1822direkt XS2A-Interface

Documentation for Payment Initiation Service Providers, Account Information Service Providers and Payment Instrument Issuer Service Providers

Version 1.5

Table of Contents

Changes to the previous version

Version	Interface version	Changes	Date
1.3	/r1/v1	Extension by the following additional functionalities: • Reading standing orders • Extension of the account details structure to include the ownerName (account holder) • Support of the global consent variants availableAccounts and availableAccountsWithBalance • Support for Bank Offered Consent	30.06.2020
1.4		Added 2.5 Fall-Back Interface • Fall-Back Interface adress is https://www.1822direkt-banking.de:8443/JOBa1822Client/	22.12.2020
1.5		3.1.1 Payment Initiation Request • Fees for cross-border-credit-transfers in repsonse body added 3.2.5 Account Information Consent Request • Attribute allPsd2 supports Global Consent	15.09.2021

Glossary

Abbreviation	Description
AISP	Account Information Service Provider
ASPSP	Account Servicing Payment Service Provider, in the context of this document the 1822direkt.
FCS	Funds Confirmation Service
PIISP	Payment Instrument Issuer Service Provider, a provider who offers card-based payment instruments
PISP	Payment Initiation Service Provider
PSD2	Payment Service Directive 2
PSU	Payment Service User, end customer who uses payment services
QSealC	Qualified Certificate for Electronic Seals: a qualified certificate (eiDAS) for application layer identification of a TPP
QWAC	Qualified Certificate for Website Authentication: a qualified certificate (eiDAS) for transport layer identification of a TPP
SCA	Strong Customer Authentication

TPP	Third Party Payment Service Provider

Referenced Documents

Reference	Document
[PSD2]	Directive (EU) 2015/2366 of the European Parliament and of the Council on Payment Services in the Internal Market, published 25 November 2016
[EBA-RTS]	Commission Delegated Regulation (EU) 2018/389 of 27 November 2017 supplementing Directive 2015/2366 of the European Parliament and of the Council with regard to Regulatory Technical Standards for Strong Customer Authentication and Common and Secure Open Standards of Communication, C(2017) 7782 final, published 13 March 2018
[eIDAS]	Regulation (EU) No 910/2014 of the European Parliament and of the Council on Electronic Identification and Trust Services for Electronic Transactions in the Internal Market, 23 July 2014, published 28 August 2014
[ETSI_TS_119_495]	Technical Specification 119 495 V1.1.2 (2018-07) Electronic Signatures and Infrastructures (ESI); Sector Specific Requirements; Qualified Certificate Profiles and TSP Policy Requirements under the payment services Directive (EU) 2015/2366
[BG-IMPL]	03. NextGenPSD2 Access to Account Interoperability Framework - Implementation Guidelines V1.3_20181019
[BG-IMPL 1.3.6]	03. NextGenPSD2 Access to Account Interoperability Framework - Implementation Guidelines V1.3.6_20200203.pdf
[BG-OR]	02. NextGenPSD2 Access to Account Interoperability Framework - Operational Rules V1.3_20181221
[BG-YAML]	OpenAPI 3.0 file „psd2-api-1.3.3 20190412.yaml"

1 Introduction

This document describes the access to account interface (XS2A) which the 1822direkt provides for third parties according to PSD2, herewith named **1822direkt XS2A-Interface**.

The interface was developed following the standards specified by the Berlin Group [BG-OR], [BG-IMPL], [BG-IMPL 1.3.6], [BG-YAML] for implementation of [PSD2] and [EBA-RTS].

1.1 Target audience and document contents

The target audience of this document is „Third Party Payment Service Providers" (TPP) according to [PSD2], consisting of:

- Payment Initiation Service Providers (PISP)
- Account Information Service Providers (AISP)
- Payment Instrument Issuer Service Providers (PIISP)

The contents of this document consists of the following:

- A general description of technical functionality and elements of the interface
- A description of the communication path
- A description of the endpoints

1.2 Interface version

The version of the 1822direkt XS2A-Interface is defined by two components:

1) The version of the Berlin Group XS2A Implementation Guidelines on which the interface is based
2) The 1822direkt release version

The two components are a fixed part of the resource path and must be given with every interface call.

This document describes the 1822 XS2A-Interface with the **v1** version of the Berlin Group XS2A Implementation Guidelines and the **r1** 1822direkt release version.

The technical functionality of the interface can be expanded according to the flexibility allowed in [PSD2], [EBA-RTS] and the standards of the Berlin Group [BG-IMPL]

In the case of changes which are not backward compatible, e.g. based on newly dictated standards of the Berlin Group (in this case version **v2**) or a non-backward compatible functional enhancement implemented by the 1822direkt (for instance a migration to a different authorisation method), two or more usable interface variants could exist in parallel. Support of multiple interface variants is given to make necessary migrations as maintenance-free and flexible as possible.

2 General description of the interface

The 1822direkt XS2A-Interface was developed as a REST interface according to the standards of the Berlin Group. The individual endpoints are to be called with the following URL structure:

1) **Production:**
   https://xs2a.1822direkt-banking.de/joba-psd2/{release1822direkt}/{version}/{service}

2) **Sandbox Test Environment**
   https://sandbox.1822direkt-banking.de/joba-psd2/{release1822direkt}/{version}/{service}

The following parameters are included in the structure:

- **{release1822direkt}**: Release version of the 1822direkt XS2A-Interface, consisting of a prefix r followed by a numeral which increments with each version, i.e. initial **r1** followed by r2, r3, …
- **{version}:** this parameter is given by the Berlin Group XS2A Implementation Guidelines on which this interface is based. The initial version number **v1** corresponds to [BG_IMPL], final version 1.3. Future changes to the version number could result due to non-backward compatible changes of the standards of the Berlin Group XS2A Implementation Guidelines.
- **{service}**: the possible values of this parameter are dictated by the Berlin Group XS2A Implementation Guidelines and the freedom given to 1822direkt in accordance with said guidelines. For instance, the values *consents*, *payments, periodic payments, accounts* or *funds-confirmations* are possible. These values can be further enriched in certain specific cases (e.g. product types), e.g. *payments/sepa-credit-transfers* for Sepa bank transfers.

Moreover, additional query parameters can be passed as data parameters.

Initially, the production and sandbox environments will be offered in release 1, Berlin Group version v1. The following URL structures are defined with specific release and version numbers as stated:

1) **Production:**
   https://xs2a.1822direkt-banking.de/joba-psd2/r1/v1/{service}

2) **Sandbox test environment:**
   https://sandbox.1822direkt-banking.de/joba-psd2/r1/v1/{service}

The 1822direkt **exclusively supports JSON**, XML/plain-Format is not supported.

The authorisation method for strong customer authentication supports **Redirect**.

2.1 Supported Characters

UTF-8 is used for encoding.

The following characters are supported:
a b c d e f g h i j k l m n o p q r s t u v w x y z

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z
0 1 2 3 4 5 6 7 8 9
/ - ? : ( ) . , ' + $ % & ß ä ö ü Ä Ö Ü
Space

2.2 Interface security

The interface is directly accessible from the internet. The communication is carried out via SSL/TLS, version 1.2 or higher. A QWAC client certificate following [ETSI_TS_119_495] is required by the TPP and must be submitted during the SSL/TLS handshake. Without a proper certificate, no connection is possible.

The following verifications are not requested or supported by 1822direkt with the current version of the interface:

- 1822direkt does not use its own QWAC certificate. No two-way authentication is supported.
- The OAuth2 protocol is not supported.
- A certificate verification with QSealC (application level) is not supported.

2.3 Technical scope of function

Interface transactions are offered for **Tagesgeldkonten mit Debitkarte oder Kreditkarte (a type of savings account with a debit card or credit card) and for checking accounts**. Other products (e.g. securities accounts, additional types of savings accounts) are not supported.

All 1822direkt accounts are held in Euro. Therefore, no multicurrency accounts following [BG-IMPL], section 4.5 exist.

Optional session handling following [BG-IMPL], section 9 Sessions: Combination of AIS and PIS Services is not supported.

Additionally, the following constraints apply:

- Periodic payments and standing orders are not supported in release r1. For a follow-up release, it is planned to support them for SEPA payments.
- Target2 payments are not supported.
- Payment Cancellation Requests, [BG-IMPL], section 5.6 are not supported.
- Signing Baskets, [BG-IMPL], section 8 are not supported.
- Bulk Payments following [BG-IMPL], section 11.3 are not supported.
- Transaction detail extraction for AISPs (Read Transaction Details, [BG-IMPL], section 6.6.5) is not supported.

2.4 Communication path

The general communication path between a TPP and the 1822direkt via the „XS2A"-Interface is described in this section.

For a TPP, the following two types of communication exist:

Multi-level communication between the payment service user (PSU), the TPP and the 1822direkt with required authorisation from the PSU, for details refer to [BG-IMPL] sections 5.1.1 and 5.1.2, pp. 46 – 47 for PISPs and section 6.1.1.1, p. 101 for AISPs:

1) The payment service user (PSU) triggers a request through a TPP (**PISP/AISP**)
2) An appropriate request is sent to the 1822direkt.
3) The 1822direkt validates the submitted QWAC certificate as well as the syntax and semantics of the request
    a. If the result of all verifications is "NOK" (not ok), then an appropriate HTTP error code with message will be returned to the TPP. The transaction is terminated, a new transaction must be requested (Step 1).
    b. If the result of all verifications is "OK", then a positive response will be returned. Step 4 ensues.
4) If the issuance of an SCA or a consent is necessary, the PSU must login to 1822direkt and authorise the transaction.
5) After a PSU's successful authorisation, the subsequent communication can occur directly between the TPP and the 1822direkt; this requires the TPP to provide the appropriate paymentId or consentId during the communication.

Single-level communication: For other transactions, for instance for a check of adequate account balance for PIISPs, no participation in the communication is required of the PSU. The communication ensues directly between the TPP and the 1822direkt. An appropriate consent by the PSU needs to have been given to the 1822direkt prior to the transaction (in a previous transaction).

2.5 Fallback

If the production XS2A API is not available, TPPs can switch their implementations to the fall-back interface, which is provided directly via 1822direkt's online banking. The following steps are required:

- The address of the fall-back interface: https://www.1822direkt-banking.de:8443/JOBa1822Client/

- Furthermore, the QWAC certificate, which is also used for the XS2A API (see also the following step (2, Trust Center Certificate)), must be stored accordingly in the HTTP client / browser.

3 Endpoints / REST Services

In this chapter, the individual interface endpoints are described, in a similar manner to the tabular form as used in [BG-IMPL] .

Generally, the description of the request and response objects is limited to those interface attributes relevant to and supported by the 1822direkt, particularly all required fields. Additional request attributes, which according to [BG-IMPL] are optional, are non-effective.

Standard request header attributes which are generally always expected are **Content-Type**, **Accept** und **X-Request-ID**. Interface requests followed by a subsequent PSU authorisation, e.g. a Payment Initiation Request or an Account Information Consent Request, have the following additional mandatory header parameters **PSU-IP-Address**, **TPP-Redirect-URI a**nd **TPP-Nok-Redirect-URI**.

For a detailed description of the implemented data types and possible message and error codes, please see [BG-IMPL], section 14 Complex Data Types and Code Lists.

3.1 Payment Initiation Service

The following payment products are supported:

1) **sepa-credit-transfers**
2) **instant-sepa-credit-transfers**
3) **cross-border-credit-transfers**

The payment product **target-2-payments** is not supported.

3.1.1   Payment Initiation Request

Call

POST …/v1/payments/{payment-product}, {payment-product} can vary as shown in the following table.

Call	Description
POST …/v1/payments/**sepa-credit-transfers**	Transfer
POST .../v1/payments/**instant-sepa-credit-transfers**	Instant transfer
POST .../v1/payments/**cross-border-credit-transfers**	Cross-border transfer

Query Parameters

None

Request Header

Attribute	Type	Stipulation	Description
Content-Type	String	mandatory	application/json
X-Request-ID	UUID	mandatory	Request Identification
PSU-IP-Address	String	mandatory	IP Address of the PSU

Consent-ID	String	Not supported	No sessions for TPPs with a role of PISP and AISP are supported. The addition of a Consent-ID in the header results in an error.
TPP-Redirect-URI	String	mandatory	Redirect Url of the TPP
TPP-Nok-Redirect-URI	String	mandatory	Redirect Url of the TPP on errors

Request Body

Attribute	Type	Stipulation			Description
		Transfer	Instant transfer	Cross-border transfer	
endToEndIdentification	Max35Text	optional	optional	n/a	End-to-end id
debtorAccount	Account Reference	mandatory	mandatory	mandatory	Account of the debtor
instructedAmount	Amount	mandatory	mandatory	mandatory	Amount with currency, [BG-IMPL] section 14.3
creditorAccount	Account Reference	mandatory	mandatory	mandatory	Account of the recipient
creditorAgent	BICFI	optional	optional	optional	BIC of the recipient
creditorName	Max70Text	mandatory	mandatory	mandatory	Name of the recipient
creditorAddress	Address	optional	optional	optional	Address of the recipient, [BG-IMPL] section 14.4
chargeBearer	Charge Bearer	n/a	n/a	optional	Indication of acception of charges, refer to [BG-IMPL] section 14.29 for Charge Bearer type definition
remittanceInformationUnstructured	Max140Text	optional	optional	optional	Reason for payment/transfer

Response Code

201 represents an affirmative HTTP response code.

Response Header

Attribute	Type	Stipulation	Description
Location	String	mandatory	URL with paymentId in those cases for which the resource could be defined, i.e. HTTP response code = 201.
X-Request-ID	UUID	mandatory	Request identification specified by the TPP
ASPSP-SCA-Approach	String	mandatory	REDIRECT (only REDIRECT is supported)

Response Body

Attribute	Type	Stipulation	Description
estimatedTotalAmount	Amount	optional	Amount with currency (cross-border-credit-transfers)
estimatedInterbankSettlementAmount	Amount	optional	Amount with currency (cross-border-credit-transfers)
currencyConversionFees	Amount	optional	Amount with currency (cross-border-credit-transfers)
transactionStatus	Transaction Status	mandatory	The values defined in [BG-IMPL] Section 14.23 might be used.
paymentId	String	mandatory	
transactionFees	Amount	optional	Amount with currency (cross-border-credit-transfers)
_links	Links	mandatory	A list of links which contain the following elements: • scaRedirect • self • status • scaStatus
tppMessages	Array of TPP Message Information	optional	Messages pertaining to functional matters, e.g. failed validations

3.1.2 Initiation for Standing Orders for Recurring / Periodic Payments

Periodic payments and standing orders are not supported in release r1. For a follow-up release, it is planned to support them for SEPA payments.Call

POST .../v1/periodic-payments/**sepa-credit-transfers**

Query Parameters

None

Request Header

Attribute	Type	Stipulation	Description
Content-Type	String	mandatory	application/json
X-Request-ID	UUID	mandatory	Request Identification
PSU-IP-Address	String	mandatory	IP Address of the PSU
Consent-ID	String	Not supported	No sessions for TPPs with a role of PISP and AISP are supported. The addition of a Consent-ID in the header results in an error
TPP-Redirect-URI	String	mandatory	Redirect Url of the TPP
TPP-Nok-Redirect-URI	String	mandatory	Redirect Url of the TPP on errors

Request Body

Attribute	Type	Stipulation	Description
endToEndIdentification	Max35Text	optional	End-to-end id
debtorAccount	Account Reference	mandatory	Account of the debtor
instructedAmount	Amount	mandatory	Amount with currency, [BG-IMPL] section 14.3

creditorAccount	Account Reference	mandatory	Account of the recipient
creditorAgent	BICFI	optional	BIC of the recipient
creditorName	Max70Text	mandatory	Name of the recipient
creditorAddress	Address	optional	Address of the recipient, [BG-IMPL] section 14.4
chargeBearer	Charge Bearer	n/a	Indication of acceptance of charges, refer to [BG-IMPL] section 14.29 for Charge Bearer type definition
remittanceInformationUnstructured	Max140Text	optional	Reason for payment/transfer
startDate	ISODate	mandatory	
executionRule	String	Not fully supported	1822direkt only supports the method „following". The validation is successful when the parameter is either unset or set to „following". If any other string (for instance „preceeding") is given, the request validation fails.
endDate	ISODate	optional	Last execution date. If not specified, the standing order is valid until further notice.
frequency	Frequency Code	mandatory	Payment frequency
dayOfExecution	Max2Text	Not supported	Setting this parameter results in an error.

Response

The response (code, header and body) corresponds to section 3.1.1 Payment Initiation Request.

3.1.3   Get Transaction Status Request

Call

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

Path Parameters

Attribute	Type	Description
payment-service	String	Supported value is **payments**. The values **bulk-payments and periodic payments** are not supported.
payment-product	String	Supported values are sepa-credit-transfers, instant-sepa-credit-transfers und cross-border-credit-transfers.
paymentId	String	

Query Parameters

None

Request Header

Attribute	Type	Stipulation	Description
Content-Type	String	mandatory	application/json
X-Request-ID	UUID	mandatory	Request Identification

Authorization	String	Not supported	Only relevant in combination with OAuth2, which is currently not supported.
Accept	String	Optional	Only JSON is supported. Any other value results in a failure of the request.

Request Body

None

Response Code

200 represents an affirmative HTTP response code.

Response Header

Attribute	Type	Stipulation	Description
X-Request-ID	UUID	mandatory	Request identification specified by the TPP

Response Body

Attribute	Type	Stipulation	Description
transactionStatus	Transaction Status	mandatory	Status of the transaction

3.1.4   Get Payment Request

Call

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

Path Parameters

Attribute	Type	Description
payment-service	String	Supported value is **payments**. The values **bulk-payments and periodic payments** are not supported.
payment-product	String	Supported values are sepa-credit-transfers, instant-sepa-credit-transfers und cross-border-credit-transfers.
paymentId	String	

Query Parameters

None

Request Header

Attribute	Type	Stipulation	Description
Content-Type	String	mandatory	application/json
X-Request-ID	UUID	mandatory	Request Identification
Authorization	String	Not supported	Only relevant in combination with OAuth2, which is currently not supported.

Request Body

None

Response Code

200 represents an affirmative HTTP response code.

Response Header

Attribute	Type	Stipulation	Description
X-Request-ID	UUID	mandatory	Request identification specified by the TPP

Response Body

The response body is dependant on the parameters given {payment service} and {payment product}.

3.1.5   Get SCA Status (Payment context)

This endpoint facilitates validation of SCA status by the TPP in the context of a payment transacation.

Call

GET /v1/{payment-service}/{paymentproduct}/{paymentId}/authorisations/{authorisationId}

Path Parameters

Attribute	Type	Description
payment-service	String	Supported value is **payments**. The values **bulk-payments and periodic payments** are not supported.
payment-product	String	Supported values are **sepa-credit-transfers**, **instant-sepa-credit-transfers** and **cross-border-credit-transfers**.
paymentId	String	
authorisationId	String	authorisationId The id is created when a Payment Initiation Request ensues and is transmitted to the TPP as a response attribute **_links** with a **scaStatus** link.

Query Parameters

None

Request Header

Attribute	Type	Stipulation	Description
X-Request-ID	UUID	mandatory	Request Identification
Authorization	String	Not supported	Only relevant in combination with OAuth2, which is currently not supported.

Request Body

None

Response Code

200 represents an affirmative HTTP response code.

Response Header

Attribute	Type	Stipulation	Description
X-Request-ID	UUID	mandatory	Request identification specified by the TPP

Response Body

Attribute	Type	Stipulation	Description
scaStatus	SCA Status	mandatory	SCA status code

3.2 Account Information Service

As described in [BG-IMPL] section 6.2 p. 113, it is recommended to transmit the following PSU-specific data elements in all request headers pertaining to the endpoints of this section relating to account information and consent endpoints:

- PSU-IP-Address
- PSU-IP-Port
- PSU-Accept
- PSU-Accept-Charset
- PSU-Accept-Encoding
- PSU-Accept-Language
- PSU-User-Agent
- PSU-Http-Method
- PSU-Device-ID
- PSU-Geo-Location

These request header attributes are only specified for endpoints when they are not optional, but rather mandatory or linked to a stipulation (e.g. PSU-IP-Address).

3.2.1 Read Account List

Call

GET …/v1/accounts

Query Parameters

The Query Parameter **withBalance** defined in [BG-IMPL] as optional, which faciliates requests of account lists with balances, is not supported.

Request Header

Attribute	Type	Stipulation	Description
X-Request-ID	UUID	mandatory	Request Identification
Consent-ID	String	mandatory	ID of the previously issued consent
Authorization	String	Not supported	Only relevant in combination with OAuth2, which is currently not supported

Request Body

None

Response Code

200 represents an affirmative HTTP response code.

Response Header

Attribute	Type	Stipulation	Description
X-Request-ID	UUID	mandatory	Request identification specified by the TPP

Response Body

Attribute	Type	Stipulation	Description
accounts	Array of Account Details	mandatory	The following attributes of Account Details are set per account: • resourceID • iban • name • product • currency (always EUR) • cashAccountType • bic (always HELADEF1822) • ownerName • _links (contains a link for the request of account balances as well a link for payment details, dependant on the available consent)

3.2.2   Read Account Details

Call

GET …/v1/accounts/{account-id}

Path Parameters

Attribute	Type	Description
account-id	String	The resourceID of the account, as returned by the response to 3.2.1 Read Account List.

Query Parameters

The Query Parameter **withBalance** defined in [BG-IMPL] as optional, which faciliates requests of account lists with balances, is not supported.

Request Header

Attribute	Type	Stipulation	Description
X-Request-ID	UUID	mandatory	Request Identification
Consent-ID	String	mandatory	ID of the previously issued consent
Authorization	String	Not supported	Only relevant in combination with OAuth2, which is currently not supported

Request Body

None

Response Code

200 represents an affirmative HTTP response code.

Response Header

Attribute	Type	Stipulation	Description
X-Request-ID	UUID	mandatory	Request identification specified by the TPP

Response Body

Attribute	Type	Stipulation	Description
account	Account Details	mandatory	The following attributes are returned: • resourceID • iban • name • product • currency (always EUR) • cashAccountType • bic (always HELADEF1822) • ownerName • _links (contains a link for the request of account balances as well a link for payment details, dependant on the available consent)

3.2.3   Read Balance

Call

GET …/v1/accounts/{account-id}/balances

Path Parameters

Attribute	Type	Description

account-id	String	The resourceID of the account, as returned by the response to 3.2.1 Read Account List.

Query Parameters

None

Request Header

Attribute	Type	Stipulation	Description
X-Request-ID	UUID	mandatory	Request Identification
Consent-ID	String	mandatory	ID of the previously issued consent
Authorization	String	Not supported	Only relevant in combination with OAuth2, which is currently not supported

Request Body

None

Response Code

200 represents an affirmative HTTP response code.

Response Header

Attribute	Type	Stipulation	Description
X-Request-ID	UUID	mandatory	Request identification specified by the TPP

Response Body

Attribute	Type	Stipulation	Description
account	Account Reference	optional	The iban is returned as a reference
balances	Array of Balance	mandatory	A list of account balances is returned fort he account. The types „closingBooked" and „authorised" are supported.

3.2.4   Read Transaction List

Call

GET …/v1/accounts/{account-id}/transactions {query-parameters}

Path Parameters

Attribute	Type	Description
account-id	String	The resourceID of the account, as returned by the response to 3.2.1 Read Account List

Query Parameters

Attribute	Type	Stipulation	Description

dateFrom	ISODate	conditional	Starting date of requested transactions
dateTo	ISODate	optional	Ending date of requested transactions
entryReferenceFrom	String	optional	Id of the first transaction, for which it and the transactions thereafter should be returned
bookingStatus	String	mandatory	The status codes „booked", „pending", „both" and "information"[1] are supported.
deltaList	Boolean	Not supported	
withBalance	Boolean	Not supported	

If specified, dateFrom is verified to be the current day or previous, as well as before or equal to dateTo (if also specified). If no dateFrom is given, the parameter entryReferenceFrom must be defined to constitute a valid request.

Request Header

Attribute	Type	Stipulation	Description
X-Request-ID	UUID	mandatory	Request Identification
Consent-ID	String	mandatory	ID of the previously issued consent
Authorization	String	Not supported	Only relevant in combination with OAuth2, which is currently not supported
Accept	String	Not supported	Only JSON is supported. Any other value results in a failure of the request.

Request Body

None

Response Code

200 represents an affirmative HTTP response code.

Response Header

Attribute	Type	Stipulation	Description
Content-Type	String	mandatory	application/json
X-Request-ID	UUID	mandatory	Request identification specified by the TPP

Response Body

Only the JSON response as in [BG-IMPL 1.3.6], section 6.5.4 is supported.

3.2.5 Account Information Consent Request

Call

POST …/v1/consents

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[1] bookingStatus „information" for reading periodic payments is discribed in [BG-IMPL 1.3.6] and was not yet part of [BG-IMPL].

Query Parameters

None

Request Header

Attribute	Type	Stipulation	Description
X-Request-ID	UUID	mandatory	Request Identification
PSU-IP-Address	String	mandatory	IP Address of the PSU
PSU-ID	String	Not supported	
PSU-ID-Type	String	Not supported	
PSU-Corporate-ID	String	Not supported	
PSU-Corporate-ID-Type	String	Not supported	
TPP-Redirect-Preferred	Boolean	Not supported	
TPP-Redirect-URI	String	mandatory	Redirect Url of the TPP
TPP-Nok-Redirect-URI	String	mandatory	Redirect Url of the TPP on errors
TPP-Explicit-Authorisation-Preferred	Boolean	Not supported	

Request Body

Attribute	Type	Stipulation	Description
access	Account Access	mandatory	Refer to [BG-IMPL] section 14.16 as well as the information in the following table
recurringIndicator	Boolean	mandatory	If a consent already exists and recurringIndicator ="true", then the existing consent will be invalidated on subsequent authorisation of the new consent.
validUntil	ISODate	mandatory	Desired ending date.
frequencyPerDay	Integer	mandatory	Specifies how often per day the TPP can query the service.
combinedService Indicator	Boolean	mandatory	No sessions for TPPs with a role of PISP and AISP are supported. Setting the combinedService Indicator to true results in an error.

The attribute access of type Account Access has the following values (refer to [BG-IMPL], section 14.16).

Attribute	Type	Stipulation	Description
accounts	Array of Account Reference	Optional	Contains a list of accounts, for which account information can be queried.
balances	Array of Account Reference	Optional	Contains a list of accounts, for which an account balance can be queried.

transcations	Array of Account Reference	Optional	Contains a list of accounts, for which payment details can be queried.
availableAccounts	String	Optional	the version "allAccounts" is supported [2]
availableAccountsWithBalance	String	Optional	the version "allAccounts" is supported [2]
allPsd2	String	Optional	the version "allAccounts" is supported [2]

Berlin Group differentiates between the following three types of consent. The current interface in release r1 only supports the Detailed Consent Request.

1. A **Detailed Consent Request** is given as long as one of the lists accounts, balances or transactions is not empty and none of the three string attributes availableAccounts, availableAccounts WithBalance and allPsd2 contain the value „allAccounts".

2. A **Bank Offered Consent** is given if all three lists are empty and none of the three string attributes contains the value „allAccounts". (Not supported in release r1)

3. An appropriate **Consent on available Accounts** or **Global Consent** is given as long as exactly one of the three string attributes contains the value „allAccounts".(Not supported in release r1)

Response Code

201 represents an affirmative HTTP response code.

Response Header

Attribute	Type	Stipulation	Description
Location	String	mandatory	Link to a defined resource, e.g. https://xs2a.1822direkt-banking.de/joba-psd2/r1/v1/consents/{consentId}, whereupon {consentId} contains the value of the newly defined consentId
X-Request-ID	UUID	mandatory	Request identification specified by the TPP
ASPSP-SCA-Approach	String	mandatory	REDIRECT

Response Body

Attribute	Type	Stipulation	Description
consentStatus	Consent Status	mandatory	Consent status code, as defined in [BG-IMPL] section 14.14
consentId	String	mandatory	ConsentId
_links	Links	mandatory	A list of links with the following elements: • scaRedirect • self • status • scaStatus

---

[2] The according to [BG-IMPL 1.3.6] optional expression "allAccountsWithOwnerName" is not supported, because the ownerName attribute is always included as a fixed part of the account details in the present implementation..

3.2.6 Get Consent Request

This endpoint returns a Consent object.

Call

GET …/v1/consents/{consentId}

Path Parameters

Attribute	Type	Stipulation	Description
consentId	String	mandatory	Consent Identification

Query Parameters

None

Request Header

Attribute	Type	Stipulation	Description
X-Request-ID	UUID	mandatory	Request Identification
Authorization	String	Not supported	Only relevant in combination with OAuth2, which is currently not supported

Request Body

None

Response Code

200 represents an affirmative HTTP response code.

Response Header

Attribute	Type	Stipulation	Description
X-Request-ID	UUID	mandatory	Request identification specified by the TPP

Response Body

Attribute	Type	Stipulation	Description
access	Account Access	mandatory	Refer to [BG-IMPL] section 14.16 as well as the information in the abovementioned table
recurringIndicator	Boolean	mandatory	If a consent already exists and recurringIndicator ="true", then the existing consent will be invalidated on subsequent authorisation of the new consent.
validUntil	ISODate	mandatory	Desired ending date.
frequencyPerDay	Integer	mandatory	Specifies how often per day the TPP can query the service.
consentStatus	Consent Status	mandatory	Consent status code, as defined in [BG-IMPL] section 14.14

3.2.7 Delete Consent

This endpoint facilitates the deletion of a consent.

Call

DELETE …/v1/consents/{consentId}

Path Parameters

Attribute	Type	Stipulation	Description
consentId	String	mandatory	Consent Identification

Query Parameters

None

Request Header

Attribute	Type	Stipulation	Description
X-Request-ID	UUID	mandatory	Request Identification
Authorization	String	Not supported	Only relevant in combination with OAuth2, which is currently not supported

Request Body

None

Response Code

The positive HTTP response code is 204.

Response Header

Attribute	Type	Stipulation	Description
X-Request-ID	UUID	mandatory	Request identification specified by the TPP

Response Body

None

3.2.8 Get Consent Status

This endpoint returns the status code corresponding to the given consentId.

Call

GET …/v1/consents/{consentId}/status

Path Parameters

Attribute	Type	Stipulation	Description

consentId	String	mandatory	Consent Identification

Query Parameters

None

Request Header

Attribute	Type	Stipulation	Description
X-Request-ID	UUID	mandatory	Request Identification
Authorization	String	Not supported	Only relevant in combination with OAuth2, which is currently not supported

Request Body

None

Response Code

200 represents an affirmative HTTP response code.

Response Header

Attribute	Type	Stipulation	Description
X-Request-ID	UUID	mandatory	Request identification specified by the TPP

Response Body

Attribute	Type	Stipulation	Description
consentStatus	Consent Status	mandatory	Consent Status Code, as defined in [BG-IMPL] section 14.14

3.2.9   Get SCA Status (Consent context)

This endpoint facilitates the verification of SCA status by the TPP in the context of a consent issuance.

Call

GET /v1/consents/{consentId}/authorisations/{authorisationId}

Path Parameters

Attribute	Type	Description
consentId	String	Resource identification of the related consent.
authorisationId	String	authorisationId The id is created when a Account Information Consent Request ensues and is transmitted to the TPP as a response attribute **_links** with an **scaStatus** link.

Query Parameters

None

Request Header

Attribute	Type	Stipulation	Description
X-Request-ID	UUID	mandatory	Request Identification
Authorization	String	Not supported	Only relevant in combination with OAuth2, which is currently not supported

Request Body

None

Response Code

200 represents an affirmative HTTP response code.

Response Header

Attribute	Type	Stipulation	Description
X-Request-ID	UUID	mandatory	Request identification specified by the TPP

Response Body

Attribute	Type	Stipulation	Description
scaStatus	SCA Status	mandatory	

3.3   Check of adequate account balance

3.3.1   Confirmation of Funds Requests

Call

GET …/v1/funds-confirmations

Query Parameters

None

Request Header

Attribute	Type	Stipulation	Description
X-Request-ID	UUID	mandatory	Request Identification

Request Body

Attribute	Type	Stipulation	Description

cardNumber	String	optional	Card number of the card which the TPP has issued and for which the query is valid
account	Account Reference	mandatory	The account for which a check of adequate account balance is queried by the TPP.
payee	Max70Text	optional	The merchant where the card transaction should occur. This field is ignored..
instructedAmount	Amount	mandatory	The amount for which the TPP queries an adequate account balance.

Response Code

200 represents an affirmative HTTP response code.

Response Header

Attribute	Type	Stipulation	Description
X-Request-ID	UUID	mandatory	Request identification specified by the TPP

Response Body

Attribute	Type	Stipulation	Description
fundsAvailable	Boolean	mandatory	True, if the amount available on the account is adequate, otherwise false. The amount will not be prebooked.