Attribute	Type	Description
payment- product	String	The addressed payment product endpoint, e.g., for SEPA Credit Transfers (SCT). The default list of products supported in this standard is: • sepa-credit-transfers • cross-border-credit-transfers The ASPSP will publish which of the payment products/endpoints will be supported. For definitions of basic non euro generic products see [XS2A-DP]. Further products might be published by the ASPSP within its XS2A documentation. These new product types will end in further endpoints of the XS2A Interface.

Query Parameters

No Query Parameter.

Request Header

Attribute	Type	Condition	Description
Content-Type	String	Mandatory	application/json.
X-Request-ID	UUID	Mandatory	ID of the request, unique to the call, as determined by the initiating party. This is the unique ID of TPP for the payment initiation regarding PSD2 article 47 and EBA RTS article 29.
Authorization	String	Conditional	Bearer Token. Is contained only, if an OAuth2 based authentication was performed in a pre-step or an OAuth2 based SCA was performed in a preceding AIS service in the same session.
PSU-IP-Address	String	Mandatory	The forwarded IP Address header field consists of the corresponding HTTP request IP Address field between PSU and TPP. If not available, the TPP shall use the IP Address used by the TPP when submitting this request.

Remark: Note that a reference of the payment to payer/payee following [PSD2], Article 46 (b), will be handled on application layer with the data attributes related to end2end identification and remittance information.

Request Body

The payment data to be transported in the request body is dependent on the chosen API endpoint.

Response Code

The HTTP response code equals 201.

Response Header

Attribute	Type	Condition	Description
Location	String	Mandatory	Location of the created resource (if created).
X-Request-ID	UUID	Mandatory	ID of the request, unique to the call, as determined by the initiating party.

Response Body

Attribute	Type	Condition	Description
transactionStatus	Transaction Status	Mandatory	The values defined in Berlin-group implementation guideline.
paymentId	String	Mandatory	resource identification of the generated payment initiation resource.

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transactionFees	Amount	Optional	Can be used by the ASPSP to transport transaction fees relevant for the underlying payments.
transactionFeesDetails	Transaction FeesList	Optional	Can be used by the ASPSP to describe in details fees associated with the payment initiation.
exchangeRateInformation	Payment ExchangeRate	Optional	Exchange rate information used by ASPSP to describe exchange rate.
currencyConversionFee	Amount	Optional	Might be used by the ASPSP to transport specific currency conversion fees related to the initiated credit transfer.
transactionFeeIndicator	Boolean	Optional	If equals true, the transaction will involve specific transaction cost as shown by the ASPSP in their public price list or as agreed between ASPSP and PSU. If equals false, the transaction will not involve additional specific transaction costs to the PSU. If this data element is not used, there is no information about transaction fees unless the fee amount is given explicitly in the data element transactionFees.
_links	Links	Mandatory	A list of hyperlinks to be recognised by the TPP. The actual hyperlinks used in the response depend on the dynamical decisions of the ASPSP when processing the request.

Example

Request
```
POST https://psd2.openbankingapi.is/v1/payments/sepa-credit-transfers
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:                      Sun, 06 Aug 2017 15:02:37 GMT

{
    "instructedAmount": {
        "currency": "EUR",
        "amount": "123.50"
    },
    "debtorAccount": {
        "iban": "IS40100100103307118609"
    },
    "creditorName": "Merchant123",
    "creditorAccount": {
        "iban": "DE02100100109307118603"
    },
    "remittanceInformationUnstructured": "Ref Number Merchant"
    "centralBankPurposeCode": "99"
}
```

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A.7.3.2 Payment Initiation for Bulk Payments

This function supports the upload of bulk payments. This function is an **optional** function of the ASPSP in the XS2A interface. It can be offered by the ASPSP in JSON modelling of the payment data, i.e., the body content.

A.7.3.2.1 Bulk Payment Initiation with JSON encoding of the Payment Instruction

Call

```
POST /v1/bulk-payments/{payment-product}
```

Creates a bulk payment initiation request at the ASPSP.

Path Parameters

Attribute	Type	Description
payment- product	String	The addressed payment product endpoint for bulk payments e.g., for a bulk SEPA Credit Transfers (SCT). Some default names are: • sepa-credit-transfers • cross-border-credit-transfers The ASPSP will publish which of the payment products/endpoints will be supported. For definitions of basic non euro generic products see [XS2ADP].

Query Parameters

The same query parameter definition as in single payment applies.

Request Headers

The same HTTP header definition as in single payment applies.

Request Body

The body definition with the JSON based SEPA bulk payments is contained in Section A.2, further definitions for non SEPA payments in [XS2A-DP].

Response

The responses definition is analogous to the initiation of single payments.

A.7.4 Get Transaction Status Request

Call

```
GET /v1/{payment-service}/{payment-product}/{paymentId}/status
```

Can check the status of a payment initiation.

Path Parameter

Attribute	Type	Description
paymentservice	String	The possible values are "payments", "bulk-payments" and "periodic-payments".
paymentproduct	String	The payment product, under which the payment under paymentId has been initiated. It shall be checked by the ASPSP, if the payment-product is matching the payment initiation addressed by paymentId.
paymentId	String	Resource Identification of the related payment.

Request Header

Attribute	Type	Condition	Description
X-Request-ID	UUID	Mandatory	ID of the request, unique to the call, as determined by the initiating party.
Authorization	String	Conditional	Is contained only, if an OAuth2 based authentication was performed in a pre-step or an OAuth2 based SCA was performed in the current PIS transaction or in a preceding AIS service in the same session, if no such OAuth2 SCA approach was chosen in the current PIS transaction.

Query Parameters

No specific query parameters defined.

Request Body

No request body.

Response Code

The HTTP response code equals 200.

Response Header

Attribute	Type	Condition	Description
X-Request-ID	UUID	Mandatory	ID of the request, unique to the call, as determined by the initiating party.

Response Body

Attribute	Type	Condition	Description
transactionStatus	Transaction Status	Mandatory	In case where the Payment Initiation Request was JSON encoded, the status is returned in this JSON based encoding.

Example

Request

```
GET https://psd2.openbankingapi.is/v1/payments/1234-wertiq-983/status
Accept:                      application/json
X-Request-ID:                99391c7e-ad88-49ec-a2ad-99ddcb1f7721
Date:                        Sun, 06 Aug 2017 15:04:07 GMT
```

Response

```
HTTP/1.x 200 Ok

X-Request-ID:                99391c7e-ad88-49ec-a2ad-99ddcb1f7721
Date:                        Sun, 06 Aug 2017 15:04:08 GMT
Content-Type:                application/json

{
    "transactionStatus": "ACCP"
}
```

A.7.5 Get Payment Request

```
GET /v1/{payment-service}/{payment-product}/{paymentId}
```

Returns the content of a payment object.

Path Parameters

Attribute	Type	Description
paymentservice	String	The possible values are "payments" and "bulk-payments".
paymentproduct	String	The payment product, under which the payment under paymentId has been initiated.
paymentId	String	ID of the corresponding payment initiation object as returned by a Payment Initiation Request.

Query Parameters

No specific query parameter.

Request Headers

Attribute	Type	Condition	Description
X-Request-ID	UUID	Mandatory	ID of the request, unique to the call, as determined by the initiating party.
Authorization	String	Conditional	Is contained only, if an OAuth2 based authentication was performed in a pre-step or an OAuth2 based SCA was performed in the current PIS transaction or in a preceding AIS service in the same session, if no such OAuth2 SCA approach was chosen in the current PIS transaction.

Request Body

No request body.

Response Header

Attribute	Type	Condition	Description
X-Request-ID	UUID	Mandatory	ID of the request, unique to the call, as determined by the initiating party.

Response Code

The HTTP response code equals 200.

Response Body

The response body is dependent on the parameter {payment-service}. It contains the view of the ASPSP on the addressed payment resource.

For JSON based {payment-services}, the payment resources may contain e.g., in addition the transaction status data element.

Response for single payment

Attribute	Type	Condition	Description
debtorName	DebtorName	Optional	Debtor name.
chargesAccount	Account Reference	Optional	Charges account.
debtorAccount	Account Reference	Mandatory	Debtor account.
debtorId	Debtor Id	Optional	Debtor id.
instructedAmount	Amount	Mandatory	Instructed amount.

exchangeRateInformation	Payment Exchange rate	Optional	Exchange rate information.
creditorAccount	Account Reference	Mandatory	Creditor account.
creditorAgent	BICFI	Optional	Creditor agent.
creditorName	Creditor Name	Mandatory	Creditor name.
creditorAddress	Address	Optional	Creditor address.
creditorId	Max35Text	Optional	Creditor id.
icelandicPurpose	Icelandic Purpose	Optional	Payment categorization.
chargeBearer	Account Reference	Optional	Who is going to bear charges?
remittanceInformationUnstructured	Remittance Information Unstructured	Optional	References.
transactionStatus	Transaction Status	Optional	Transaction status.
transactionFeesDetails	Transaction FeesList	Optional	Any payment fees.

Response for bulk payment

Attribute	Type	Condition	Description
acceptorTransactionDateTime	Date	Optional	Timestamp of the actual card transaction within the acceptance system.
debtorAccount	Account Reference	Mandatory	The withdrawal account.
chargesAccount	Account Reference	Optional	The withdrawal charge account.
paymentInformationId	Max35Text	Optional	Unique identification as assigned by the sending party to unambiguously identify this bulk payment. This attribute may be used by ASPSPs or communities as an optional field.
payments	List of bulk payment	Mandatory	List of 1 or more bulk payment.
transactionStatus	Transaction Status	Optional	Status of the payment request.
transactionFeesDetails	Transaction FeesList	Optional	Detailed list of fees. ASPSP can use this field to communicate to the TPP the fees applied to the payment initiation request that will be withdrawn from the chargesAccount.

A.7.6 Payment Cancellation Request

Call

```
DELETE /v1/{payment-service}/{payment-product}/{paymentId}
```

It initiates the cancellation of a payment. Depending on the payment-service, the payment product and the ASPSP's implementation, this TPP call might be sufficient to cancel a payment. If an authorization of the payment cancellation is mandated by the ASPSP, a corresponding hyperlink will be contained in the response message. These two cases will be separated also in using different 2xx HTTP response codes.

Path Parameter

Attribute	Type	Description
paymentservice	String	The possible values are "payments", "bulk-payments" and "periodic-payments".
paymentproduct	String	The payment product, under which the payment under paymentId has been initiated. It shall be checked by the ASPSP, if the payment-product is matching the payment initiation addressed by paymentId.
paymentId	String	Resource Identification of the related payment.

Request Header

Attribute	Type	Condition	Description
X-Request-ID	UUID	Mandatory	ID of the request, unique to the call, as determined by the initiating party.
Authorization	String	Conditional	Is contained only, if an OAuth2 based authentication was performed in a pre-step or an OAuth2 based SCA was performed in the current PIS transaction or in a preceding AIS service in the same session, if no such OAuth2 SCA approach was chosen in the current PIS transaction.

Query Parameters

No specific query parameters defined.

Request Body

No request body.

Response Code

If the DELETE is sufficient for cancelling the payment: HTTP response code 204.

Response Header

Attribute	Type	Condition	Description
X-Request-ID	UUID	Mandatory	ID of the request, unique to the call, as determined by the initiating party.

Response Body

In case of HTTP code 204, no response body is used.

In case of HTTP code 202, the following body is used:

Attribute	Type	Condition	Description
transactionStatus	Transaction Status	Mandatory	Transaction Status of the payment resource.
_links	Links	Conditional	A list of hyperlinks to be recognised by the TPP. The actual hyperlinks used in the response depend on the dynamical decisions of the ASPSP when processing the request.

Example in case the DELETE process as such is already sufficient for cancelling the payment

Request

```
DELETE https://psd2.openbankingapi.is/v1/bulk-payments/sepa-credit-transfers/123456scheduled789

Content-Type                  application/json
X-Request-ID                  99391c7e-ad88-49ec-a2ad-99ddcb1f7769
Date                          Sun, 13 Aug 2017 17:05:37 GMT
```

Response

```
HTTP/1.x 204

X-Request-ID:                 99391c7e-ad88-49ec-a2ad-99ddcb1f7769
Date:                         Sun, 13 Aug 2017 17:05:38 GMT
```

A.8. Complex Data Types and Code Lists

In the following constructed data types are defined as used within parameter sections throughout this document.

A.8.1. Transactions

Attribute	Type	Condition	Description
transactionId	String	Optional	Can be used as access-ID in the API, where more details on a transaction is offered. If this data attribute is provided this shows that the AIS can get access on more details about this transaction using the GET Transaction Details Request.
entryReference	Max35Text	Optional	Is the identification of the transaction as used e.g., for reference for delta function on application level. The same identification as for example used within camt.05x messages.
endToEndId	Max35Text	Optional	Unique end to end identity.
mandateId	Max35Text	Optional	Identification of Mandates, e.g., a SEPA Mandate ID.
checkId	Max35Text	Optional	Identification of a Cheque.
creditorId	Max35Text	Optional	Identification of Creditors, e.g., a SEPA Creditor ID.
bookingDate	ISODate	Optional	The Date when an entry is posted to an account on the ASPSPs books.
valueDate	ISODate	Optional	The Date at which assets become available to the account owner in case of a credit.
transactionAmount	Amount	Mandatory	The amount of the transaction as billed to the account.
currencyExchange	Array of Report Exchange Rate	Optional	List of exchange rate between two currencies.
creditorName	Max70Text	Optional	Name of the creditor if a "Debited" transaction.
creditor Account	Account Reference	Conditional	IBAN account number.
creditorAgent	BICFI	Optional	BIC FI.
ultimate Creditor	Max70Text	Optional	The beneficiary.
debtorName	Max70Text	Optional	Name of the debtor if a "Credited" transaction.
debtorAccount	Account Reference	Conditional	IBAN account for the debtor.
debtorAgent	BICFI	Optional	Debtor agent.
ultimateDebtor	Max70Text	Optional	The Originator Reference Party.
remittance Information Unstructured	Max140Text	Optional	Reference field.

remittance Information Unstructured Array	Array of Max140Text	Optional	Array of reference field.
remittance Information Structured	Max140Text	Optional	Reference as contained in the structured remittance reference structure (without the surrounding XML structure).
remittance Information Structured Array	Array of Remittance	Optional	More details about the Remittance Data Type will be published in an Errata in due course. For usage of the fields e.g., for domestic elements, Berlin Group should be contacted. This would enable to publish usage of structured remittance information in the domestic payment documentation, cp. [XS2A-DP].
additionalInformation	Max500Text	Optional	Might be used by the ASPSP to transport additional transaction related information to the PSU.
additionalInformation Structured	Structured Additional Information	Conditional	Is used if and only if the bookingStatus entry equals "information". Every active standing order related to the dedicated payment account result into one entry.
purposeCode	Purpose Code	Optional	The reason for the transaction.
bankTransactionCode	Bank Transaction Code	Optional	Bank transaction code as used by the ASPSP and using the sub elements of this structured code defined by ISO20022.
proprietaryBank TransactionCode	Max35Text	Optional	Proprietary bank transaction code as used within a community.
balanceAfterTransaction	Balance	Optional	This is the balance after this transaction. Recommended balance type is interimBooked.
_links	Links	Optional	The following links could be used here: transactionDetails for retrieving details of a transaction.

A.8.2. Transaction Fees Detail

Attribute	Type	Condition	Description
feeType	Transaction Fees Detail	Mandatory	Defines the fee type. Used by the ASPSP to describe payment fees.
value	Amount	Mandatory	Defines the fee amount.

A.9. ISO Definitions

A.9.1. ExternalServiceLevel1Code

The following list contains suggested values.

Code	Name	Definition
SDVA	SameDayValue	Payment must be executed with same day value to the creditor.
URGP	Urgent Payment	Payment must be executed as an urgent transaction cleared through a real-time gross settlement system, which is typically identified as a wire or high value transaction.

A.8. References

[XS2A-OR]   NextGenPSD2 XS2A Framework, Operational Rules, The Berlin Group Joint
              Initiative on a PSD2 Compliant XS2A Interface, version 1.3, published 21 December 2018.
[XS2A-DP]   NextGenPSD2 XS2A Framework, Domestic Payment Definitions, The Berlin Group Joint Initiative on a
              PSD2 Compliant XS2A Interface, current version.
[XS2A-COFC]   NextGenPSD2 XS2A Framework, Extended Services, Confirmation of Funds Consent Service,
              Version 2.0, 01 March 2019.
[PSD2]   Directive (EU) 2015/2366 of the European Parliament and of the Council on payment services in the
              internal market, published 23 December 2015.

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