The Manual on Validation of Balances to Card-Based Payment Instrument Issuers

CIS

Contents

The Manual on Validation of Balances to Card-Based Payment Instrument Issuers (CIS)

The service is used to verify the availability of funds in a specific account in which the client has enabled a balance validation service to a specific third party via client's Internet banking.

The bank's response consists in a confirmation or non-confirmation of the sufficiency of funds as against the amount stated in the query. The answer is yes/no only – see below for details. In this case, the bank does not provide information about the specific amount of the balance in the client's account.

The service is not authorised by the account holder directly through the authorisation resource.

Komerční banka has based its approach on the unified structure and format of information defined by the Czech Banking Association in the Czech Open Banking Standard. The differences between the KB implementation mode and the published standard are described in this document and they are marked in yellow colour.

The information provided through API Open Banking is in both Czech and English.

The allowed character set is based exclusively on the SWIFT character set (i.e., exclusively without diacritics).

The "debtorAccount.identification.iban" data element requires an account number in the IBAN format as defined by the ISO 13616 international standard.

Error reporting

Reporting quarantined errors or calling them always takes place via the mailbox api@kb.cz. The e-mail sent must contain the following information, in case the required information is missing, it will not be possible to process the query or error.

PSD2 API: CZ, SK
Environment: Sandbox, Production
Whether it was called from FE Sandbox incl. the type and version of the browser used or, in the case of a BE call, the name and version of the program for the BE call
Request type
Date and time of the call
IP address
The error and its most accurate description, which can be supplemented with the appropriate screenshot

Without the above values, it is not possible to solve the reported error.

1. Sufficient Funds Query (POST /accounts/balanceCheck)

This is the resource for sending a sufficient funds query regarding a debtor's particular payment account. This resource is not authorized by the account holder directly through the authorisation resource. The consent to access to information must be granted by the client outside the interaction of this API before the resource is used.

Characteristics of the Resource

URI:	/accounts/balanceCheck
HTTP Method:	POST
Request URL:	https://api.kb.cz/serverapi/cisp/v1/accounts/balanceCheck

Authorization: the request **does not require** any authorisation by the user/client as part of the API call.

Certification: the request **requires** the use of the third party qualified certificate as part of establishing two-way TSL communication with the server. The third party is identified by verifying the validity and content of this certificate.

The certificate must contain the „**cisp**" scope permission so that the API call can be successful.

Pagination:	**no**
Sorting:	**no**
Filtering:	**no**

Supported encoding:	charset=**UTF-8**

Query parameters of the request: **not defined**

Example of the API call curl:

```
curl -X POST --header 'Content-Type: application/json' --header 'Accept: application/json' --
header 'x-request-id: 123' --header 'Authorization: Bearer ' -d '{ \
   "exchangeIdentification": 1234567890, \
   "debtor": { \
     "name": "Jan Novák" \
   }, \
   "debtorAccount": { \
     "identification": { \
       "iban": "CZ9501000000001234567899" \
     }, \
     "currency": "EUR" \
   }, \
   "authenticationMethod": "NPIN", \
   "merchant": { \
     "identification": "47116129", \
     "shortName": "NEOLUXOR", \
     "commonName": "NEOLUXOR s.r.o", \
     "address": "Hlavní 5, Praha 1", \
     "countryCode": "CZ", \
     "merchantCategoryCode": 5192 \
   }, \
   "transactionDetails": { \
     "currency": "EUR", \
     "totalAmount": 10.10 \
   } \
}' 'https://api.kb.cz/serverapi/cisp/v1/accounts/balanceCheck'
```

Table 1   *Request header parameters*

PARAMETER	TYPE	MANDATORY	PURPOSE
Content-Type	Text	Yes	A specification of the required transfer format. Based on the prerequisites of the technical specification of this API standard, in this case the **application/json** format is primarily supported.
API-key	Text	No	An optional string issued to a communicating third party as the call identifier of that party primarily serving as the configuration element of communication.
x-request-id	Text	Yes	A unique identification of the caller's each particular query. The value of this parameter should therefore be generated randomly, and the individual x-request-ids of the same caller within a short time interval should not be identical. This parameter service returns responses to the calling system within response headers.

Example of request headers:

```
{
  "Accept": "application/json",
  "x-request-id": "123",
}
```

Table 2   ***Response header parameters***

PARAMETER	TYPE	MANDATORY	PURPOSE
Content-Type	Text	Yes	A specification of the required transfer format. Based on the prerequisites of the technical specification of this API standard, in this case the **application/json** format is primarily supported.
x- request -id	Text	Yes	Returns the original request id of the API call.

Example of response headers:

```
{
  "date": "Fri, 23 Feb 2018 12:51:46 GMT",
  "cookie": "i18next=cs-CZ",
  "x-request-id": "123",
  "accept": "application/json",
  "x-forwarded-host": "api.kb.cz",
  "host": "api.kb.cz",
  "accept-encoding": "gzip, deflate",
  "cache-control": "no-cache",
  "accept-language": "cs-CZ",
  "content-language": "cs",
  "x-forwarded-server": "api.kb.cz",
  "content-type": "application/json; charset=UTF-8",
  "keep-alive": "timeout=60, max=100",
  "connection": "Keep-Alive",
  "transfer-encoding": "chunked",
  "strict-transport-security": "max-age=16070400; includeSubDomains",
}
```

Komerční banka provides information on the availability of funds within the following structure and contents of the POST request.

Table 3   ***Sufficient funds query – BASIC ELEMENTS OF THE REQUEST***

LEVEL	MESSAGE ELEMENT	OCCURRENCE	FORMAT TYPE	PRESENTATION
+	exchangeIdentification	[1..1]	Max18Text	Unique identification of the query
+	debtor	[0..1]	±	Identification of the debtor – cardholder
++	name	[1..1]	Max140Text	Transaction debtor's (cardholder's) name
+	debtorAccount	[1..1]	±	Debtor's account
++	identification	[1..1]	±	Debtor's account identification
+++	iban	[1..1]	IBAN2007Identifier	IBAN
++	currency	[0..1]	CurrencyCode, ISO 4217	Debtor's account currency
+	authenticationMethod	[0..1]	CodeSet	Client authentication method
+	merchant	[0..1]	±	Merchant carrying out the transaction
++	identification	[1..1]	Max35Text	Merchant's identification
++	type	[0..1]	Code	Merchant's type
++	shortName	[1..1]	Max35Text	Merchant's name
++	commonName	[1..1]	Max70Text	Merchant's name as given in the payment slip
++	address	[0..1]	Max140Text	Merchant's address
++	countryCode	[0..1]	CountryCode, ISO 3166	Merchant's country
++	merchantCategoryCode	[1..1]	Min3Max4Text, ISO 18245	Merchant's code depending on the type of the transaction
+	transactionDetails	[1..1]	±	Transaction details
++	currency	[1..1]	CurrencyCode, ISO 4217	Balance query currency
++	totalAmount	[1..1]	Max18.5Amount	Balance query amount

JSON – example of a requestBody:

```json
{
        "exchangeIdentification": 103149078,
        "debtor": {
                "name": "Jan Novak"
        },
        "debtorAccount": {
                "identification": {
                        "iban": "CZ1101000900930763990217"
                },
                "currency": "CZK"
        },
        "authenticationMethod": "NPIN",
                "merchant": {
                "identification": 47116129,
                "shortName": "NEOLUXOR",
                "commonName": "NEOLUXOR s.r.o",
                "address": "Hlavni 5, Praha 1",
                "countryCode": "CZ",
                "merchantCategoryCode": 5192
        },
        "transactionDetails": {
                "currency": "EUR",
                "totalAmount": 10.00
        }
}
```

Table 4   Sufficient funds query – RESPONSE ELEMENTS

LEVEL	MESSAGE ELEMENT	OCCURRENCE	FORMAT TYPE	PRESENTATION

+	responseIdentification	[1..1]	Integer	A unique identification of a response to the sufficient funds query (from ASPSP).
+	exchangeIdentification	[1..1]	IntMax18Digits	A repeated identification of the payment transaction (sufficient funds query) by the card issuer, to which the sufficient funds query relates.
+	response	[1..1]	Code set	A response to the sufficient funds query.

JSON – example of a response:

```
{
    "responseIdentification": 41657765434736200,
    "exchangeIdentification": 103149078,
    "response": "APPR"
}
```

Table 5   "Response" parameter return codes

CODE	DESCRIPTION
APPR	Sufficient funds in the account.
DECL	Insufficient funds in the account.

Table 6   Error codes defined for the Sufficient Funds Query POST service

HTTP STATUS CODE	ERROR CODE	ERROR CODE DESCRIPTION	PURPOSE
401	UNAUTHORISED	Missing certificate or access token.	Missing certificate or access token.
403	FORBIDDEN	Invalid certificate or token.	Authentication made with an invalid certificate or expired access token, or a call that does not correspond to the third party's licence.
400	FIELD_MISSING	Missing mandatory field.	Missing mandatory field in the request.
400	FIELD_INVALID	Field value not valid.	The value of the field is not valid.
400	AC02	InvalidDebtorAccountNumber	Incorrect account number format.
400	AC09	InvalidAccountCurrency	The declared account currency does not correspond to the currency in which the client's account held with the bank under the given number is denominated.
403	AG01	TransactionForbidden	The account type does not match the allowed account types (e.g. a non-paying account).
400	AM11	InvalidTransactionCurrency	The payment currency is not listed in the bank's exchange list.
400	AM12	InvalidAmount	The amount of the transaction is invalid, i.e. is too low/high, the account number is incorrect, or the number of decimal places is wrong according to ISO 4217.
400	FF01	InvalidFileFormat	The payload has not been sent under JSON or other technical issue occurred.
400, 50x	NARR	Narrative	The payment has been rejected on general grounds, which will be explained in the narrative. This may be a technical issue.
400	RF01	NotUniqueTransactionReference	The sufficient funds query reference is not unique.
400	RR10	InvalidCharacterSet	Illegal characters have been used (e.g. Chinese characters, diacritic, unauthorised symbols etc.).

JSON – example of an error message body:

```
{
    "errors": [{
    "error": "UNAUTHORISED",
    "message": "Missing certificate or access token"
    }]
}
```