



PSD2 API

INTERFACE SPECIFICATION

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DOCUMENT INFORMATION

Name	PSD2 API
Subject	Interface specification
Version	2.00

LIST OF ACRONYMS

List of acronyms

#	Acronym	Explanation
	PSD2	Payment Service Directive 2
	TPP	Third Party Provider
	MEP	Message Exchange Pattern
	AI	Account Information
	POI	Payment Order Initiation
	LOT	List Of Transactions
	FAC	Funds Availability Confirmation
	AI	Account Information
	API GW	API Gateway
	CA	Certificate authority
	SSL	Secure Socket Layer
	TLS	Transport Layer Security
	PISP	Payment Information Service Provider
	AISP	Account Information Service Provider

REFERENCES

#	Name	Description
	PSD2	Payment Service Directive 2
	RTS on SCA and CSC	Regulatory technical standards for strong customer authentication and common and secure open standards of communication
	eIDAS	REGULATION (EU) No 910/2014 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 23 July 2014 on electronic identification and trust services for electronic transactions in the internal market and repealing Directive 1999/93/EC

1. INTRODUCTION

Document describes PSD2 directive 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

Following interfaces from PSD2 directive will be provided for TPP by 365.bank

- Account Information (AI)
- Payment Order Initiation (POI)
- List Of Transactions (LOT)
- Funds Availability Confirmation (FAC)

Communication pattern follow 2 scenarios from TPP point of view:

- Multi step pattern with online authorization by client (AISP, PISP)
 - 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 (FAC)
 - Result of the inquiry is immediate, client approved processing of the inquiry via different channels in the past

2.1. Online authorization (AI, POI, LOT)

In case of the scenarios AI, POI, LOT it is required that inquiry is authorized with client via 2 factor authentication. Orchestration of the steps is depicted on the following sequence diagram.

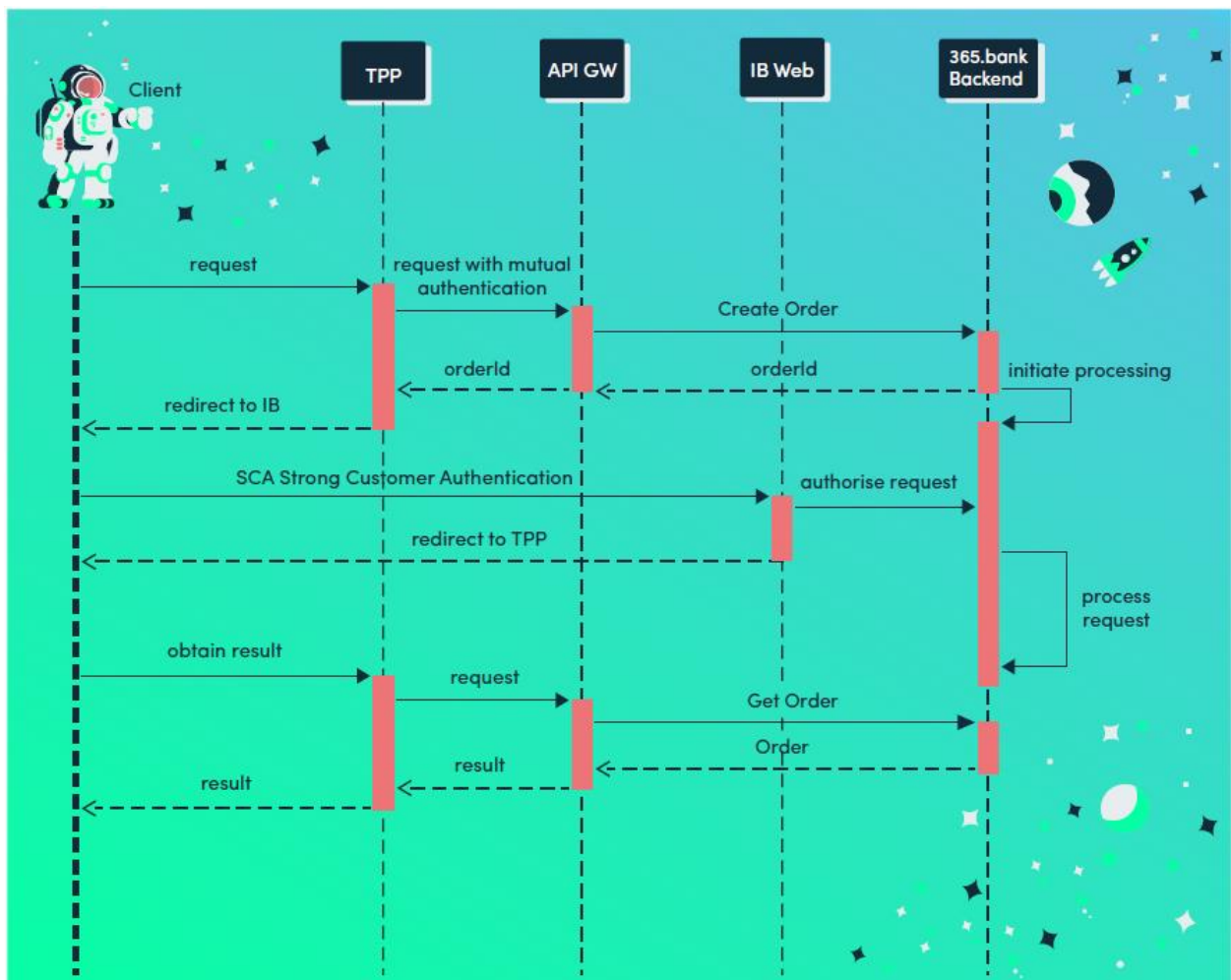


Figure 1 – Sequence diagram for scenarios AI, POI, LOT

Description of the sequence diagram:

- Client puts inquiry (AI, POI, LOT) via TPP
- TPP calls provided API
- 365.bank validate TPP, creates Order and returns identification of created Order to TPP. Inquiry is processing in backend systems 365.bank
- TPP forward client to Internet banking webpage
- Authentication and authorization is performed by client on Internet banking. Inquiry continues in processing. Authorization must be performed within in 10 minutes after inquiry, otherwise it will be rejected
- Client is forwarded to TPP webpage
- TPP validates result of processing based on identification of Order

In case of direct access:

- Client puts inquiry (AI, POI, LOT) via TPP
- TPP calls provided API with attributes Login and password – the password must be encrypted as is described in chapter 3.2
- Bank validate TPP and client, creates Order and returns identification of created Order to TPP. Inquiry is processing in backend systems
- Client is on TPP page
- Authentication and authorization is performed by TPP page. Client fill the OTP codes on the TPP page. TPP send OTP, bank validate OTP and than inquiry is processing in backend systems or declined with err msg (in case of bad OTP). Authorisation must be provided in 5 minutes.
- TPP validates result of processing based on identification of Order

2.2. Forward authorization (FAC)

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.

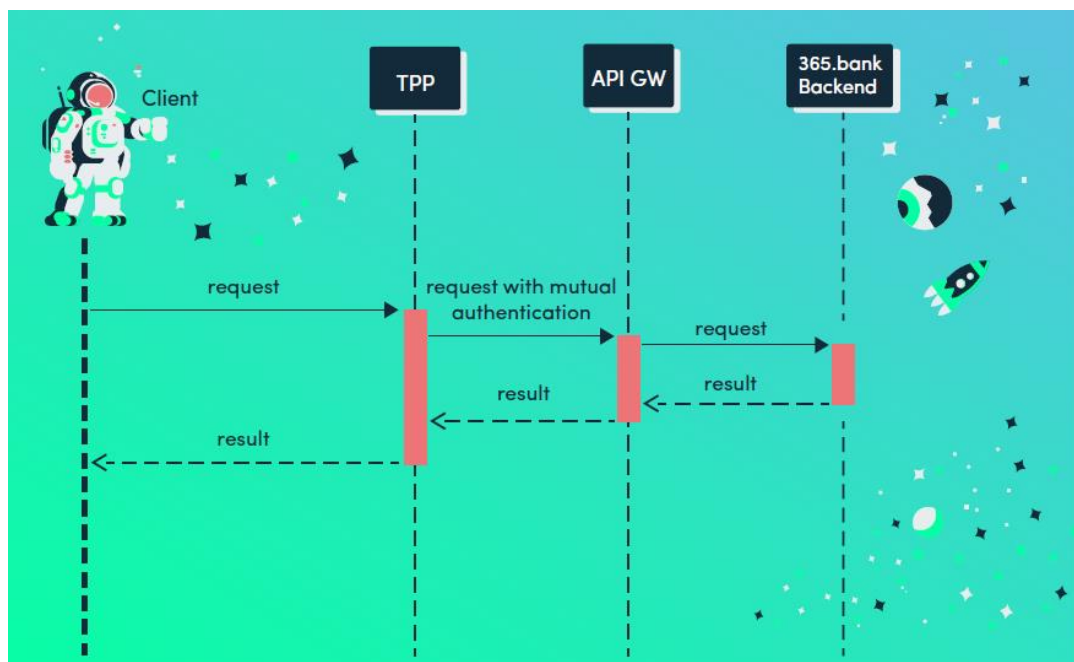


Figure 2 – Orchestration FAC

Sequence diagram description:

- Client puts inquiry (FAC) via TPP
- TPP invokes FAC 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.

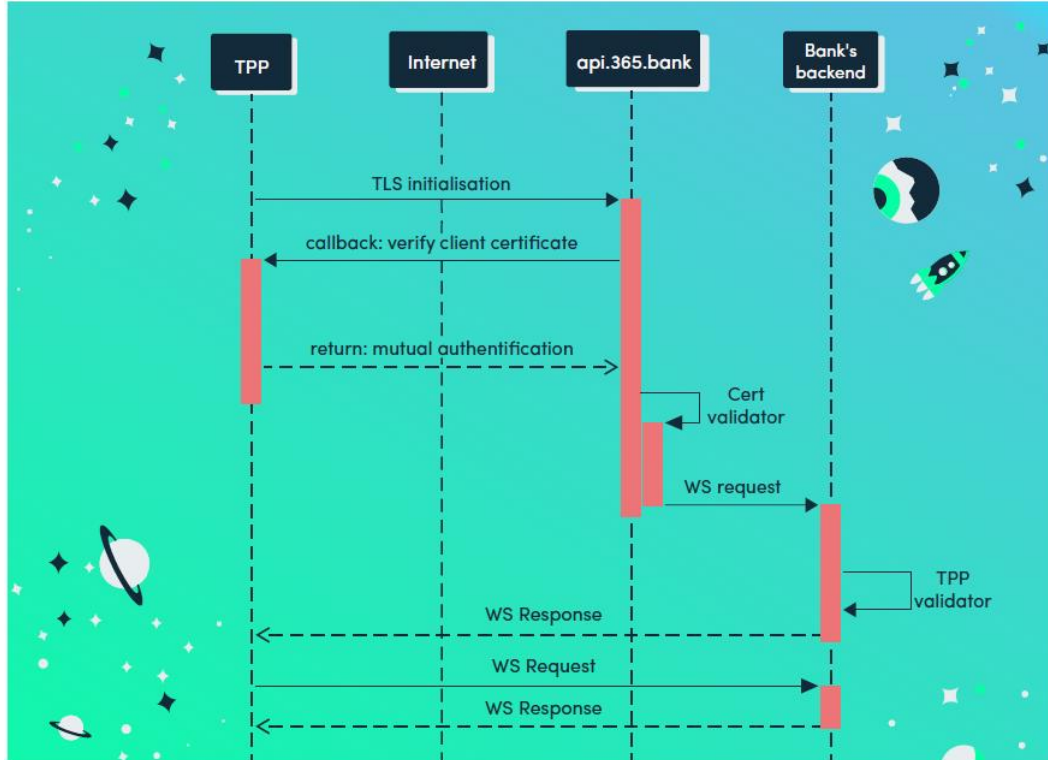


Figure 3 – TPP authentication

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 <http://tlbrowser.tsl.website/tools/index.jsp>)
- 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 3.

Client certificate requirements for test environment:

- TPP has PSD2 licence
 - certificate meets requirements for production environment noted above
- 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 hello@365.bank

3.2. Password cryptography in case of direct access

Before provided API calls TPP will encrypt password by public key. Please find the public key on the website <https://365.bank/cert/passwd/pubkey>.

Password is encrypted by algorithm RSAES-OAEP (RSA/ECB/OAEPWithSHA-256AndMGF1Padding).

In the end, final text is encrypted with BASE64 form. Final value is filled to the parameter X-password, that represent login and password to the IB. All description of requirements and parameters is described in subchapter 3.4.1. /ws/AccountService/1.0/information

3.3. 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:

- **Test URL valid from 13.03.2019 to 13.09.2019** (since 13.09.2019 unsupported solution)
- `https://apitest.365.bank/mockup/ws/AccountService/1.0`
- `https://apitest.365.bank/mockup/ws/PaymentService/1.0`

For direct access (without redirect) are deployed following endpoints:

- **Test URL valid from 13.03.2019** (since 13.09.2019 deploy solution into production)
- `https://apitest.365.bank/mockup_direct/ws/AccountService/1.0`
- `https://apitest.365.bank/mockup_direct/ws/PaymentService/1.0`

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

.XSD and Test cases are in the separate appendix.

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		
HTTP Header parameters	TPPUriRedirect	TPP webpage URL where will be client redirected after inquiry authorisation
	Accept	application/xml
	X-username	Client login to Internet banking
	X-password	Client password to Internet banking
	X-orderId	orderId of trx, which has to be authorise
	X-OTPKod	OTP authorisation code
HTTP Content	InformationRequest	

Response message		
HTTP Header parameters	redirectUrl	365.bank webpage URL where will be client redirected for authorisation of his inquiry
	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
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
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3.5. List Of Transactions (LOT)

3.5.1. /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		
HTTP Header parameters	TPPUriRedirect	TPP webpage URL where will be client redirected after inquiry authorisation
	Accept	application/xml
	X-username	Client login to Internet banking
	X-password	Client password to Internet banking
	X-orderId	orderId of trx, which has to be authorisate
	X-OTPKod	OTP authorisation code
HTTP Content	TransactionsRequest	

Response message		
HTTP Header parameters	redirectUrl	365.bank webpage URL where will be client redirected for authorisation of his inquiry
	error	Error code
	errorDescription	Error description
HTTP Content	TransactionResponse	

3.5.1.1 REQUEST MESSAGE - TRANSACTIONSREQUEST

Element name	Required	Type	Description
IBAN	yes	xsd:string	Client's IBAN
dateFrom	yes	xsd:date	Date of first transaction
dateTo	yes	xsd:date	Date of last transaction

transactionType	yes	xsd:string	Transaction type: pending realized
messageId	yes	xsd:string	Unique identifier of TPP message

3.5.1.2 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

3.5.2. /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

3.5.2.1 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

3.5.2.2 RESPONSE MESSAGE – TRANSACTIONSRESULTRESPONSE

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

Element name	Required	Type	Description
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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

3.6. Payment Order Initiation (POI)

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

- sendPaymentEcommerce - immediate payment (SEPA)
- sendPaymentStandard – payment with future payment date (SEPA)
- sendPaymentInternational - international payment (Non SEPA)

3.6.1. /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.PaBkCustomPOlecomm.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		
HTTP Header parameters	TPPUriRedirect	TPP webpage URL where will be client redirected after inquiry authorisation
	Accept	application/xml
	X-username	Client login to Internet banking
	X-password	Client password to Internet banking
	X-orderId	orderId of trx, which has to be authorise
	X-OTPKod	OTP authorisation code
HTTP Content	SendPaymentEcommerceRequest	

Response message		
HTTP Header parameters	redirectUrl	365.bank webpage URL where will be client redirected for authorisation of his inquiry
	error	Error code
	errorDescription	Error description
HTTP Content	SendPaymentEcommerceResponse	

3.6.1.1 REQUEST MESSAGE - SENDPAYMENTECOMMERCEREQUEST

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		
==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

3.6.1.2 RESPONSE MESSAGE - SENDPAYMENTECOMMERCE RESPONSE

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 = 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

3.6.2. /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		
HTTP Header parameters	TPPUriRedirect	TPP webpage URL where will be client redirected after inquiry authorisation
	Accept	application/xml
	X-username	Client login to Internet banking
	X-password	Client password to Internet banking
	X-orderId	orderId of trx, which has to be authorisate
	X-OTPkod	OTP authorisation code
HTTP Content	SendPaymentStandardRequest	

Response message		
HTTP Header parameters	redirectUrl	365.bank webpage URL where will be client redirected for authorisation of his inquiry
	error	Error code
	errorDescription	Error description
HTTP Content	SendPaymentStandardResponse	

3.6.2.1 REQUEST MESSAGE - SENDPAYMENTSTANDARDREQUEST

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

Element name	Required	Type	Description
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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

3.6.2.2 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 = 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

3.6.3. /ws/PaymentService/1.0/sendPaymentInternational

Transport	HTTPS/XML
Method	POST
MIME Type	application/xml
MEP	Synchronous request-response
Request XSD schema	pain.001.001.07.PaBkCustomPOlecomm.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		
HTTP Header parameters	TPPUriRedirect	TPP webpage URL where will be client redirected after inquiry authorisation
	Accept	application/xml
	X-username	Client login to Internet banking
	X-password	Client password to Internet banking
	X-orderId	orderId of trx, which has to be authorise
	X-OTPKod	OTP authorisation code
HTTP Content	SendPaymentInternationalRequest	

Response message		
HTTP Header parameters	redirectUrl	365.bank webpage URL where will be client redirected for authorisation of his inquiry
	error	Error code
	errorDescription	Error description
HTTP Content	SendPaymentInternationalResponse	

3.6.3.1 REQUEST MESSAGE - SENDPAYMENTINTERNATIONALREQUEST

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. The amount must be ≥ 0.01 and ≤ 9999999999.99 . The amount must be rounded to only 2 decimal places. Decimal places separator is "." (dot).
===ChrgBr	yes	ChargeBearerType1CodePaBk	Specifies which party/parties will bear the charges associated with the processing of the payment transaction (SHA, OUR, BEN)
===CdtrAgt	yes		
==== FinInstnId	yes		
===== BICFI	yes	BICFIIdentifier	Creditor bank SWIFT/BIC
===Cdtr	yes		
====Nm	yes	Max140Text	Creditor name No diacritic is allowed. Only characters are allowed: A-Za-z0-9+?/-(:),.' and space
====PstlAdr	yes		Creditor postal address
=====StrtNm	yes	Max70Text	Creditor street. No diacritic is allowed. Only characters are allowed: A-Za-z0-9+?/-(:),.' and space

=====TwnNm	yes	Max35Text	Creditor town. No diacritic is allowed. Only characters are allowed: A-Za-z0-9+?/-(.)', and space
=====CtrySubDvsn	yes	Max35Text	Creditor country
=====Ctry	yes	CountryCode	Creditor address country - ISO 20022
===CdtrAcct	yes		
=====Id	yes		
=====Othr	yes		
=====Id	yes	Max34Text	Creditor account – IBAN or account format
===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

3.6.3.2 RESPONSE MESSAGE - SENDPAYMENTINTERNATIONALRESPONSE

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 = 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

3.6.4. /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

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

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

3.6.4.1 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

3.6.4.2 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
=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 = 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

3.7. Funds Availability Confirmation (FAC)

3.7.1. /ws/AccountService/1.0/balanceCheck

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	BalanceCheckRequest	

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

3.7.1.1 REQUEST MESSAGE - BALANCECHECKREQUEST

Element name	Required	Type	Description
IBAN	yes	xsd:string	Client IBAN
amount	yes	xsd:decimal	Amount balance to be checked
currency	yes	xsd:string	Currency
messageId	yes	xsd:string	Unique identifier of TPP message

3.7.1.2 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.

#	Error code	Error description
	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
	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.