

# The Sandbox SK Manual on the Payment Initiation Service



# Change log

Date	Version	Description
29.01.2020	1	First document version
19.5.2020	2	Document edit
18.11.2020	3	Document edit (added certain specifics of payment system in Slovakia, etc.)



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### 1. Payment Initiation Service (PIS)

Overview of implemented resources:

- Payment initiation
  - o Step I. authorised payment initiation
- Established/initiated payment status it provides information about the current status of a payment while it is processed by KB
- Payment authorisation
  - O Step II authorised payment initiation this resource initiates the ament authorisation

Unauthorised payment types for Sanbox:

- Standing payment orders
- Direct debit orders/mandates
- Payment orders batches
- Instant payments
- · Cheque payments

Komerční banka has based its approach on the unified structure and format of information defined by the Czech Banking Association in the <u>Czech Open Banking Standard</u>.

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). Only one query can be sent and processed during a single call.

# 2. Payment Initiation Service Calling API Sandbox

Through the Sandbox, third parties may have a trial (mock) of a service providing the below information concerning the payment account of a client of Komerční banka, branches of the foreign bank (hereinafter referred to as Komeční banky).

Any entities, not only the third parties with a PSD2 services licence, may access the API Sandbox. However, they must register at KB's API portal <a href="https://api.koba.sk/portal/?tenant=api.kb.sk">https://api.koba.sk/portal/?tenant=api.kb.sk</a>. Failing this, they cannot utilize the Sandbox services. The procedure for registration is described in the document API Sandbox Registration\_v1.doc. Qualified PSD2 certificates issued by a qualified certification authority according to the EU QTSP list at <a href="https://webgate.ec.europa.eu/tl-browser/">https://webgate.ec.europa.eu/tl-browser/</a>

### 3. Issuing a Certificate

A certificate is necessary for the production calling and PSD2 Sandbox. After the registration, Komerční banka will provide the third parties with certificates to be used on the Sandbox, **based on their request sent at the electronic address** <a href="mailto:api@kb.cz">api@kb.cz</a>. The Sandbox certificates are not intended for production use. The production unit will reject and monitor such calls.

### 4. Definition of the Mock

Parameters of static calling are defined, which a third party cannot change within calling. Any change will result in the rejection of a request. Appropriate responses or, as the case may be, error codes are returned depending on the specimen requests used.

### 1. Payment initiation:

- Remittance initiation (TPL) –click on the **Example Value** grey field to the right of the paymentRequest field to get the input value, i.e., the valid structure of the initiated payment. The Sandbox fills in these values into the payment entering field automatically.
- Remittance payment initiation invalid IBAN error 400 AC02 [InvalidDebtorAccountNumber], debtorAccount.identification.iban field
- Remittance payment initiation invalid amount error 400 AM12 [InvalidAmount], (amount.instructedAmount.value) field
- Remittance payment initiation invalid execution date error the required date exceeds the actual date,
   400 NARR [Entered Execution date cannot exceed actual Business date], requestedExecutionDate field
- Remittance payment initiation invalid field formats errors returns a collection of errors

### 2. Payment status:

- Payment status ZU000007AX3 must be filled in as an paymentID (transactionID) input value
- Payment status non-existing paymentID (transactionID) error; if no ID is found, the following error is generated 404 \_NOT\_FOUND



### 5. 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.

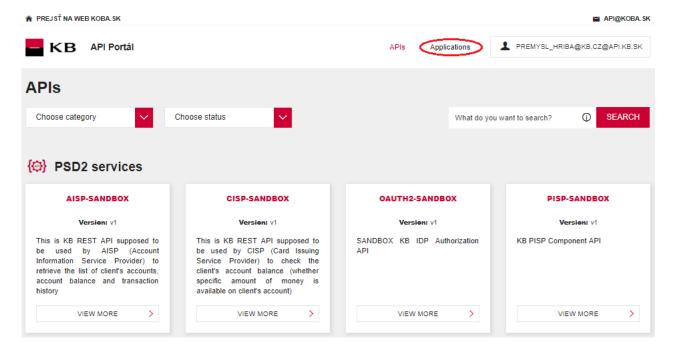
# 6. Procedure for generating PISP key/token

### Prerequisites for key/token generation

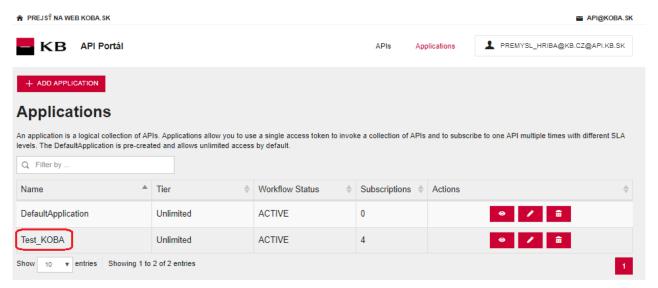
The user is registered and logged in to the Sandbox SK portal.

### Acces the application menu and select desired application

The logged-in user will enter the aplication via the "Applications" link at the top screen.

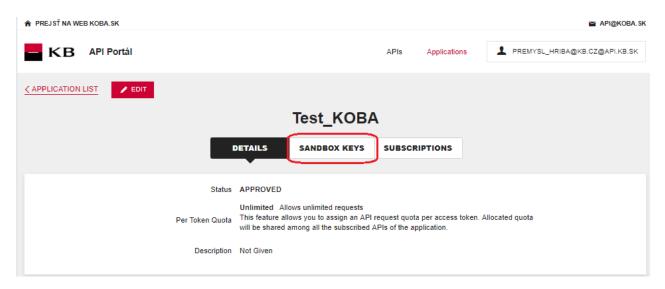






### Selection of application menu functionality

User selects "SANDBOX KEYS" in application menu



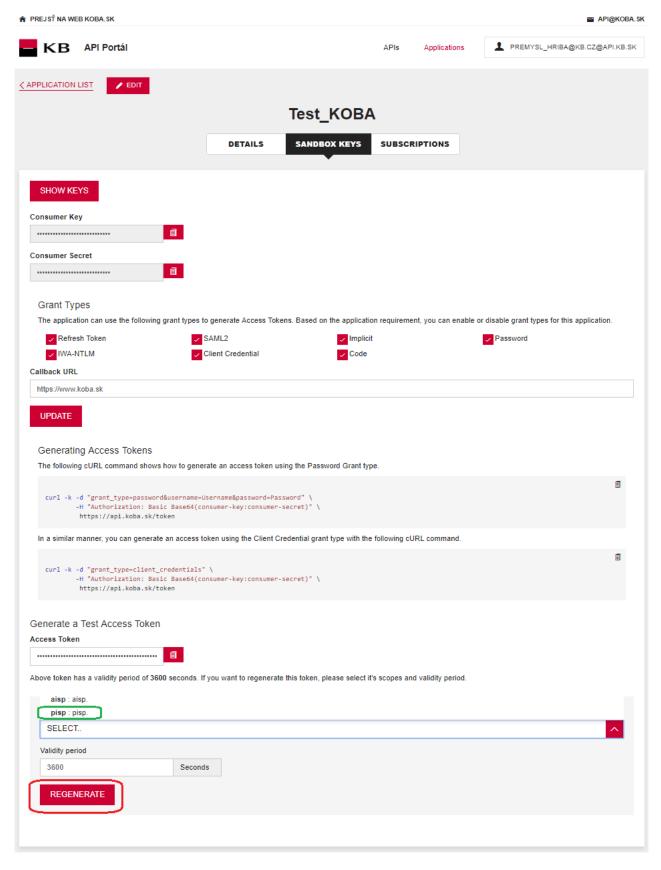


### Generate certificate for PISP service

The user Sandox may choose to generate a token for the PISP service, provided that the user is subscribed to the PISP service.

The user selects for key/token generation and generates the token using the "REGENERATE" functionality.





# 7. PISP Mock Calling Methods

- 1. New payment establishing mock calling through the API console
- 2. Payment status request mock calling through the API console
- 3. "Payment Authorization" PIS mock calling for the purpose of testing (through the API console)

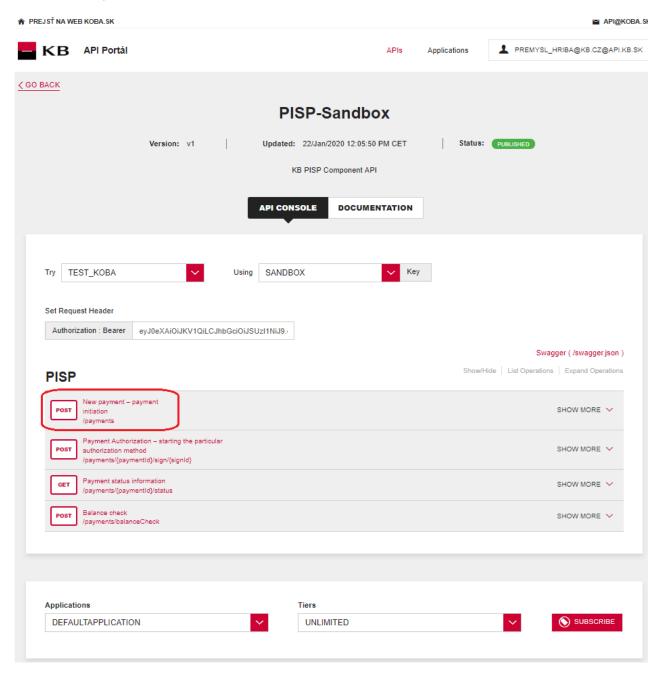


- 4. Payment initiation resource direct calling
- 5. Payment status resource direct calling
- 6. Payment authorisation resource direct calling currently not implemented in the Sandbox.

# 8. Access to the application through the API console

### "New Payment" PIS mock calling for the purpose of testing

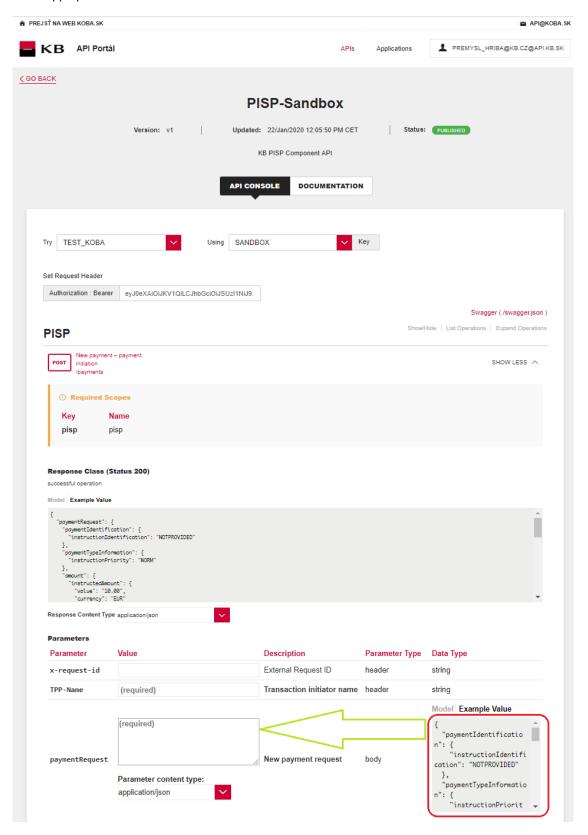
The user chooses an operation he/she wishes to test. In this case, it is "New Payment". A new payment can be established using this operation. The operation menu drops down after the user clicks on the "SHOW MORE" button.





### Filling in the required fields of the "New Payment" operation

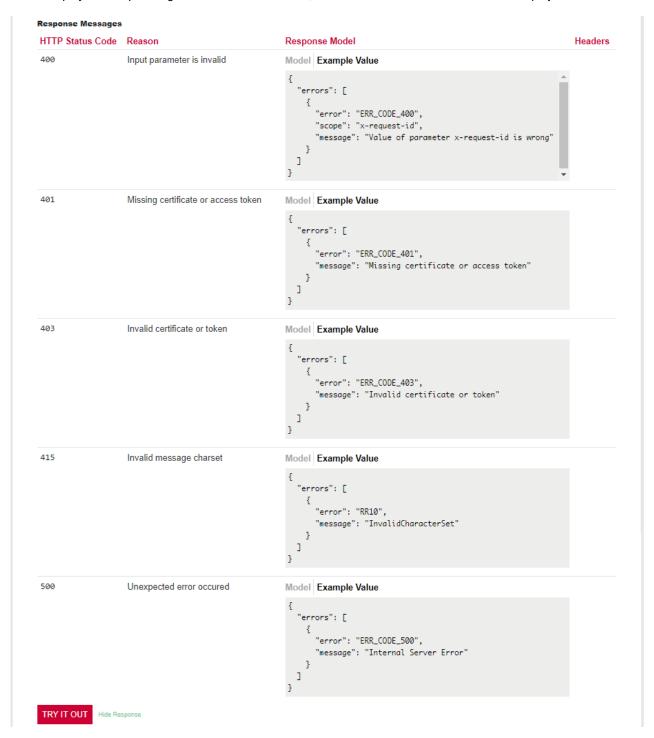
The user wishing to initiate a new payment fills in all fields with values in an appropriate format. If everything is done properly and there is no other reason why the payment should not be made (e.g., insufficient account balance), he/she receives a report on the execution of the payment. If any of mandatory fields is not filled in, the report is not displayed and the blank fields are highlighted in red. For the "paymentRequest" field, just click on the displayed example to copy it to the appropriate field.





### "New Payment" operation error message

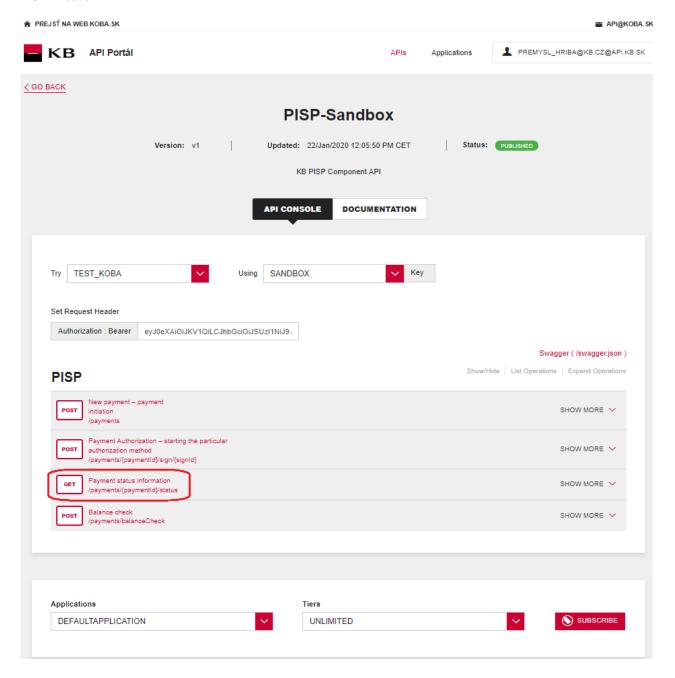
If any value has been entered incorrectly, one of the following error messages or an error specified in the mock definition will be displayed after pressing the "TRY IT OUT" button, otherwise the result statement will be displayed.





### "Payment status information" PIS mock calling for the purpose of testing

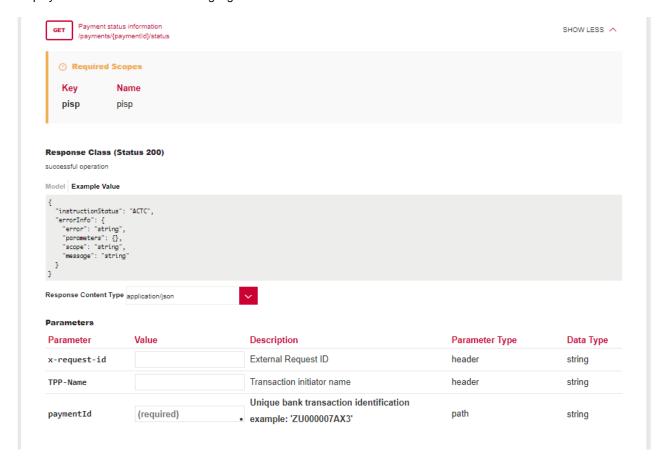
The user chooses an operation he/she wishes to test. In this case, it is "Payment status information". This operation will view the payment status. It is an established payment that has not yet been authorized by the client or has already been authorized and PISP queries its status (GET). The operation menu drops down after the user clicks on the "SHOW MORE" button.





# Filling in the required fields of the "Payment status information" operation

A user wishing to view the status of a particular payment fills in all fields with values in an appropriate format. If everything is done properly, information on the given payment is displayed. If any of mandatory fields is not filled in, the report is not displayed and the blank fields are highlighted in red.





### "Payment status information" operation error message

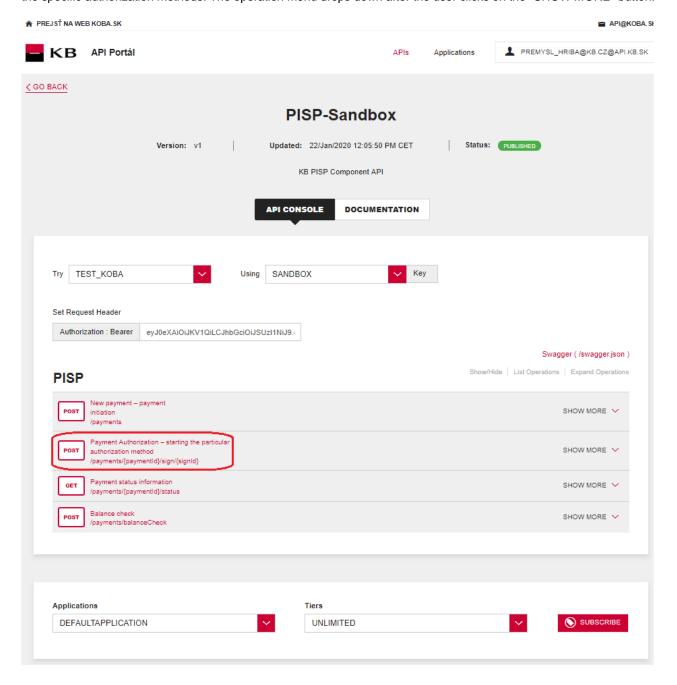
If any value has been entered incorrectly, one of the following error messages or an error specified in the mock definition will be displayed after pressing the "TRY IT OUT" button, otherwise the result statement will be displayed.





### "Payment Authorization" PIS mock calling for the purpose of testing

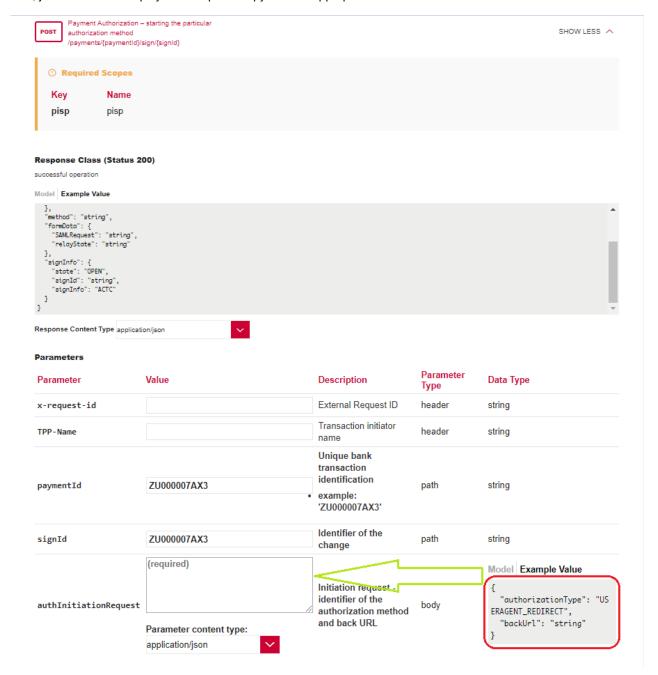
The user chooses an operation he/she wishes to test. In this case, it is "Payment Authorization". This operation will start the specific authorization methods. The operation menu drops down after the user clicks on the "SHOW MORE" button.





### Filling in the required fields of the "Payment Authorization" operation"

A user wishing to start the authorization process fills in all fields with values in an appropriate format. If everything is done properly, an overview of the values necessary for the completion of the authorization will be displayed. If any of mandatory fields is not filled in, the report is not displayed and the blank fields are highlighted in red. For the "authInitiationRequest" field, just click on the displayed example to copy it to the appropriate field.





### "Payment Authorization" operation error message

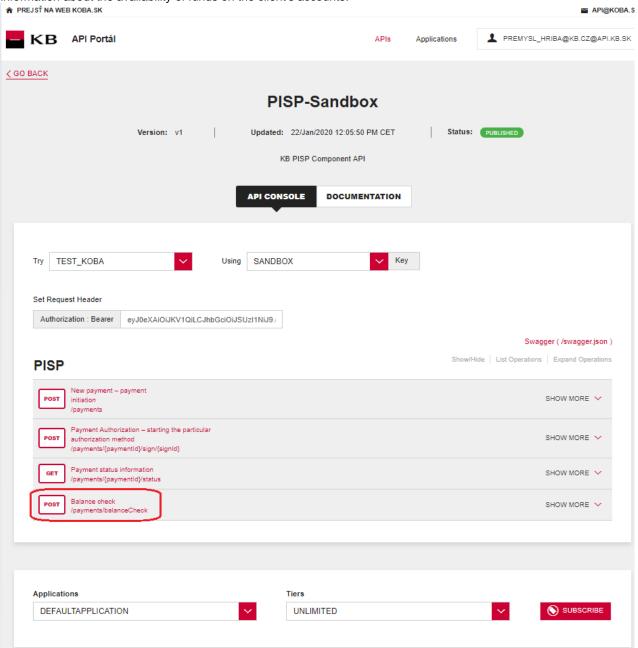
If any value has been entered incorrectly, one of the following error messages or an error specified in the mock definition will be displayed after pressing the "TRY IT OUT" button, otherwise the result statement will be displayed.





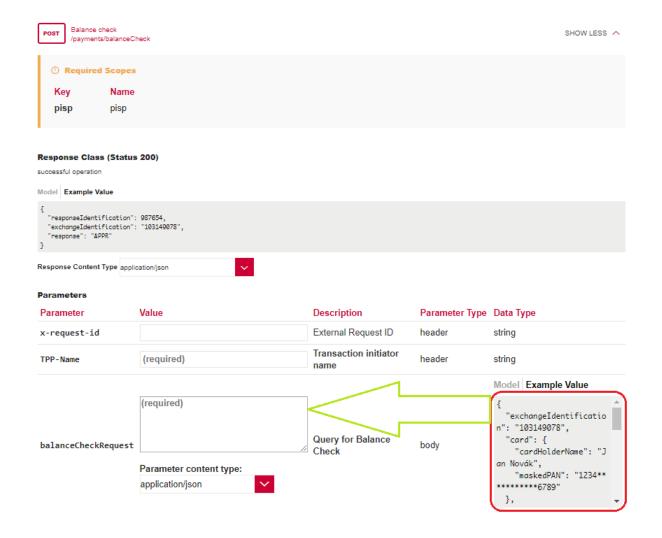
# Balance check" PIS mock calling for the purpose of testing

The user chooses an operation he/she wishes to test. In this case, it is "Balance check". The operation allows to obtain information about the availability of funds on the client's accounts.





# Filling in the required fields of the "Balance Check" operation





# 9. Access to the application through direct calling

### New Payment - Payment Initiation (POST /my/payments)

Resource for establishing a new payment.

### **Resource characteristics**

URI: /payments HTTP Method: POST

Request URL: <a href="https://api.koba.sk/sandbox/pisp/v1/payments">https://api.koba.sk/sandbox/pisp/v1/payments</a>

Authorization: the requires an authorisation by the user/client as part of the API call.

Certification: the 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.

Pagination:noSorting:noFiltering:no

Query parameters of the request: not defined

Request header parameters:

PARAMETER	TYPE	MANDATOR Y	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 <b>application/json</b> 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.
Authorization	Text	Yes	A parameter used for forwarding the authenticated user's access token along with its type.

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 <b>application/json</b> format is primarily supported.						

For the content of the request and response call POST see Chapter 1.1 New Payment – Payment Initiation REPORT ELEMENTS.

Table - CBA-standard defined error codes for the payment initiation POST service

HTTP STATUS CODE	ERROR CODE	PURPOSE
401	UNAUTHORISED	Missing certificate.
403	FORBIDDEN	Calling of a method that does not correspond to the licence, or invalid certificate.
400	FIELD_MISSING	Missing mandatory field in the request .
400	FIELD_INVALID	The field value is not valid.
400	AC02	[InvalidDebtorAccountNumber] – invalid account identifier in the request content.



400	AC03	[InvalidCreditorAccountNumber] – the creditor account number is closed/blocked, or credit transactions are not allowed for the given account type, or the creditor account number is given in an invalid format (note: validated for in-house payments only).			
400	AC10	[InvalidDebtorAccountCurrency] – 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 (the account currency is optional; however, it should be specified in the case of multicurrency accounts – Raiffeisenbank).			
400	AC12	[InvalidAccountType] – the account type does not match allowed account types (e.g., a non-paying account).			
403	AG01	[TransactionForbidden] – an absent consent to access to the account balance check.			
400	AM05	[Duplication] – a duplication occurred. A universal code for a CISP duplicate query (validated e.g. by ČSOB) or a duplicate payment via PISP (non-unique payment reference).			
400	AM11	[InvalidTransactionCurrency] – the request contains a currency that is not traded/supported.			
400	AM12	[InvalidAmount] – a wrong amount, e.g., too low or high amount or a wrong number format in terms of the number of decimal places according to ISO 4217.			
400	FF01	[Invalid File Format] – an invalid JSON format or other technical problem with the query processing.			
400	BE19	[InvalidChargeBearerCode] – an invalid charge type for the given transaction type.			
400	DT01	[InvalidDate] – "Invalid Date" – see below *			
400, 50x	NARR	Narrative – a general reason for rejecting the payment, with an addition of error-related information.			
400	RC07	[InvalidCreditorBICIdentifier] – an invalid SWIFT / BIC code of the creditor's bank.			
400	RC10	[InvalidCreditorClearingSystemMemberIdentifier] – an invalid creditor's bank code identification.			
400	RR03	[MissingCreditorNameOrAddress] – required data concerning the creditor's name or address is missing fully or partly in the field. If the data is given in a wrong format, the FIELD_INVALID error code is used.			
400	RR10	[InvalidCharacterSet] – an invalid character set in the request.			

### New Payment – Payment Initiation report elements

Considered payment types

Considered pa	Considered payment types								
PAYMENT CODE	SERVICE LEVEL CODE	DESCRIPTION							
SEPA	ESCT	SEPA payment (domestic and within the EEA)							
ZPL	XBCT	Cross-border payment within the EEA, Cross-border payment outside the EEA							

LEVEL	MESSAGE	OCCUR-	PAYMENT	FORMAT TYPE	PRESENTATION
	ELEMENT	RENCE	TYPE		



+	paymentIdentification	[11]	ALL	PaymentIdentification1	Payment identification
++	instructionIdentificatio	[11]	ALL	Max35Text	Instruction identification
++	endToEndIdentificatio n	[00] [11] [00] [00]	SEPA ZPL	Max35Text	End To End identification.
++	transactionIdentificati on	[00]	ALL	Max35Text	Transaction identification
+	paymentTypeInformat ion	[01]	ALL	PaymentTypeInformation 19	Information about the payment type
++	instructionPriority	[01]	ALL	Priority2Code	Priority of the instruction
++	serviceLevel	[00]	ALL	ServiceLevel8CZ	Service level
+++	code	[00]	ALL	ExternalServiceLevel1Co de	Service level code
++	categoryPurpose	[00]	ALL	CategoryPurpose1Choic e	Payment purpose category
+++	code	[00]	ALL	ExternalCategoryPurpos e1Code	Payment purpose category code
+++	proprietary	[00]	ALL	Max35Text	Payment purpose category in the free format
+	amount	[11]	ALL	SEPA- AmountType3CZ EHP- AmountType3Choice NONEHP- AmountType3Choice	Amount
++	instructedAmount	[11]	ALL	CurrencyAndAmount	Instruction currency and amount
+++	value	[11]	ALL	Amount	Transfer amount
+++	currency	[11]	ALL	CurrencyCode	Transfer currency
++	equivalentAmount	[00]	ALL	CurrencyAndAmount	Equivalent currency and amount
+++	value	[00]	ALL	Amount	Equivalent transaction amount
+++	currency	[00]	ALL	CurrencyCode	Currency of the equivalent transaction amount
+	requestedExecutionD ate	[01]	ALL	ISODate	Requested execution date of the payment
+	exchangeRateInform ation	[00]	ALL	ExchangeRateInformatio n1	Contractual rate
++	exchangeRate	[00]	ALL	BaseOneRate	Agreed exchange rate
++	rateType	[00]	ALL	ExchangeRate Type1Code	Type of the agreed exchange rate
++	contractIdentification	[00]	ALL	Max35Text	Identifier of the use of the agreed exchange rate
+	chargeBearer	[00] [00] [01]	SEPA ZPL	ChargeBearerType1Cod e	Charge bearer.
+	chargesAccount	[00]	ALL	CashAccount16CZ	Charges account
++	identification	[00]	ALL	AccountIdentification4Ch oiceCZ	Charges account number identification
+++	iban	[00]	ALL	IBAN2007Identifier	Charges account IBAN number
++	currency	[00]	ALL	CurrencyCode ISO 4217	Charges account currency



+	ultimateDebtor	[00] [01] [00]	SEPA ZPL	Partyldentification32CZ1	Ultimate debtor.
++	name	[00] [01] [00]	SEPA ZPL	Max70Text	Ultimate debtor's name.
++	postalAddress	[00] [01] [00]	SEPA ZPL	PostalAddress6CZ	Ultimate debtor's postal address.
+++	streetName	[00] [01] [00]	SEPA ZPL	Max70Text	Ultimate debtor's street.
+++	buildingNumber	[00] [01] [00]	SEPA ZPL	Max16Text	Ultimate debtor's building number.
+++	postCode	[00] [01] [00]	SEPA ZPL	Max16Text	Ultimate debtor's Postal Code.
+++	townName	[00] [01] [00]	SEPA ZPL	Max35Text	Ultimate debtor's town/city.
+++	country	[00] [01] [00]	SEPA ZPL	CountryCode ISO3166	Ultimate debtor's country.
+++	addressLine	[00] [02] [00]	SEPA ZPL	Max70Text	Unstructured record of the ultimate debtor's address.
++	identification	[00] [01] [00]	SEPA ZPL	Party6Choice	Ultimate debtor's identification.
+++	organisationIdentificat ion	[00] [11] [00]	SEPA ZPL	OrganisationIdentification 4CZ	Unique identification of the ultimate debtor as an organization/ legal person. Either organisationIdentification or privateIdentification



++++	bicOrBei	[00] [01] [00]	SEPA ZPL	BICIdentifier	Identification of the ultimate debtor as an organization/legal person in the form of the BIC or BEI code.
++++	other	[00] [01] [00]	SEPA ZPL	GenericOrganisationIdent ification1	Other identification of the ultimate debtor as an organization/legal person.
+++++	identification	[00] [11] [00]	SEPA ZPL	Max35Text	Other identification of the ultimate debtor as an organization/legal person in the unstructured form.
+++++	schemeName	[00] [01] [00]	SEPA ZPL	OrganisationIdentification SchemeName1CZ	Type of the document used for the identification of the ultimate debtor as an organization/legal person.
+++++	proprietary	[00] [11] [00]	SEPA ZPL	Max35Text	Type of the document used for the identification of the ultimate debtor as an organization/legal person in the free text format.
+++++	issuer	[00] [01] [00]	SEPA ZPL	Max35Text	Issuer of the document used for the identification of the ultimate debtor as an organization/legal person.
+++	privateIdentification	[00] [11] [00]	SEPA ZPL	PersonIdentification5CZ	Unique identification of the ultimate debtor as a natural person. Either organisationIdentification or privateIdentification.
++++	other	[00] [01] [00]	SEPA ZPL	GenericPersonIdentificati on1	Other identification of the ultimate debtor as a natural person in the unstructured form.
+++++	identification	[00] [11] [00]	SEPA ZPL	Max35Text	Other identification of the ultimate debtor as a natural person in the unstructured form.
+++++	schemeName	[00] [01] [00]	SEPA ZPL	PersonIdentificationSche meName1Choice	Type of the document used for the identification of the ultimate debtor as a natural person.
+++++	proprietary	[00] [11] [00]	SEPA ZPL	Max35Text	Type of the document used for the identification of the ultimate debtor as a natural person in the free text format.



+++++	issuer	[00] [01] [00]	SEPA ZPL	Max35Text	Issuer of the document used for the identification of the ultimate debtor as a natural person.
+	debtor	[00]	ALL	Partyldentification32CZ2	Debtor
++	name	[00]	ALL	Max70Text	Debtor's name
++	postalAddress	[00]	ALL	PostalAddress6CZ	Debtor's postal address
+++	streetName	[00]	ALL	Max70Text	Street name used in the debtor's postal address.
+++	buildingNumber	[00]	ALL	Max16Text	Building number used in the debtor's postal address.
+++	postCode	[00]	ALL	Max16Text	Postal code used in the debtor's postal address.
+++	townName	[00]	ALL	Max35Text	Town name used in the debtor's postal address.
+++	country	[00]	ALL	CountryCode ISO3166	Country name used in the debtor's postal address.
+++	addressLine	[00]	ALL	Max70Text	Unstructured record of the debtor's postal address.
+	debtorAccount	[11]	ALL	CashAccount16CZ	Debtor's account
++	identification	[11]	ALL	AccountIdentification4Ch oiceCZ	Debtor's account identification
+++	iban	[11]	ALL	IBAN2007Identifier	Debtor's account number in the IBAN format
+++	other	[00]	ALL	GenericAccountIdentificat ion1CZ	Debtor's account number in other format
++++	identification	[00]	ALL	Max34Text	Debtor's account number in the local BBAN format
++	currency	[01]	ALL	CurrencyCode ISO 4217	Debtor's account currency
+	intermediaryAgent1	[00]	ALL	BranchAndFinancialInstit utionIdentification4CZ	Intermediary bank 1
++	financialInstitutionIde ntification	[00]	ALL	FinancialInstitutionIdentifi cation7CZ	Financial institution identification
+++	bic	[00]	ALL	BICIdentifier	BIC / SWIFT bank code
+++	clearingSystemMemb erIdentification	[00]	ALL	ClearingSystemMemberl dentification2	Clearing system member identification
++++	clearingSystemIdentifi cation	[00]	ALL	ClearingSystemIdentificat ion2Choice	Clearing system identification
+++++	code	[00]	ALL	ClearingSystemIdentificat ion1Code	Code
+++++	proprietary	[00]	ALL	Max35Text	Free format
++++	memberIdentification	[00]	ALL	Max35Text	Member's clearing code
+++	name	[00]	ALL	Max70Text	Name
+++	postalAddress	[00]	ALL	PostalAddress6CZ	Postal address
++++	streetName	[00]	ALL	Max70Text	Street
++++	buildingNumber	[00]	ALL	Max16Text	Building number
++++	postCode	[00]	ALL	Max16Text	Postal Code
++++	townName	[00]	ALL	Max35Text	Town/City
++++	country	[00]	ALL	CountryCode ISO3166	Country
++++	addressLine	[00]	ALL	Max70Text	Unstructured record of the address
+++	other	[00]	ALL	GenericFinancialIdentific ation1CZ	Other identification of the bank
++++	identification	[00]	ALL	Max35Text	Bank's local code



+	creditorAgent	[00] [01] [11]	SEPA ZPL	BranchAndFinancialInstit utionIdentification4CZ	Creditor's bank.
++	financialinstitutioniden tification [00 [01		SEPA ZPL	FinancialInstitutionIdentifi cation7CZ	Identification of the financial institution.
+++	bic	[00] [11] [01]	SEPA ZPL	BICIdentifier	BIC / SWIFT bank code.
+++	clearingSystemMemb erIdentification	[00] [00] [01]	SEPA ZPL	ClearingSystemMemberl dentification2	Clearing system member identification.
++++	clearingSystemIdentifi cation	[00] [01] buď anebo některá z jiných variant identifika ce banky příjemce	SEPA ZPL	ClearingSystemIdentificat ion2Choice	Clearing system identification.
+++++	code	[00] [00] [11] buď code anebo proprietar y	SEPA ZPL	ExternalClearingSystemI dentification1Code	Code
+++++	proprietary	[00] [00] [11] buď code anebo proprietar y	SEPA ZPL	Max35Text	Free format
++++	memberIdentification	[00] [00] [11]	SEPA ZPL	Max35Text	Member's clearing code
+++	name	[00] [00] [01] buď anebo některá z jiných variant identifika ce banky příjemce	SEPA ZPL	Max70Text	Name



+++	postalAddress	[00] [00] [01] buď anebo některá z jiných variant identifika ce banky příjemce	SEPA ZPL	PostalAddress6CZ	Postal address
++++	streetName	[00] [00] [01]	SEPA ZPL	Max70Text	Street
++++	buildingNumber	[00] [00] [01]	SEPA ZPL	Max16Text	Building number
++++	postCode	[00] [00] [01]	SEPA ZPL	Max16Text	Postal Code
++++	townName	[00] [00] [01]	SEPA ZPL	Max35Text	Town/City
++++	country	[00] [00] [01]	SEPA ZPL	CountryCode ISO3166	Country
++++	addressLine	[00] [00] [02]	SEPA ZPL	Max70Text	Unstructured record of the address
+++	other	[00] [01] buď anebo některá z jiných variant identifika ce banky příjemce	SEPA ZPL	GenericFinancialIdentific ation1C	Other identification of the bank
++++	identification	[00] [00] [01]	SEPA ZPL	Max35Text	Bank's local code
+	creditor	[00] [11] [11]	SEPA ZPL	Partyldentification32CZ2	Creditor



++	name	[00] [11] [11]	SEPA ZPL	Max70Text	Creditor's name
++	postalAddress	[00] [01] [11]	SEPA ZPL	PostalAddress6CZ	Postal address
+++	streetName	[00] [01] [01]	SEPA ZPL	Max70Text	Street
+++	buildingNumber	[00] [01] [01]	SEPA ZPL	Max16Text	Building number
+++	postCode	[00] [01] [01]	SEPA ZPL	Max16Text	Postal Code
+++	townName	[00] [01] [01]	SEPA ZPL	Max35Text	Town/City
+++	country	[00] [01] [01]	SEPA ZPL	CountryCode ISO3166	Country
+++	addressLine	[00] [02] [02]	SEPA ZPL	Max70Text	Unstructured record of the address
+	creditorAccount	[11]	ALL	CashAccount16CZ	Creditor's account
++	identification	[11]	ALL	AccountIdentification4Ch oiceCZ	Creditor's account identification
+++	iban	[11]	ALL	IBAN2007Identifier	Account number in the IBAN format
+++	other	[00] [00] [11]	SEPA ZPL	GenericAccountIdentificat ion1CZ:	Account number in other format.
++++	identification	[00] [00] [11]	SEPA ZPL	Max34Text	Account number in the local BBAN format.



++	currency	[01] [00] [00]	SEPA ZPL	CurrencyCode ISO4217	Creditor's account currency.
+	ultimateCreditor	[00] [01] [00]	SEPA ZPL	Partyldentification32CZ1	Ultimate creditor.
++	name	[00] [01] [00]	SEPA ZPL	Max70Text	Name
++	postalAddress	[00] [01] [00]	SEPA ZPL	PostalAddress6CZ	Postal address
+++	streetName	[00] [01] [00]	SEPA ZPL	Max70Text	Street
+++	buildingNumber	[00] [01] [00]	SEPA ZPL	Max16Text	Building number
+++	postCode	[00] [01] [00]	SEPA ZPL	Max16Text	Postal Code
+++	townName	[00] [01] [00]	SEPA ZPL	Max35Text	Town/City
+++	country	[00] [01] [00]	SEPA ZPL	CountryCode ISO3166	Country
+++	addressLine	[00] [02] [00]	SEPA ZPL	Max70Text	Unstructured record of the address.
++	identification	[00] [01] [00]	SEPA ZPL	Party6Choice	Ultimate creditor's identification.



+++	organisationIdentificat ion	[00] [11] [00]	SEPA ZPL	OrganisationIdentification 4CZ	Unique identification of the ultimate creditor as an organization/ legal person. Either organisationIdentification or privateIdentification.
++++	bicOrBei	[00] [01] [00]	SEPA ZPL	BICIdentifier	Identification of the ultimate creditor as an organization/ legal person in the form of the BIC or BEI code.
++++	other	[00] [01] [00]	SEPA ZPL	GenericOrganisationIdent ification1	Other identification of the ultimate creditor as an organization/ legal person.
+++++	identification	[00] [11] [00]	SEPA ZPL	Max35Text	Other identification of the ultimate creditor as an organization/ legal person in the unstructured form.
+++++	schemeName	[00] [01] [00]	SEPA ZPL	OrganisationIdentification SchemeName1CZ	Type of the document used for the identification of the ultimate creditor as an organization/legal person.
+++++	proprietary	[00] [11] [00]	SEPA ZPL	Max35Text	Type of the document used for the identification of the ultimate creditor as an organization/legal person in the free text format.
+++++	issuer	[00] [01] [00]	SEPA ZPL	Max35Text	Issuer of the document used for the identification of the ultimate creditor as an organization/legal person.
+++	privateIdentification	[00] [11] [00]	SEPA ZPL	PersonIdentification5CZ	Unique identification of the ultimate creditor as a natural person. Either organisationIdentification or privateIdentification.
++++	other	[00] [01] [00]	SEPA ZPL	GenericPersonIdentificati on1	Other identification of the ultimate creditor as a natural person in the unstructured form.
+++++	identification	[00] [11] [00]	SEPA ZPL	Max35Text	Other identification of the ultimate creditor as a natural person in the unstructured form.
+++++	schemeName	[00] [01] [00]	SEPA ZPL	PersonIdentificationSche meName1Choice	Type of the document used for the identification of the ultimate creditor as a natural person.



+++++	proprietary	[00] [11] [00]	SEPA ZPL	Max35Text	Type of the document used for the identification of the ultimate creditor as a natural person in the free text format.
+++++	issuer	[00] [01] [00]	SEPA ZPL	Max35Text	Issuer of the document used for the identification of the ultimate creditor as a natural person.
+	purpose	[00]	ALL	Purpose2Choice	Payment purpose
++	code	[00]	ALL	ExternalPurpose1Code	Payment purpose code
++	proprietary	[00]	ALL	Max35Text	Payment purpose in the free format
+	instructionForNextAg ent	[00]	ALL	Instruction code	Instruction for the next bank
+	remittanceInformation	[01]	ALL	RemittanceInformation5C Z	Information about the payment
++	unstructured	[01]	ALL	Max140Text, consisting of alphanumeric characters supported by CERTIS (CNB clearing), including supported special characters	Unstructured report for the creditor (see below*)
++	structured	[01] [00] [00]	SEPA ZPL	StructuredRemittanceInfo rmation7CZ	Structured message for the creditor – variable, specific, and constant symbol.
+++	creditorReferenceInfo rmation	[01] [00] [00]	SEPA ZPL	CreditorReferenceInform ation2CZ	Creditor reference information.
++++	reference	[03] [00] [00]	SEPA ZPL	CreditorReferenceInform ation2CZ	VS, SS & KS values

ZPL = cross-border payment

EHP = EEA

\* remittanceInformation.unstructured - (this information is optional): used to further identify the payment. In Slovakia, payment symbols (variable, specific and constant symbol) are used for this purpose. They are also transmitted in the "EndToEndIdentification" field in the sense of nationally agreed rules.

**Note** to the field *remittanceInformation.unstructured*: according to the standard of the Czech Banking Association, this field may also contain information about VS, KS and SS, however the Bank will work with all information contained here as if it were a simple description of the payment (information for beneficiaries) and none symbol parsing will not occur even if they occur here.

- The variable symbol value is recorded as VS:max.10 digits (e.g. VS:3451859072).
- The **constant symbol** value is recorded as KS:max.10 characters (e.g. KS:0308).
- The specific symbol value is recorded as SS:max.10 digits (e.g. SS:8451201274).

### JSON example element: "Payer reference":

The form of entering symbols according to the Slovak national convention is not arbitrary, but is prescribed as follows: /VS1234567890/SS1234567890/KS1234 or /VS1234567890/SS/KS1234



### The following conditions are also applied:

In the case of a foreign SEPA payment, the "Payer's reference" field:

- 1. must not contain the character "/" in the first or last position,
- 2. must not contain "//" (two slashes in a row).

We would also like to point out that in the processing of AISP information, the Bank does not evaluate all slashes entered in the PISP in the *Remittance Information.Unstructured* field as valid, resp. semantic and in the AISP output it is no longer mentioned.

### For example:

"VS: 36718 ///", for a payment in the AISP, enter "VS: 36718", ie all slashes are discarded by the system.

### **New Payment – Payment Initiation response elements**

The table only contains the elements that occur exclusively in the message response.

LEVEL	MESSAGE ELEMENT	OCCUR- RENCE	FORMAT TYPE	PRESENTATION
+	transactionIdentification	[11]	Max35Text	Established transaction identifier
+	serviceLevel	[11]	±	Service level (within the payment type)
++	code	[11]	Text	Type of the submitted payment
+	signInfo	[11]	±	Information about the status and id of the unauthorised transaction
++	state	[11]	StateCode	Information about the status of the transaction authorisation
++	signId	[01]	Text	Identifier of the authorising process of the particular transaction.
++	signInfo	[11]	Status Code set	Transaction status identifier.

serviceLevel.code element values - initiated payment type

service Level. Code element values – initiated payment type				
CODE	DESCRIPTION			
DMCT	[DoMestic Creidt Transfer] Domestic payment. Not supported SK			
ESCT	[SEPA Credit Transfer] – SEPA payment			
XBCT	[Cross-Border Credit Transfer] – Cross border payment			

Payment status codes - StatusCode

HTTP STATUS CODE	STATUS CODE	PURPOSE
200	ACTC	[AcceptedTechnicalValidation] – The authentication and syntactical and semantical validation are successful
200	RJCT	[Rejected] - Payment initiation or individual transaction included in the payment initiation has been rejected
200	ACWC	[AcceptedWithChange] – An instruction is accepted but a change will be made, such as date or remittance not sent



### Established/Initiated Payment Status (GET /payments/{paymentId}/status)

A resource for viewing the payment status. It is an established payment that has not yet been authorised by the client or has been authorised and PISP sends a query about its status (GET).

The resource only returns information about transactions established through the mediation of a specific provider. Information on the provider is taken from the certificate, or from the licence type information.

The user authorisation of this resource is optional. Primarily, only a provider's valid certificate is required.

#### **Resource characteristics**

URI: /payments/{paymentId}/status

HTTP Method: GET

Request URL: <a href="https://api.koba.sk/sandbox/pisp/v1/payments/{paymentId}/status">https://api.koba.sk/sandbox/pisp/v1/payments/{paymentId}/status</a>

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

**Certification:** the requiest **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.

Pagination:noSorting:noFiltering:no

Query parameters of the request: not defined

Request header parameters:

PARAMETER	Түре	Manda- TORY	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 <b>application/json</b> 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.

Response header parameters:

PARAMETER	Түре	MANDA- TORY	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 <b>application/json</b> format is primarily supported.

For the content of the request and response call POST see Chapter 2.1 Established/Initiated Payment Status REPORT ELEMENTS

CBA-standard defined error codes for the GET Status service of the Established/Initiated Payment

HTTP STATUS CODE	ERROR CODE	PURPOSE
401	UNAUTHORISED	Invalid/missing certificate = the provider has not been authenticated
404	TRANSACTION_MISS ING	Calling of a method that does not match with the licence, or invalid certificate.

### **Established/initiated Payment Status Report Elements**

LEVEL	MESSAGE ELEMENT	OCCUR- RENCE		FORMAT TYPE	PRESENTATION
+	instructionStatus	[11]	PISP ALL	StatusCode	Established payment status

Payment codes status - StatusCode

HTTP STATUS STATUS CODE PURPOSE CODE



200	ACTC	[AcceptedTechnicalValidation] – The authentication and syntactical and semantical validation are successful
200	RJCT	[Rejected] - Payment initiation or individual transaction included in the payment initiation has been rejected
200	ACSP	[AcceptedSettlementInProcess] – All preceding checks such as technical validation and customer profile were successful and therefore the payment initiation has been accepted for execution
200	ACSC	[AcceptedSettlementCompleted] – Settlement on the debtor's account has been completed. Usage: this can be used by the first agent to report to the debtor that the transaction has been completed. Warning: this status is provided for transaction status reasons, not for financial information. It can only be used after bilateral agreement
200	ACWC	[AcceptedWithChange] – An instruction is accepted but a change will be made, such as date or remittance not change



# Step II – Payment Authorisation Initiation – bank-specific (POST /my/payments/{paymentId}/sign/{signId})

This resource serves for starting a specific authorisation method from a selected scenario.

The input is a JSON object containing the required authorisation method type - **CODE** and all elements specific for this step.

The output of this resource is an overview of values necessary for completing the authorisation.

E.g., the response to the CODE corresponding to the federated authorisation will be URL and parameters for the redirection to the federated authorisation page.

Further, e.g. the response to the CODE corresponding to the authorisation through the OTP code sent via SMS will only be a confirmation of the code sending. The sending itself is initiated by the bank.

#### **Resource characteristics**

URI: /payments/{paymentld}/sign/{signId}

HTTP Method: POST

Request URL: <a href="https://api.koba.sk/sandbox/pisp/v1/payments/{paymentId}/sign/{signId}">https://api.koba.sk/sandbox/pisp/v1/payments/{paymentId}/sign/{signId}</a>

**Authorization:** the requires an 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.

Pagination:noSorting:noFiltering:no

Query parameters of the request: not defined

#### Request header parameters:

PARAMETER	Түре	MANDA- TORY	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 <b>application/json</b> 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.
Authorization	Text	Yes	A parameter used for forwarding the authenticated user's access token along with its type.

### Response header parameters:

response neader parameters.								
PARAMETER TYPE MANDA- PURPOSE TORY		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/ison format is primarily supported.					

For the content of the request and response call POST see Chapter 3.1 Step II - Payment Authorisation Initiation – Bank-Specific – REPORT ELEMENTS

CBA-standard defined error codes for the payment authorisation initiation POST service:

HTTP STATUS CODE	ERROR CODE	PURPOSE
401	UNAUTHORISED	Invalid/missing access token = the user has not been authenticated
403	FORBIDDEN	Invalid/missing certificate = the provider has not been authenticated
404	ID_NOT_FOUND	The required id does not exist



AUTH_LIMIT_EXCEE DED	This resource cannot be authorised in this manner
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# Step II - Payment Authorisation Initiation - Bank-Specific

### Request parameters:

Request parameters:						
LEVEL	MESSAGE ELEMENT	OCCUR- RENCE	PAYMENT TYPE	FORMAT TYPE	PRESENTATION	
+	authorizationType	[11]	PISP ALL	Text	The code of the required authorisation (from authorisation scenarios)	

Response parameters:

LEVEL	MESSAGE ELEMENT	OCCUR- RENCE	PAYMENT TYPE	FORMAT TYPE	PRESENTATION
+	authorizationType	[11]	PISP ALL	±	The code of the required authorisation (from authorisation scenarios)
+	href	[01]	PISP ALL	±	The reference for calling the federated authorisation
++	url	[11]	PISP ALL	Text	The URL link or package federated authorisation
++	id	[01]	PISP ALL	Text	The potential id for calling the federated authorisation
+	method	[01]	PISP ALL	Text	The method of the use of the href link for the federated authorisation.
+	formData	[01]	PISP ALL	±	An optional element. In the case of the POST method of the federated authorisation (authorisationType=USERAGENT_REDIRECT), the element contains the data for sending in the redirection to the federated authorisation.
++	SAMLRequest	[01]	PISP ALL	Text	An optional parameter. In the case of the POST method of the federated authorisation (authorisationType=USERAGENT_REDIRECT), the element contains the SAML request data.
++	relayState	[01]	PISP ALL	Text	An optional parameter. In the case of the POST method of the federated authorisation (authorisationType=USERAGENT_REDIRECT), the element contains the relay State for the return value.
+	signInfo	[11]	PISP ALL	±	Information about the instruction authorisation.
++	state	[11]	PISP ALL	Text	A status of the transaction authorisation in a format supported by the bank.
++	signId	[11]	PISP ALL	Text	A unique identifier of the current transaction authorisation.



### Balance Check (POST /my/payments/balanceCheck)

This is the resource for sending a request for balance check in a particular payer's payment account. This resource is authorized. Access to information must be granted by the client outside the interaction of this API before the resource is used.

### **Resource characteristics**

URI: /my/payments/balanceCheck

HTTP Method: POST

Request URL: <a href="https://api.koba.sk/serverapi/pisp/v1/payments/balanceCheck">https://api.koba.sk/serverapi/pisp/v1/payments/balanceCheck</a>

request requires the authorization of user/client as part of API calling

Use certificate: requires the use of the qualified third-party certificate

Paging: no Sorting: no Filtering: no

Query parameters of the request: not defined

Parameters of the request header:

PARAMETER	TYPE	MANDATORY	PURPOSE
Content-Type	Text	Yes	Specification of required transfer format. From the precondition of technical specification of this API standard, in this case, <b>application/json</b> 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 a communication configuration element.
Authorization	Text	Yes	The parameter is used to pass an access token of the authenticated user together with its type
TPP-Name	Text	Yes	The name of the original TPP that created the request. Eg. 'Star corporation, a.s.'. In this field, only characters with no diacritics are supported.
TPP-Identification	Text	No	The identification (licence number) of the original TPP that created the request. Eg. 'CZ013574-15'

Parameters of the response header:

PARAMETER	TYPE	MANDATORY	PURPOSE
Content-Type	Text	Yes	Specification of required transfer format. From the
			precondition of technical specification of this API standard,
			in this case, <b>application/json</b> format is primarily supported.

The content of POST request and response for calling, please see Chapter 7.1. MESSAGE ELEMENTS Query for balance check.

Error codes defined for the POST service Query for balance check

HTTP STATUS CODE	ERROR CODE	PURPOSE		
401 UNAUTHORISED		Missing certificate.		
403	FORBIDDEN	Calling of the method which does not correspond to the licence, or invalid certificate.		
400	FIELD_MISSING	Missing mandatory field in the request.		
400	FIELD_INVALID	FIELD value is not valid.		
400	AC02	[InvalidDebtorAccountNumber] – invalid account identifier in the request content.		
400	AC09	[InvalidAccountCurrency] – invalid currency of the required account.		
400	AC12	[InvalidAccountType] - account type does not match allowed account types (e.g., a non-paying account).		
403	AG01	[TransactionForbidden] – absent consent to access to balance check at the account.		
400	AM11	[InvalidTransactionCurrency] – the request contains a currency not trade/not supported.		
400	AM12	[InvalidAmount] – wrong amount. For instance, too low or high amount or wrong number format according to the number of decimal places according to the ISO 4217.		



400	FF01	[Invalid File Format] – invalid JSON forma tor other technical problem with the query processing.
400, 50x	NARR	Narrative – a general reason for rejecting the payment, with an addition of error-related information.
400	RF01	[NotUniqueTransactionReference] – not unique request identifier.
400	RR10	[InvalidCharacterSet] – invalid character set in the request.

# 1.1. MESSAGE ELEMENTS Query for Balance Check

LEVEL	MESSAGE ELEMENT	OCCURRENCE	FORMAT TYPE	PRESENTATION
+	exchangeldentification	[11]	Max18Text	Clear query identification
+	card	[01]	±	Transaction card
++	cardholderName	[01]	Max45Text	Card holder name
++	maskedPan	[11]	Max30Text	Masked card number
+	debtorAccount	[11]	±	Payer account
++	identification	[11]	±	Payer account identification
+++	iban	[11]	IBAN2007Identifier	IBAN
++	currency	[01]	CurrencyCode, ISO 4217	Payer account currency
+	authenticationMethod	[01]	CodeSet	Client verification method
+	merchant	[01]	±	Merchant executing the transaction
++	identification	[11]	Max35Text	Merchant identification
++	type	[01]	Code	Merchant type
++	shortName	[11]	Max35Text	Merchant name
++	commonName	[11]	Max70Text	Merchant name as stated in the payment receipt
++	address	[01]	Max140Text	Merchant address
++	countryCode	[01]	CountryCode, ISO 3166 (2 alphanumeric characters code version)	Merchant country
++	merchantCategoryCode	[11]	Min3Max4Text, ISO 18245	Merchant code following the transaction type
+	transactionDetails	[11]	±	Transaction details
++	currency	[11]	CurrencyCode, ISO 4217	Balance query currency
++	totalAmount	[11]	Amount	Balance query amount

### 1.2. MESSAGE ELEMENTS Response for Balance Check

LEVEL	MESSAGE ELEMENT	OCCURRENCE	FORMAT TYPE	PRESENTATION
+	responseldentification	[11]	Number (integre)	Unique identification of response to query for Balance Check (from ASPSP).
+	exchangeldentification	[11]	Max18Text	Repeated identification of a payment transaction (query for Balance Check) from the issuer of the card to which the request for Balance Check linked to the account.
+	response	[11]	Code set	Result code of query for Balance Check.

### 1.3. Return codes for the parameter "response" – Code set:

CODE	DESCRIPTION	



APPR	Enough funds on this account
DECL	Unsufficient funds on this account

# 10. PSD2 glossary – selected terms

API - Application Programing Interface

REST – (Representational State Transfer) is an API architecture, which allows for accessing the data and execute CRUD operations. It usually uses the HTTP/HTTPS protocol. REST is stateless, which makes communication with the API much easier and allows for the parallel processing of its contents. At the same time, it can be easily used with HTTP, which is a widely used protocol. Last not least, it provides a standard of a kind so we can easily use an API created by somebody else or offer our API to a number of other users. The REST interface supports uniform and easy access to resources. Such resources can be data or application states (as long as they can be described using specific data). All resources have their URI identifier. REST defines four basic methods of access (GET, PUT, POST, and DELETE). The HTTP Verbs have the following meaning:

- GET obtaining the data
- POST creating
- PUT editing (like SET, it edits an entire resource)
- DELETE deleting
- PATCH partial editing

**REST API** – Distributed environment interface oriented on data, not on calling procedures like RPC (XML-RPC) or SOAP. Web services define remote procedures and their calling protocol; REST decides how the data should be approached. REST API uses HTTP methods, such as @GET, @PUT, @POST, @DELETE, @PATCH.

TPP - Third Party Provider (a third party registered/licenced by the CNB or other EU National Competent Authority)

AIS - Account Information Service

AISP - Account Information Service Provider

PIS - Payment Initiation Service

PISP - Payment Initiation Service Provider

CIS - Card-based Payment Instrument Issuance Service

CISP - Card-based Payment Instrument Issuance Service Provider

ASPSP - Account Servicing Payment Service Provider (a bank holding the debtor's payment account)