

# PSD2 API

## Interface specification



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## Document information

<b>Name</b>	PSD2 API
<b>Subject</b>	Interface specification
<b>Version</b>	4.00

# List of acronyms

## List of acronyms

#	Acronym	Explanation
	365.bank or bank	365.bank, a. s. so sídlom Dvořákovo nábrežie 4, 811 02 Bratislava, IČO: 31 340 890
	AI	Account Information
	AISP	Account Information Service Provider
	APIGW	API Gateway
	CA	Certificate authority
	IB	Internet banking
	IL	IBAN Listing – list of accounts
	MEP	Message Exchange Pattern
	PISP	Payment Information Service Provider
	PIISP	Payment Instrument Issuer Service Provider
	POI	Payment Order Initiation
	PSD2	Payment Service Directive 2
	SCA	Strong customer authentication
	SSL	Secure Socket Layer
	TLS	Transport Layer Security
	TPP	Third Party Provider

## References

#	Name	Description
	<u>PSD2</u>	DIRECTIVE (EU) 2015/2366 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 25 November 2015 on payment services in the internal market, amending Directives 2002/65/EC, 2009/110/EC and 2013/36/EU and Regulation (EU) No 1093/2010, and repealing Directive 2007/64/EC
	<u>RTS on SCA and CSC</u>	COMMISSION DELEGATED REGULATION (EU) 2018/389 of 27 November 2017 supplementing Directive (EU) 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
	<u>eIDAS</u>	REGULATION (EU) No 910/2014 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 23 July 2014 on electronic identification and trust services for electronic transactions in the internal market and repealing Directive 1999/93/EC

# 1 Introduction

Document describes PSD2 regulation and RTS on SCA and CSC interfaces which are provided by 365.bank.

## 1.1 Main focus

Document focuses on following topics:

- Describe interfaces which are provided by 365.bank for Third Party Providers (TPP)
- Define security requirements for TPP
- Describe invocation sequence for proper interface handling

## 2 Overall description

Bank allows the connection of third parties to the API without the obligation to register and without granting special access tokens. The interfaces for TPP communication with PABK are described in detail in the following chapters of the documentation. TPP accesses the API interface by direct access by connecting to individual endpoints of the issued services in accordance with defined security requirements based on the client's request.

The API provides the following functionalities from PSD2 control and RTS on SCA and CSC:

PSD2 Services provided in the API		
IBAN Listing	IBAN Listing for AI (LIAI)	Account list for Account Information
IBAN Listing	IBAN Listing for LOT (LILOT)	Account list for Account Transactions
IBAN Listing	IBAN Listing for POI (LIPOI)	List of accounts for the payment service
AISP	Account information (AI)	Account information - The service provides information and balances related to the account Account transactions - the service provides a list of transactions in a defined range of dates related to the account
AISP	List of Transactions (LOT)	Service allows you to authorize an initialized payment. The service is defined according to the type of payments for individual endpoints. The bank does not currently provide instant payments.
PISP	Payment Order Initiation (POI)	Submitting an e-commerce payment
PISP	Payment Order Initiation (POI)- Ecommerce	Submission of a standard SEPA payment
PISP	Payment Order Initiation (POI) – standard payments	Creating a SEPA standing order
PISP	Payment Order Initiation (POI) - Standing Order	Balance check - the service provides information about a sufficient balance by answering yes / no
PIISP	Payment Instrument Issuer Service Provider	

The sequence of processes is shown in diagrams describing the individual steps for making calls for each service. Failure to comply with the sequence of calls may lead to the rejection of the request by the bank in individual processes. It is important to follow the case-sensitive pattern in both the header and the body in the calls according to the template given in this documentation.

Communication pattern follow 2 scenarios from TPP point of view:

- Multi step pattern with online authorization by client (AISP- AI, AISP- LOT, PISP-POI)
  - Client puts inquiry via TPP
  - Client authorize inquiry via 2 factor authentication (Internet banking)
  - Client check result of inquiry via TPP
- Single step pattern with forward authorization by client (PIISP)
  - Result of the inquiry is immediate, client approved processing of the inquiry via different channels in the past

### 2.1 Request submission process AI

The figure below describes the sequence of API calls that must be followed in that order. Failure to comply with the call sequence may result in the bank rejecting the request.



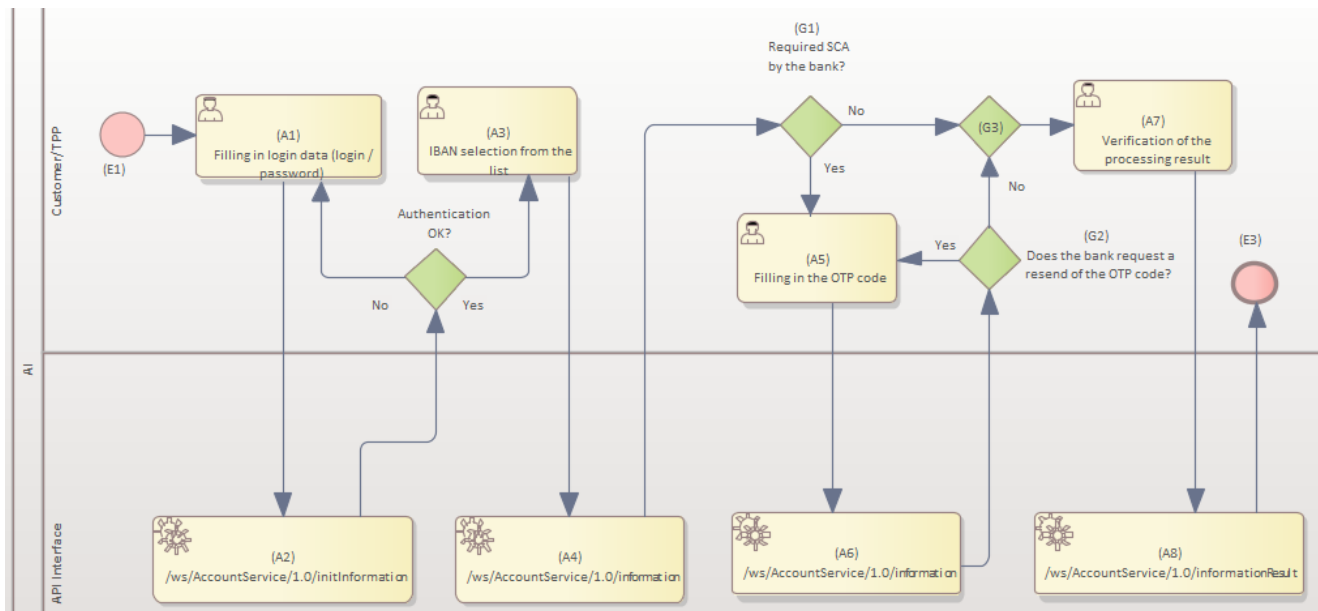


Figure 1: Sequence of call steps for AI service

Description process:

- (A1) The client enters his login details (login and password) with the TPP. After they are obtained, the TPP calls the initInformation service.
- (A2) After verifying the accuracy of the data, the bank responds with a list of accounts available to the client.
- (A3) The client defines an account from the list. After selecting a account, TPP will call the information service with added account information and assigned orderID.
- (A4) The service returns in response information on whether authorization is required.
  - SCA is required
    - A5 (A5) The TPP must request an OTP code from the client to continue. The code sends information by calling the service and the request must contain the same values as in point (A4)
      - DD - day of sending the request – numeric value
      - MM – month of sending the request – numeric value
      - HH – hour of sending the request – numeric value
    - A6 (A6) The service returns authorization information in response.
  - SCA not required - the request entry process is completed.
- (A7) To verify the processing result and display the account detail, it is necessary for TPP to call the informationResult service
- (A8) The service response returns the required data.

## 2.2 Request submission process POI

The figure below describes the sequence of API calls that must be followed in that order. Failure to comply with the call sequence may result in the bank rejecting the request.

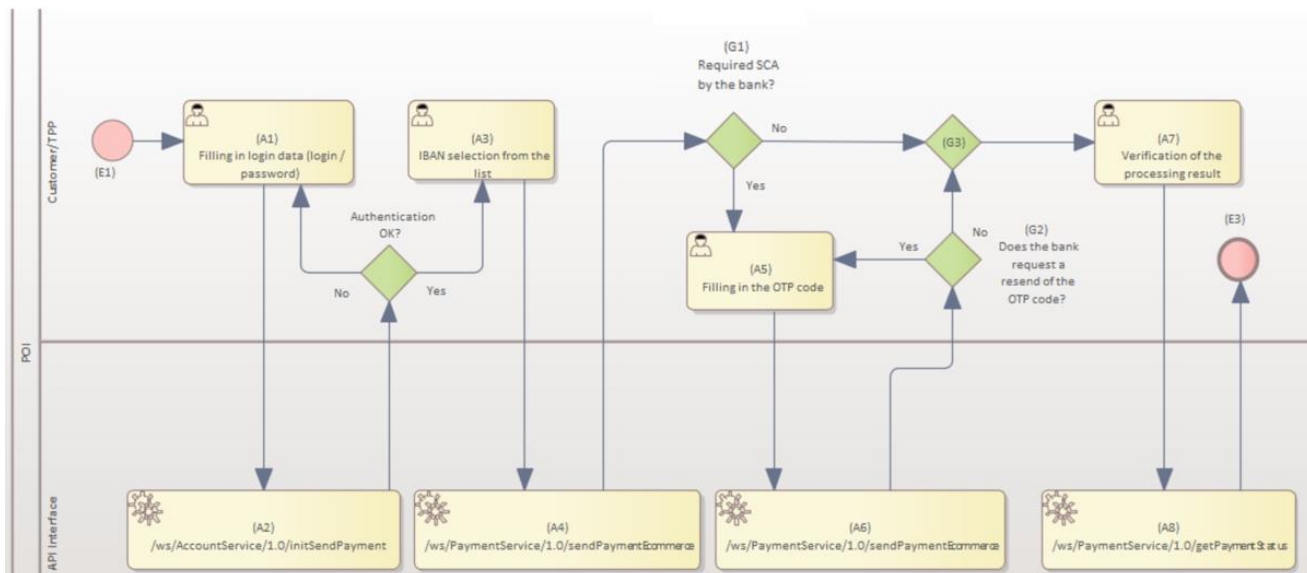


Figure 2: Sequence of call steps for POI service

#### Process:

- (A1) The client enters his login details (login and password) with the TPP. After they are obtained, TPP calls the initSendPayment service.
- (A2) After verifying the accuracy of the data, the bank responds with a list of accounts available to the client.
- (A3) The client defines an account from the list. After selecting an account, TPP calls the sendPaymentEcommerce service with added account information and assigned orderID.
- (A4) The service returns in response information on whether authorization is required.
  - SCA is required
    - A5 (A5) The TPP must request an OTP code from the client to continue. The code is sent by calling sendPaymentEcommerce, where the request must contain the same values as in point (A4)
      - DD - day of sending the request – numeric value
      - MM – month of sending the request – numeric value
      - HH – hour of sending the request – numeric value
    - A6 (A6) The service returns authorization information in response.
  - SCA not required - the request entry process is completed.
- (A7) To verify the processing result and display the account detail, it is necessary for the TPP to call the getPaymentStatus service
- (A8) The service response returns the required data.

### 2.3 Request submission process LOT

The figure below describes the sequence of API calls that must be followed in that order. Failure to comply with the call sequence may result in the bank rejecting the request.

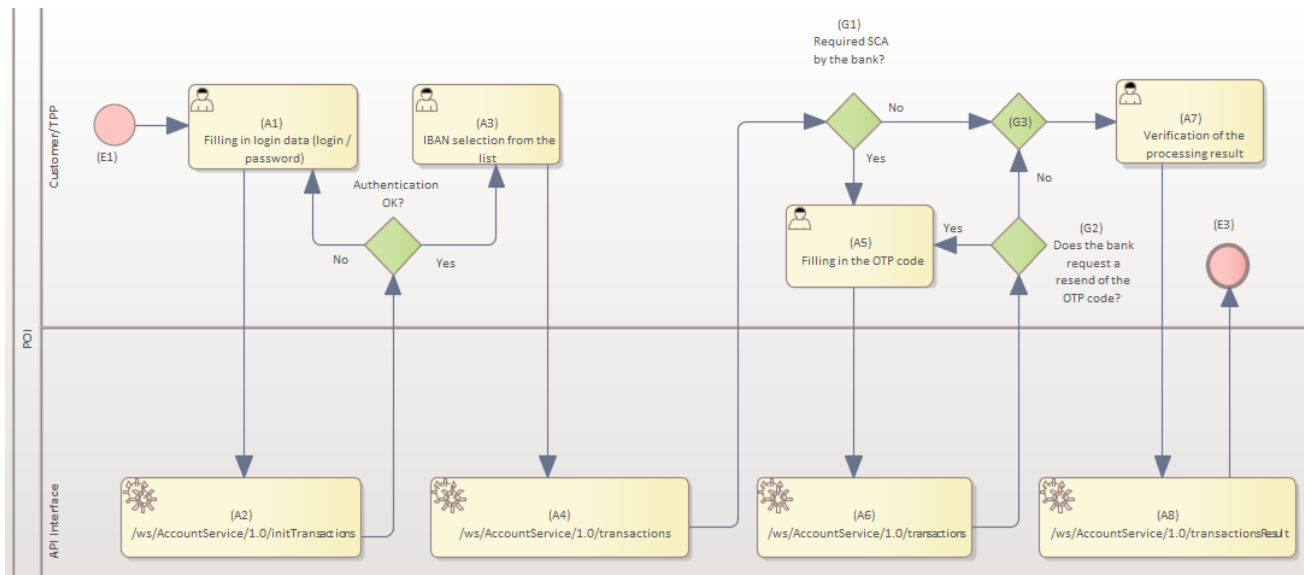


Figure 3: Sequence of call steps for LOT service

Process:

- (A1) The client enters his login details (login and password) with the TPP. After they are retrieved, the TPP calls the initTransactions service.
- (A2) After verifying the accuracy of the data, the bank responds with a list of accounts available to the client.
- (A3) The client defines an account from the list. After selecting a TPP account, it calls the transactions service with added account information and assigned orderID.
- (A4) The service returns in response information on whether authorization is required.
  - SCA is required
    - o A5 (A5) The TPP must request an OTP code from the client to continue. The code is sent by calling the transaction service, where the request must contain the same values as in point (A4)
      - DD - day of sending the request – numeric value
      - MM – month of sending the request – numeric value
      - HH – hour of sending the request – numeric value
    - o A6 (A6) The service returns authorization information in response.
      - o SCA not required - the request entry process is completed.
- (A7) To verify the processing result and display the account detail, it is necessary for TPP to call the transactionsResult service
- (A8) The service response returns the required data.

2.4 Payment Instrument Issuer Service Provider (PIISP)

To successfully proceed of this scenario, it is necessary that client of 365.bank provides forward authorization for selected TPP to validate his account balances.

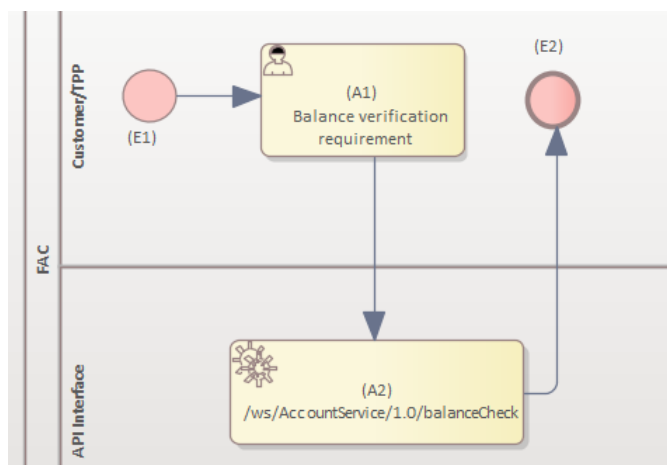


Figure 4: Orchestration PIISP

### Sequence diagram description:

- Client puts inquiry (PIISP) via TPP
- TPP invokes PIISP API on API GW
- 365.bank verifies TPP and process inquiry online
- Result is presented to client via TPP

## 3 Interfaces

### 3.1 Security requirements

Client SW (TPP) willing to use 365.bank API has to follow security requirements described in this section. Communication has to be initiated via TLS (mutual authentication). Brief description is on the following figure.

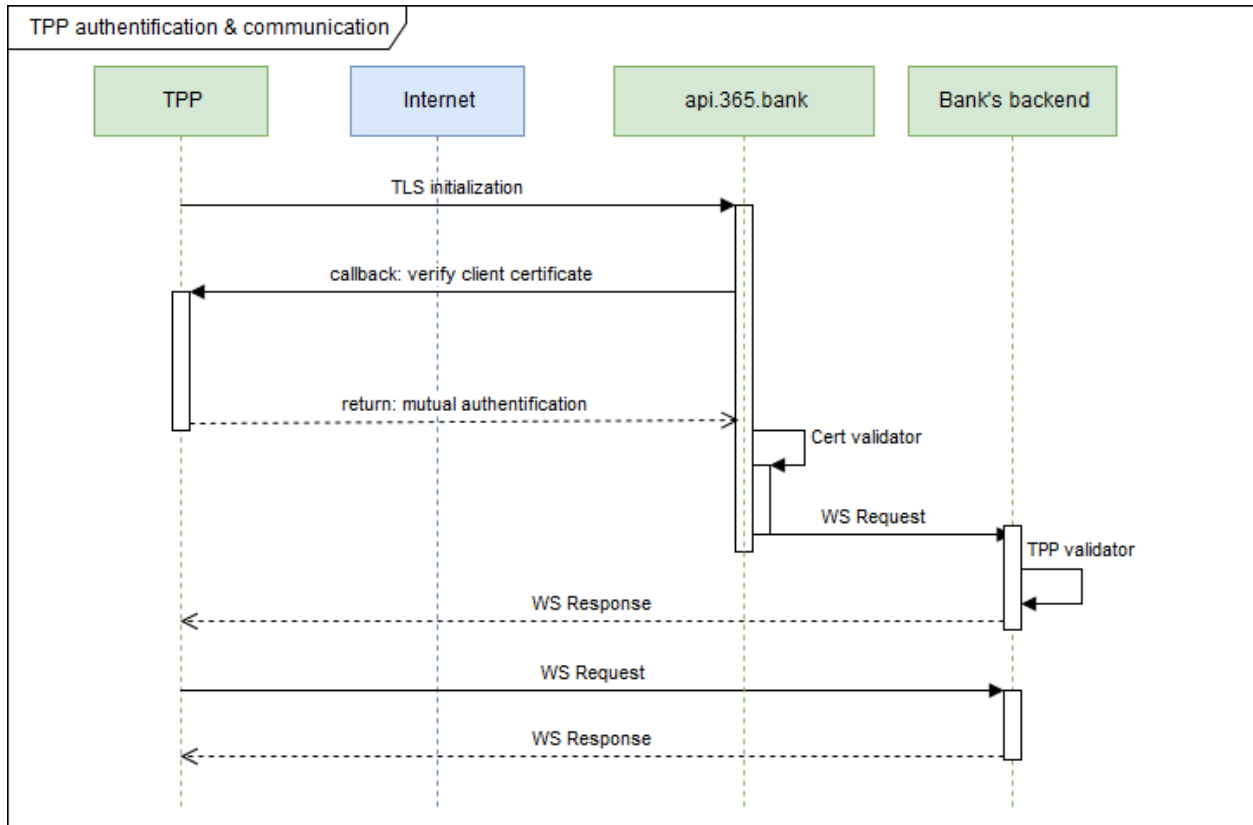


Figure 5: TPP Authentication

Interactions with 365.bank API has to be initiated with TLS handshake. Client has to use valid certificate (X.509 SSL type EV or qualified eIDAS certificate) issued via public certificate authority. Detailed requirements to initiate TLS could be found in RFC 6125. Client identification is verified and following attributes are validated:

1. Certification authority signature
2. Certificate validity
3. Certificate ownership

Client certificate requirements:

- Certificate meets X.509 standard
- Certificate is issued by CA
- Accepted certificates
  - Extended Validation SSL certificate
  - eIDAS qualified certificate for website authentication (eIDAS SSL must conform to requirements in section 45 directive EÚ nr. 910/2014 (list of accepted trust service providers <http://nbu.gov.sk/en/trust-services/index.html> or <https://esignature.ec.europa.eu/efda/tl-browser/#/screen/home>)
- certificate includes (standard ETSI TS 119 495):
  - name of TPP licence registrator,
  - number of licence ID,
  - roles of TPP licence

Immediately after the secure connection is established it is possible to call application interfaces which are described in following sections. Application interfaces are depicted as WS Request/WS Response on figure 5.

Client certificate requirements for test environment:

- TPP has PSD2 licence
  - certificate meets requirements for production environment noted above
  - TPP sends confirmation before start testing to support\_tpp@365.bank with certificate
- TPP is in the process of PSD2 licence issuing:
  - Accepted certificate is type of Extended Validation SSL certificate
  - TPP confirms his licence process, which is provided by the Regulator (confirmation included name of TPP, identification ID of TPP, role)

TPP sends confirmation before start testing to support\_tpp@365.bank with certificate

Password encryption

- Test environment

The login password must be sent in RSAES-OAEP (RSA/ECB/OAEPWithSHA-256AndMGF1Padding) encrypted form and converted to a Base64 string. The encryption key must be used for encryption:

XML format:

<RSAKeyValue>

<Modulus>

```
q7Tv/ksO0opyhDe1WHYar+azEYIGRHwgUDePLMeDGSnpEKWMYROI1HD+t4GRgfKXbPsXSkd31VT472Q4kesYbiyELVyUhwzzjSBo8YqajOjACDSs8fNSrBaio/ELCVHpGnFQmLoDACNDhK079pYXxUg1j1EUCGVbLu6sq6GIGeZHe/NRavJCn+zxv42aGDczQPwFYXz1xfMrDFgQIXTdb+XbpK99FYe/CnEFbABEM7Gf5MsoAXr/vcPWkdFcZng/qVC5F+E3T78sqYgnNi17VT5d++QYQbir6wM/sMQKRhYiZ/fE/ARZiLsEA9r592hpbZAHlgtcd4vsAPJOOY1d+Q==
```

</Modulus>

<Exponent>

AQAB

</Exponent>

</RSAKeyValue>

PEM format:

```
-----BEGIN PUBLIC KEY-----
```

```
MIIBIjANBgkqhkiG9w0BAQEFAAOCAQ8AMIIBCgKCAQEAg7Tv/ksO0opyhDe1WHYar+azEYIGRHwgUDePLMeDGSnpEKWMYROI1HD+t4GRgfKXbPsXSkd31VT472Q4kesYbiyELVyUhwzzjSBo8YqajOjACDSs8fNSrBaio/ELCVHpGnFQmLoDACNDhK079pYXxUg1j1EUCGVbLu6sq6GIGeZHe/NRavJCn+zxv42aGDczQPwFYXz1xfMrDFgQIXTdb+XbpK99FYe/CnEFbABEM7Gf5MsoAXr/vcPWkdFcZng/qVC5F+E3T78sqYgnNi17VT5d++QYQbir6wM/sMQKRhYiZ/fE/ARZiLsEA9r592hpbZAHlgtcd4vsAPJOOY1d+QIDAQAB
```

```
-----END PUBLIC KEY-----
```

Example for test environment:

Login and password from Use-cases before encryption:

**X-username:** A1psd2365@gmailabc.com

**X-password:** Test365Test1

Login name and password after encryption:

**X-username:** A1psd2365@gmailabc.com

**X-password:**

EvN6e8sB22iswD5rlnzyRoZq8q5SsWTn/7AuT+4LD3L6jFvskwZ5NVGYbXOqkVDSpO+ZgHHljaVYvrtH6dKeMfKjFH4UQ6xL  
3SPRmAiGDcBTSEXY5U3Os6tFylbO3CRXiy9GB8TQlqRLqJxxWHHFTsqbK+p3FhqcTdJmCYFkeZWPPpjFoSEVD0/EWUsx  
UTu9pq+niD8Mdal836i5oGILzNWc0MXq+Z2TiGcbKu6lKuOu9iJeYWKFeWGfokfClfNxXmyhlNKCvFkh5xiH+RM61uMx6mG+b  
EJIX1Y74rKmUssPm9dxL3RaFbtrF8SooWOpngHL1t9A49LSBbVRiCfTg==

- Production environment

The login password must be sent in encrypted form. To encrypt, you need to download the key from the URL:

<https://365.bank/cert/passwd/pubkey>

The password is encrypted by an algorithm RSAES-OAEP (RSA/ECB/OAEPWithSHA-256AndMGF1Padding). Finally, the resulting text is encoded in BASE64 format. The resulting value is filled in the X-password parameter in the request header.

## 3.2 URL convention

Interface endpoints compose of these parts:

https://domainname/brand/servicename

- domainname – api.365.bank
- brand – is alias for bank or alias for testing service
  - 365.sk – endpoint for services of 365.bank
- servicename – service which is initiated. For example for Account Information service use /ws/AccountService/1.0/information

example

- https://api.365.bank/365.sk/ws/AccountService/1.0/information

For testing purpose there are mock services deployed on the following endpoints:

- https://apitest.365.bank/ws/\*

In the following text, subsections names correspond to servicename part of the URL.

XSD schemes are in the annexes to the dossier. XSD scenarios for international payments and bulk payments are not supported.

## 3.3 IBAN Listing pre Account Information (LIAI)

### 3.3.1 /ws/AccountService/1.0/initInformation

Transport	HTTPS/XML
Method	POST
MIME Type	application/xml
MEP	Synchronous request-response
XSD schema	AccountService_api.xsd

<b>Request message</b>	
	Accept application/xml
HTTP Header parameters	X-username Client login to Internet banking
	X-password Client password to Internet banking
HTTP Content	InitInformationRequest

<b>Response message</b>	
HTTP Header parameters	error Error code
	errorDescription Error description
HTTP Content	InitInformationResponse

#### 3.3.1.1 Request message - initInformationRequest

Názov elementu	Povinný	Typ	Popis
messageId	áno	xsd:string	Unique identifier of TPP message

#### 3.3.1.2 Response message - initInformationResponse



Názov elementu	Typ	Popis
orderId	xsd:string	Unique order ID
accountList		IBAN Listing
=id	xsd:string	IBAN

### 3.4 Account Information (AI)

#### 3.4.1 /ws/AccountService/1.0/information

Transport	HTTPS/XML
Method	POST
MIME Type	application/xml
MEP	Synchronous request-response
XSD schema	AccountService_api.xsd

Request message	
Accept	application/xml
HTTP Header parameters	X-orderId orderId of operation, which has to be authorisate
	X-OTPkod OTP authorisation code
HTTP Content	InformationRequest

Response message	
HTTP Header parameters	error Error code
	errorDescription Error description
HTTP Content	InformationResponse

##### 3.4.1.1 Request message - InformationRequest

Element name	Required	Type	Description
IBAN	yes	xsd:string	client IBAN- (international bank account number)
messageId	yes	xsd:string	Unique identifier of TPP message

##### 3.4.1.2 Response message - InformationResponse

Element name	Required	Type	Description
orderId	yes	xsd:string	Unique ID of Order corresponding to client inquiry
SCA_Type	yes	xsd:boolean	Attribute for requirement of additional authorisation . 1 – is required 0 – is not required

#### 3.4.2 /ws/AccountService/1.0/informationResult

Transport	HTTPS/XML
-----------	-----------

Method	POST
MIME Type	application/xml
MEP	Synchronous request-response
XSD schema	AccountService_api.xsd

Request message	
HTTP Header parameters	Accept application/xml
HTTP Content	InformationResultRequest

Response message	
HTTP Header parameters	error Error code
	errorDescription Error description
HTTP Content	InformationResultResponse

#### 3.4.2.1 Request message - InformationResultRequest

Element name	Required	Type	Description
orderId	yes	xsd:string	Unique order id
messageId	yes	xsd:string	Unique identifier of TPP message

#### 3.4.2.2 Response message - InformationResultResponse

Element name	Required	Type	Description
accountName	yes	xsd:string	Account name
accountType	yes	xsd:string	Account type 0 – current account 1 – saving account
accountCurrency	yes	xsd:string	Account currency
accountingBalance	yes	xsd:decimal	Accounting balance
availableBalance	yes	xsd:decimal	Available balance
ownFunds	yes	xsd:decimal	Own funds
datetime	yes	xsd:date	Time of the balances snapshot

### 3.5 IBAN Listing pre List Of Transactions (LILOT)

#### 3.5.1 /ws/AccountService/1.0/initTransactions

Transport	HTTPS/XML
Method	POST
MIME Type	application/xml
MEP	Synchronous request-response
XSD schema	AccountService_api.xsd

Request message	
	Accept application/xml
HTTP Header parameters	X-username Client login to Internet banking
	X-password Client password to Internet banking
HTTP Content	InitTransactionsRequest
Response message	
HTTP Header parameters	error Error code
	errorDescription Error description
HTTP Content	InitTransactionsResponse

### 3.5.1.1 Request message - inittransactionsRequest

Názov elementu	Povinný	Typ	Popis
messageId	áno	xsd:string	Unique identifier of TPP message

### 3.5.1.2 Response message - inittransactionsResponse

Názov elementu	Typ	Popis
orderId	xsd:string	Unique order id
accountList		List of accounts
=id	xsd:string	IBAN (international bank account number)

## 3.6 List Of Transactions (LOT)

### 3.6.1 /ws/AccountService/1.0/transactions

Transport	HTTPS/XML
Method	POST
MIME Type	application/xml
MEP	Synchronous request-response
XSD schema	AccountService_api.xsd

Request message	
	Accept application/xml
HTTP Header parameters	X-orderId orderId of operation, which has to be authorisate
	X-OTPkod OTP authorisation code
HTTP Content	TransactionsRequest

Response message	
HTTP Header parameters	error Error code
	errorDescription Error description
HTTP Content	TransactionResponse

### 3.6.1.1 Request message - TransactionsRequest

Element name	Required	Type	Description
IBAN	yes	xsd:string	Client's IBAN (international bank account number)
dateFrom	yes	xsd:date	Date of first transaction
dateTo	yes	xsd:date	Date of last transaction
transactionType	yes	xsd:string	Transaction type: pending realized
messageld	yes	xsd:string	Unique identifier of TPP message

### 3.6.1.2 Response message - TransactionResponse

Element name	Required	Type	Description
orderId	yes	xsd:string	Unique order id
SCA_Type	yes	xsd:boolean	Attribute for requirement of additional authorisation . 1 – is required 0 – is not required

## 3.6.2 /ws/AccountService/1.0/transactionsResult

Transport	HTTPS/XML
Method	POST
MIME Type	application/xml
MEP	Synchronous request-response
XSD schema	AccountService_api.xsd

Request message	
HTTP Header parameters	Accept application/xml
HTTP Content	TransactionsResultRequest

Response message	
HTTP Header parameters	error Error code
	errorDescription Error description
HTTP Content	TransactionsResultResponse

### 3.6.2.1 Request message - TransactionsResultRequest

Element name	Required	Type	Description
orderId	yes	xsd:string	Unique order id

pageNr	yes	xsd:string	Page number
messageId	yes	xsd:string	Unique identifier of TPP message

### 3.6.2.2 Response message – TransactionsResultResponse

Character = in column Element name represents one level in XML structure

Element name	Required	Type	Description
transactionList			
=pageNr	yes	xsd:integer	Actual page number
=totalPages	yes	xsd:integer	Total number of pages
=transaction	no		One transaction in page
==id	yes	xsd:string	Id of transaction
==type	yes	xsd:string	Operation type
==date	yes	xsd:date	Date of transaction
== amount	yes	xsd:string	Transaction amount
== reference	yes	xsd:decimal	Reference
== note	no	xsd:string	Note
==rowIDInPage	no	xsd:integer	Id of page number
==accountNumber	yes	xsd:string	Account number
==accountBankCode	no	xsd:string	Account bank code
==accountName	no	xsd:string	Account name
==correspondingAccountNumber	no	xsd:string	Counterparty account number
==correspondingAccountBankCode	no	xsd:string	Counterparty bank code

## 3.7 IBAN Listing for Payment Order Initiation (LIPOI)

### 3.7.1 /ws/AccountService/1.0/initSendPayment

Transport	HTTPS/XML
Method	POST
MIME Type	application/xml
MEP	Synchronous request-response
XSD schema	PaymentService_api.xsd

Request message		
	Accept	application/xml
HTTP Header parameters	X-username	Client login to Internet banking
	X-password	Client password to Internet banking
HTTP Content	initSendPaymentRequest	

Response message	
HTTP Header parameters	error      Error code
	errorDescription      Error description
HTTP Content	initSendPaymentResponse

### 3.7.1.1 Request message - inittransactionsRequest

Názov elementu	Povinný	Typ	Popis
messageld	áno	xsd:string	Unique identifier of TPP message

### 3.7.1.2 Response message - inittransactionsResponse

Názov elementu	Typ	Popis
orderId	xsd:string	Unique order id
accountList		List of accounts
=id	xsd:string	IBAN (international bank account number)

## 3.7.2 /ws/AccountService/1.0/initStandingOrder

Transport	HTTPS/XML
Method	POST
MIME Type	application/xml
MEP	Synchronous request-response
XSD schema	PaymentService_api.xsd

Request message	
HTTP Header parameters	Accept      application/xml
	X-username      Client login to Internet banking
	X-password      Client password to Internet banking
HTTP Content	initStandingOrderRequest

Response message	
HTTP Header parameters	error      Error code
	errorDescription      Error description
HTTP Content	initStandingOrderResponse

### 3.7.2.1 Request message - initStandingOrderRequest

Element	Mandatory	Type	Description
messageld	yes	xsd:string	Unique identifier of TPP message

### 3.7.2.2 Response message - initStandingOrderResponse

Element	Type	Description
---------	------	-------------

orderId	xsd:string	Unique order id
accountList		List of accounts
=id	xsd:string	IBAN (international bank account number)

### 3.8 Payment Order Initiation (POI)

Interface to be used to payment initiation. Based on the payment type there are 3 endpoints provided:

- sendPaymentEcommerce - Ecommerce payment (SEPA)
- sendPaymentStandard – payment with future payment date (SEPA)
- createStandingOrder – create standing order (SEPA)

#### 3.8.1 /ws/PaymentService/1.0/sendPaymentEcommerce

Transport	HTTPS/XML
Method	POST
MIME Type	application/xml
MEP	Synchronous request-response
Request XSD schema	pain.001.001.07.PaBkCustomPOIecomm.xsd Customised PAIN001 scheme is used as payload. See PAIN001 for element type specification.
Response XSD schema	pain.002.001.08.xsd Customised PAIN002 scheme is used as payload. See PAIN002 for element type specification.

Request message		
	Accept	application/xml
HTTP Header parameters	X-orderId	orderId of operation, which has to be authorisate
	X-OTPkod	OTP authorisation code
HTTP Content	SendPaymentEcommerceRequest	

Response message		
HTTP Header parameters	error	Error code
	errorDescription	Error description
HTTP Content	SendPaymentEcommerceResponse	

##### 3.8.1.1 Request message - SendPaymentEcommerceRequest

Character = in column Element name represents one level in XML structure

Element name	Required	Type	Description
CstmrCdtTrflnitn	yes		
=GrpHdr	yes		
==MsgId	yes	Max35Text	Unique identifier of TPP message

			No diacritics or space is allowed. Only characters are allowed: A-Za-z0-9+?/-(:),.'
==CreDtTm	yes	ISODateTime	Date and time that the request was created
=PmtInf	yes		
==Dbtr	no		
===Nm	no	Max140Text	Name of the payer/originator No diacritic is allowed. Only characters are allowed: A-Za-z0-9+?/-(:),.' and space
==DbtrAcct	yes		
===Id	yes		
====IBAN	yes	IBAN2007Identifier	IBAN of the Payer/Originator that will be debited
==CdtTrfTxInf	yes		
===PmtId	yes		
====InstrId	yes	Max35Text	Transaction ID No diacritics or space is allowed. Only characters are allowed: A-Za-z0-9+?/-(:),.'
====EndToEndId	no	Max35Text	E2E reference – max 35 characters No diacritic is allowed. Only characters are allowed: A-Za-z0-9+?/-(:),.' and space
=== Amt	yes		
==== InstdAmt	yes	ActiveOrHistoricCurrencyAndAmount	Amount of transaction and currency. Only EUR currency possible. The amount must be >= 0.01 and <= 999999999.99. The amount must be rounded to only 2 decimal places. Decimal places separator is "." (dot)
===Cdtr	yes		
====Nm	yes	Max140Text	Creditor name No diacritic is allowed. Only characters are allowed: A-Za-z0-9+?/-(:),.' and space
===CdtrAcct	yes		
====Id	yes		
====IBAN	yes	IBAN2007Identifier	Creditor IBAN
===RmtInf	no		
====Ustrd	no	Max140Text	Remittance Information - Free text provided for information purposes



No diacritic is allowed. Only characters are allowed: A-Za-z0-9+?/-(.)', and space

### 3.8.1.2 Response message - SendPaymentEcommerceResponse

Element name	Required	Type	Description
CstmrPmtStsRpt	yes		
=GrpHdr	yes		
==MsgId	yes	Max35Text	Response message identification
==CreDtTm	yes	ISODatetime	Date and time when the response was created
=OrgnlGrpInfAndSts	yes		
==OrgnlMsgId	yes	Max35Text	Copy of field GrpHdr/MsgId from Request
==OrgnlMsgNmId	yes	Max35Text	pain.001.001.07 – constant value
=OrgnlPmtInfAndSts	no		
==OrgnlPmtInfId	yes	Max35Text	Copy of field PmtInf/CdtTrfTxInf/PmtId/InstrId from Request
==TxInfAndSts	no		
===OrgnlInstrId	no	Max35Text	Order Id - a unique reference assigned by the bank to uniquely identify the order.
===TxSts	no	ExternalPaymentTransactionStatus1Code	RCVD = payment is processing ERR = error occurred COMP = payment processing completed WAIT = payment is waiting for processing SCA = additional authorization is required
=== StsRsnInf	no		
====Rsn	no		
====Cd	yes	ExternalStatusReason1Code	Reason code

### 3.8.2 /ws/PaymentService/1.0/sendPaymentStandard

Transport	HTTPS/XML
Method	POST
MIME Type	application/xml
MEP	Synchronous request-response
Request XSD schema	pain.001.001.07.PaBkCustomPOIecomm.xsd Customised PAIN001 scheme is used as payload. See PAIN001 for element type specification.
Response XSD schema	pain.002.001.08.xsd Customised PAIN002 scheme is used as payload. See PAIN002 for element type specification.

Request message		
	Accept	application/xml
HTTP Header parameters	X-orderId	orderId of operation, which has to be authorisate
	X-OTPkod	OTP authorisation code
HTTP Content	SendPaymentStandardRequest	

Response message		
HTTP Header parameters	error	Error code
	errorDescription	Error description
HTTP Content	SendPaymentStandardResponse	

#### 3.8.2.1 Request message - SendPaymentStandardRequest

Character = in column Element name represents one level in XML structure

Element name	Required	Type	Description
CstmrCdtTrfInItN	yes		
=GrpHdr	yes		
==MsgId	yes	Max35Text	Unique identifier of TPP message No diacritics or space is allowed. Only characters are allowed: A-Za-z0-9+?/-(.)',
==CreDtTm	yes	ISODateTime	Date and time that the request was created
=PmtInf	yes		
==ReqdExctnDt	yes	ISODate	Requested execution date
==Dbtr	no		
===Nm	no	Max140Text	Name of the payer/originator No diacritic is allowed. Only characters are allowed: A-Za-z0-9+?/-(.)', and space

==DbtrAcct	yes		
===Id	yes		
====IBAN	yes	IBAN2007Identifier	IBAN of the Payer/Originator that will be debited
==CdtTrfTxInf	yes		
===PmtId	yes		
====InstrId	yes	Max35Text	Transaction ID No diacritics or space is allowed. Only characters are allowed: A-Za-z0-9+?/-(.)',.
====EndToEndId	no	Max35Text	E2E reference – maximum 35 characters are allowed No diacritic is allowed. Only characters are allowed: A-Za-z0-9+?/-(.)', and space
===Amt	yes		
====InstdAmt	yes	ActiveOrHistoricCurrencyAndAmount	Amount of transaction and currency. Only EUR currency possible. The amount must be > = 0.01 and <= 999999999.99. The amount must be rounded to only 2 decimal places. Decimal places separator is "." (dot)
===Cdtr	yes		
====Nm	yes	Max140Text	Creditor name No diacritic is allowed. Only characters are allowed: A-Za-z0-9+?/-(.)', and space
===CdtrAcct	yes		
====Id	yes		
====IBAN	yes	IBAN2007Identifier	Creditor IBAN
===RmtInf	no		
====Ustrd	no	Max140Text	Remittance Information - free text provided for information purposes No diacritic is allowed. Only characters are allowed: A-Za-z0-9+?/-(.)', and space

### 3.8.2.2 Response message - SendPaymentStandardResponse

Element name	Required	Type	Description
CstmrPmtStsRpt	yes		

=GrpHdr	yes		
==MsgId	yes	Max35Text	Response message identification
==CreDtTm	yes	ISODateTime	Date and time when the response was created
=OrgnlGrpInfAndSts	yes		
==OrgnlMsgId	yes	Max35Text	Copy of field GrpHdr/MsgId from Request
==OrgnlMsgNmId	yes	Max35Text	pain.001.001.07 – constant value
=OrgnlPmtInfAndSts	no		
==OrgnlPmtInfId	yes	Max35Text	Copy of field PmtInf/CdtTrfTxInf/PmtId/InstrId from Request
==TxInfAndSts	no		
===OrgnlInstrId	no	Max35Text	Order Id
===TxSts	no	ExternalPaymentTransactionStatus1Code	RCVD = prebieha spracovanie platby ERR = chyba COMP = platba bola spracovana WAIT = platba bola prijata na spracovanie SCA = potrebné dodatočná autorizácia platby
=== StsRsnInf	no		
====Rsn	no		
=====Cd	yes	ExternalStatusReason1Code	reason code

### 3.8.3 /ws/PaymentService/1.0/getPaymentStatus

Transport	HTTPS/XML
Method	POST
MIME Type	application/xml
MEP	Synchronous request-response
Request XSD schema	PaymentService_api.xsd
Response XSD schema	PaymentService_api.xsd
<b>Request message</b>	
HTTP Header parameters	Accept application/xml
HTTP Content	GetPaymentStatusRequest
<b>Response message</b>	
HTTP Header parameters	error Error code

HTTP Content	GetPaymentStatusResponse
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### 3.8.3.1 Request message - GetPaymentStatusRequest

Character = in column Element name represents one level in XML structure

Element name	Required	Type	Description
PaymentStatus			
=GrpHdr	yes		
==MsgId	yes	xsd:string	Unique identifier of TPP message
==CreDtTm	yes	xsd:dateTime	Date and time that the request was created
=Order	yes		
==OrderId	yes	xsd:string	Order id

### 3.8.3.2 Response message - GetPaymentStatusResponse

Element name	Required	Type	Description
CstmrPmtStsRpt	yes		
=GrpHdr	yes		
==MsgId	yes	Max35Text	Response message identification
==CreDtTm	yes	ISODateTime	Date and time when the response was created
=OrgnGrpInfAndSts	yes		
==OrgnMsgId	yes	Max35Text	Copy of field GrpHdr/MsgId from Request
==OrgnMsgNmId	yes	Max35Text	pain.001.001.07 – constant value
=OrgnPmtInfAndSts	no		
==OrgnPmtInfId	yes	Max35Text	Copy of field PmtInf/CdtTrfTxInf/PmtId/InstrId from Request
==TxInfAndSts	no		
===OrgnInstrId	no	Max35Text	Order Id - a unique reference assigned by the bank to uniquely identify the order.
===TxSts	no	ExternalPaymentTransactionStatus1Code	RCVD = payment is processing ERR = error occurred COMP = payment processing completed WAIT = payment is waiting for processing SCA = additional authorization is required
=== StsRsnInf	no		
====Rsn	no		
=====Cd	yes	ExternalStatusReason1Code	reason code

### 3.8.4 /ws/PaymentService/1.0/createStandingOrder

Transport	HTTPS/XML
Method	POST
MIME Type	application/xml
MEP	Synchronous request-response
Request XSD schema	PaymentService_api.xsd
Response XSD schema	PaymentService_api.xsd

Request message		
HTTP Header parameters	Accept	application/xml
	X-orderId	orderId of the specific operation that TPP wants to authorize
	X-OTPKod	OTP code for verification of authorization
HTTP Content	CreateStandingOrderRequest	

Response message		
HTTP Header parameters	error	Error code
	errorDescription	Description of error
HTTP Content	CreateStandingOrderResponse	

#### 3.8.4.1 Request message - createStandingOrderRequest Character = in column Element name represents one level in XML structure

Element name	Required	Type	Description
StdOrderPmt			
= GrpHdr	yes		
== MsgId	yes	Max35Text	Unique TPP message identifier No accents or spaces are allowed. Only characters are allowed: A-Za-z0-9+?/-(:),.'
== CreDtTm	yes	ISODateTime	Date and time the message was sent from the TPP
= PmtInf	yes		
== DbtrAcct	yes		
=== Id			
==== IBAN		IBAN2007Identifier	IBAN (international bank account number)
== PmtId	no		
=== EndToEndId	yes	Max35Text	E2E reference - validation syntactically to max 35 characters Accents are not allowed. Only characters are allowed: A-Za-z0-9+?/-(:),.'
== Amt	yes		

=== InstdAmt	yes	ActiveOrHistoricCurrencyAndAmount	Transfer order amount and currency. Currency only EUR The amount must be >=0.01 and <=999999999.99. The amount must be rounded to 2 decimal places only. The decimal separator is "." (dot)
== Cdtr	yes		
===Nm	yes	Max140Text	The name of the creditor Accents are not allowed. Only characters are allowed: A-Za-z0-9+?/-(.)', and space
== CdtrAcct	yes		
===Id	yes		
====IBAN	yes	IBAN2007Identifier	IBAN (international bank account number)
== RmtInf	no		
=== Ustrd	yes	Max140Text	Payer's reference Accents are not allowed. Only characters are allowed: A-Za-z0-9+?/-(.)', and space
== Detail	yes		
===Periodicity	yes	integer	Only one type of periodicity allowed. Allowed values: 2 (daily) 4 (monthly) 5 (quarterly) 6 (semi-annually) 7 (annually) 8 (the end of the month)
====FirstPaymentDt	yes	date	Date must be at least D+1 and may not be greater than the 28th day of the month
====LastPaymentDt	no	date	future date maximum 31.12.2099, which must be greater than the date of the first payment

### 3.8.4.2 Response message - createStandingOrderResponse

Element name	Required	Type	Description
OrgnlInstrId	Yes		
TxSts	yes		RCVD = payment is processing ERR = error occurred COMP = payment processing completed WAIT = payment is waiting for processing SCA = additional authorization is required

## 3.9 Payment Instrument Issuer Service Provider (PIISP)

### 3.9.1 /ws/AccountService/1.0/balanceCheck

Transport	HTTPS/XML
Method	POST

MIME Type	application/xml
MEP	Synchronous request-response
XSD schema	AccountService_api.xsd

<b>Request message</b>	
HTTP Header parameters	Accept application/xml
HTTP Content	BalanceCheckRequest

<b>Response message</b>	
HTTP Header parameters	error Error code
	errorDescription Error description
HTTP Content	BalanceCheckResponse

#### 3.9.1.1 Request message - BalanceCheckRequest

Element name	Required	Type	Description
IBAN	yes	xsd:string	Client IBAN (international bank account number)
amount	yes	xsd:decimal	Amount balance to be checked
currency	yes	xsd:string	Currency
messageld	yes	xsd:string	Unique identifier of TPP message

#### 3.9.1.2 Response message - BalanceCheckResponse

Element name	Required	Type	Description
result	yes	xsd:boolean	Result of the check
dateTime	yes	xsd:dateTime	Date and time when check was performed



## 4 List of error codes

In case of error code and errorDescription is returned in HTTP header. HTTP header parameters:

- error - Error code
- errorDescription – Error description

#	Error code	Error description
	Err_out_001	Unauthorized characters in the InstrId field. The request could not be processed. Please verify the correctness of the entered data.
	Err_out_002	Incorrect amount entered. The request could not be processed. Please verify the correctness of the entered data.
	Err_out_003	The request could not be processed due to an incorrect due date. Please verify the correctness of the entered data.
	Err_out_004	The request could not be processed for insufficient dispo balance.
	Err_out_005	Could not process request due to invalid validity date since. Please verify the correctness of the entered data.
	Err_out_006	The request could not be processed due to an incorrect maturity date. Please verify the correctness of the entered data.
	Err_out_007	The request could not be processed because of an incorrect IBAN format. Please verify the correctness of the entered data.
	Err_out_008	The request could not be processed due to incorrect maturity date. Please verify the correctness of the entered data.
	Err_out_009	The request could not be processed because the recipient bank is not a SEPA bank. Please verify the correctness of the entered data.
	Err_out_010	The request could not be processed, there is not enough money for the account. Please verify the correctness of the entered data.
	Err_out_011	The request could not be processed, the payer's details are not filled in correctly. Please verify the correctness of the entered data.
	Err_out_012	The request could not be processed. Can not make a transfer to the same account. Please verify the correctness of the entered data.
	Err_out_013	The request could not be processed. Please verify the correctness of the entered data, especially the existence of the account and its limitations.
	Err_out_014	The request could not be processed. Please verify the correctness of the entered data, especially the existence of the account and its limitations.
	Err_out_015	The request could not be processed. Please verify the correctness of the entered data, or try again later.
	Err_out_016	The command could not be processed. Please verify the correctness of the entered data, especially the existence of the account (beneficiary) and its limitations.
	Err_out_017	The request was received and now is processing.
	Err_out_018	The request could not be processed. Please verify the correctness of the entered data, especially the account format.
	Err_out_019	The request could not be processed. Please verify the correctness of the entered data, especially the IBAN and BIC of the recipient.
	Err_out_020	The request could not be processed. Please verify the correctness of the entered data, especially the IBAN of the recipient.
	Err_out_021	The request could not be processed. Please verify the correctness of the entered data, especially the beneficiary's bank code.
	Err_out_022	The request could not be processed. Please verify the correctness of the entered data.
	Err_out_023	The request could not be processed. Account is inactive.
	Err_out_024	The request could not be processed. There was a problem converting your IBAN account number. Please verify the correctness of the entered data.
	Err_out_025	IBAN recipient account is incorrect. Please verify the correctness of the entered data

#	Error code	Error description
	Err_out_026	Priority transfer in this amount is not possible.
	Err_out_027	The request could not be processed. The time for authorization has expired.
	Err_out_028	The request could not be processed. Request was not authorized.
	401 Unauthorized	Client certificate isn't owned by any registered TPP.
	403 Forbidden	TPP hasn't required role for this request.