STET PSD2 API

Documentation Part 2: Functional Model

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4. Functional Model

4.1. Generic Structures

Some structures are generic and common to several request or response data.

4.1.1. AccountIdentification

FIELD		MULT.	DESC.
AccountIdentification			Unique and unambiguous identification for the account between the account owner and the account servicer. Card accounts must provide the identification of the card through the "other" substructure by giving, for instance, the masked PAN (MPAN). The currency used for the account, when needed, can be specified through the [currency] field.
	workspace	[0..1]	Workspace to which the account is linked. This workspace might be specified by the AISP when forwarding the consent on accounts. If not provided, the default workspace is computed from the authentication that was used for getting the OAuth2 Access Token.
	Iban	[0..1]	ISO20022: International Bank Account Number (IBAN) - identification used internationally by financial institutions to uniquely identify the account of a customer. Further specifications of the format and content of the IBAN can be found in the standard ISO 13616 "Banking and related financial services - International Bank Account Number (IBAN)" version 1997-10-01, or later revisions.
	Other	[0..1]	See generic structure GenericIdentification
	currency	[0..1]	Specifies the currency of the amount or of the account. A code allocated to a currency by a Maintenance Agency under an international identification scheme, as described in the latest edition of the international standard ISO 4217 "Codes for the representation of currencies and funds".

4.1.2. AmountType

FIELD		MULT.	DESC.
AmountType			Structure aiming to embed the amount and the currency to be used.
	Amount	[1..1]	ISO20022: Amount of money to be moved between the debtor and creditor, before deduction of charges, expressed in the currency as ordered by the initiating party.
	Currency	[1..1]	Specifies the currency of the amount or of the account. A code allocated to a currency by a Maintenance Agency under an international identification scheme, as described in the latest edition of the international standard ISO 4217 "Codes for the representation of currencies and funds".

4.1.3. BalanceResource

FIELD			MULT.	DESC.
BalanceResource				Structure of an account balance
	name		[1..1]	Label of the balance
	balanceAmount		[1..1]	See generic structure AmountType
	balanceType		[1..1]	Type of balance
	lastChangeDateTime		[0..1]	Timestamp of the last change of the balance amount
	referenceDate		[0..1]	Reference date for the balance
	lastCommittedTransaction		[0..1]	Identification of the last committed transaction. This is actually useful for instant balance.

Type of balance (balanceType):

CODE	NAME	DESCRIPTION
CLBD	ISO20022 ClosingBooked	Balance of the account at the end of the pre-agreed account reporting period. It is the sum of the opening booked balance at the beginning of the period and all entries booked to the account during the pre-agreed account reporting period.
PRCD	ISO20022 PreviouslyClosedBooked	Balance of the account at the previously closed account reporting period. The opening booked balance for the new period has to be equal to this balance. Usage: the previously booked closing balance should equal (inclusive date) the booked closing balance of the date it references and equal the actual booked opening balance of the current date.
ITAV	ISO20022 InterimAvailable	Available balance calculated in the course of the account servicer's business day, at the time specified, and subject to further changes during the business day. The interim balance is calculated on the basis of booked credit and debit items during the calculation time/period specified.
XPCD	ISO20022 Expected	Balance, composed of booked entries and pending items known at the time of calculation, which projects the end of day balance if everything is booked on the account and no other entry is posted.
VALU	(None)	Value-date balance
OTHR	(None)	Other Balance

4.1.4. CreditTransferTransactionResource

FIELD			MULT.	DESC.
CreditTransferTransactionResource				ISO20022: Payment processes required to transfer cash from the debtor to the creditor. The [instructedAmount] property indicates Amount of money to be moved between the debtor and creditor, before deduction of charges, expressed in the currency as ordered by the initiating party. Usage: This amount has to be transported unchanged through the transaction chain. API: Amounts must always be set as positive values.
	paymentId		[1..1]	ISO20022: Set of elements used to reference a payment instruction.
		instructionId	[1..1]	ISO20022: Unique identification as assigned by an instructing party for an instructed party to unambiguously identify the instruction. API: Unique identification shared between the PISP and the ASPSP
		endToEndId	[0..1]	ISO20022: Unique identification assigned by the initiating party to unambiguously identify the transaction. This identification is passed on, unchanged, throughout the entire end-to-end chain.
		uetr	[0..1]	ISO20022: Universally unique identifier to provide an end-to-end reference of a payment transaction.
	resourceId		[0..1]	API: Identifier assigned by the ASPSP for further use of the created resource through API calls. The API client cannot set or modify the value of this field. Since this value can be exchanged between the server and the client as an URL element or for support information, it must not contain sensitive value such as personal or business data. However it is the duty of each ASPSP to perform its own risk analysis on this topic.

FIELD	MULT.	DESC.
requestedExecutionDate	[0..1]	ISO20022: Date at which the initiating party requests the clearing agent to process the payment. API: When set by the PISP, this field indicates the future date at which the payment instruction should be executed and the debtor account should be debited. if this field is not set by the PISP, the ASPSP is requested to execute the payment instruction as soon as possible. In most of the cases, especially for international payments, the date of the credit on the credit account cannot be set. Only SCTInst can guarantee having the same date for this credit. When the payment cannot be processed at the requested date, the ASPSP is allowed to shift the applied execution date to the next possible execution date for non-standing orders. For standing orders, this field is useless since the [startDate] parameter already provides the needed information for the first payment instruction to be executed.
cancellableTill	[0..1]	This field may allow the PISP to get information on the limit timestamp for requesting cancelation of the transaction. When this field is not provided by the ASPSP, the PISP must rely on the status of the transaction [transactionStatus] in order to estimate if the transaction is actually cancellable.
acceptanceDateTime	[0..1]	ISO20022: Date and time at which all processing conditions for execution of the payment are met and adequate financial cover is available at the account servicing agent.
debtorDecisionDate	[0..1]	ISO20022: Date and time on when the debtor has accepted or rejected the request.
appliedExecutionDate	[0..1]	ISO20022: Date and time on when the payment was executed.
standingOrderCharacteristics	[0..1]	Specifies the characteristics of a standing order.
startDate	[1..1]	The first applicable day of execution for a given period.
endDate	[0..1]	The last applicable day of execution for a given period. If not given, the period is considered as endless.
executionRule	[1..1]	Execution date shifting rule for standing orders This data attribute defines the behaviour when recurring payment dates falls on a weekend or bank holiday. The payment is then executed either the "preceding" or "following" working day. ASPSP might reject the request due to the communicated value, if rules in Online-Banking are not supporting this execution rule. **CODE** — **DESCRIPTION** FWNG — following PREC — preceding
frequency	[1..1]	Frequency rule for standing orders. The following codes from the "EventFrequency7Code" of ISO 20022 are supported. **CODE** — **DESCRIPTION** DAIL — Daily WEEK — Weekly TOWK — EveryTwoWeeks MNTH — Monthly TOMN — EveryTwoMonths QUTR — Quarterly SEMI — SemiAnnual YEAR — Annual However, each ASPSP might restrict these values into a subset if needed.
instructedAmount	[0..1]	See generic structure AmountType
equivalentAmount	[0..1]	Amount of money to be moved between debtor and creditor, before deduction of charges, expressed in the currency of the debtor's account, and to be moved in a different currency. Usage: The first agent will convert the equivalent amount into the amount to be moved.
amount	[1..1]	ISO20022: Amount of money to be moved between the debtor and creditor, before deduction of charges, expressed in the currency as ordered by the initiating party.
currency	[1..1]	Specifies the currency of the amount or of the account. A code allocated to a currency by a Maintenance Agency under an international identification scheme, as described in the latest edition of the international standard ISO 4217 "Codes for the representation of currencies and funds".
currencyOfTransfer	[1..1]	Specifies the currency of the amount or of the account. A code allocated to a currency by a Maintenance Agency under an international identification scheme, as described in the latest edition of the international standard ISO 4217 "Codes for the representation of currencies and funds".
exchangeRateInformation	[0..1]	ISO20022: Provides details on the currency exchange rate and contract. The [unitCurrency] property specifies the currency in which the rate of exchange is expressed in a currency exchange. In the example 1GBP = xxxCUR, the unit currency is GBP. The [estimatedPayerAmount] gives an estimation of the amount that will be debited on the payer's account, including transaction and change fees. The [estimatedPayeeAmunt] gives an estimation of the amount that will be credited on the payee's account. API: Amounts must always be set as positive values.
unitCurrency	[0..1]	Specifies the currency of the amount or of the account. A code allocated to a currency by a Maintenance Agency under an international identification scheme, as described in the latest edition of the international standard ISO 4217 "Codes for the representation of currencies and funds".

FIELD				MULT.	DESC.
	exchangeRate			[0..1]	The factor used for conversion of an amount from one currency to another. This reflects the price at which one currency was bought with another currency.
	rateType			[1..1]	Specifies the type used to complete the currency exchange. **CODE / NAME / DESCRIPTION** **SPOT** — Spot — Exchange rate applied is the spot rate. **SALE** — Sale — Exchange rate applied is the market rate at the time of the sale. **AGRD** — Agreed — Exchange rate applied is the rate agreed between the parties.
	contractIdentification			[0..1]	Unique and unambiguous reference to the foreign exchange contract agreed between the initiating party/creditor and the debtor agent.
	estimatedPayerAmount			[0..1]	See generic structure AmountType
	estimatedPayeeAmount			[0..1]	See generic structure AmountType
ultimateDebtor				[0..1]	See generic structure PartyIdentification
intermediaryAgent				[0..1]	Agent and agent account between the debtor's agent and the creditor's agent.
	agent			[0..1]	See generic structure PartyIdentification
	agentAccount			[0..1]	See generic structure AccountIdentification
beneficiary				[1..1]	Specification of a beneficiary
	workspace			[0..1]	Some ASPSP may provide different user workspaces that can be accessed by the same authenticated PSU. In this case, the AISP is able to retrieve the different pieces of account information by specifying the relevant workspace as a QUERY parameter. Identification of the workspace to be used when processing the request. If not present, the default workspace to be used is the one that is linked to the authentication processed during the OAuth2 access token request.
		identification		[1..1]	identification of the workspace to be used as an optional query parameter for some AISP queries
		label		[1..1]	textual description of the workspace as specified by the ASPSP in relationship wth the PSU
	id			[0..1]	Id of the beneficiary
	creditorAgent			[0..1]	See generic structure FinancialInstitutionIdentification
	creditor			[1..1]	See generic structure PartyIdentification
	creditorAccount			[0..1]	See generic structure AccountIdentification
ultimateCreditor				[0..1]	See generic structure PartyIdentification
instructionForCreditorAgent				[0..1]	Further information related to the processing of the payment instruction, provided by the initiating party, and intended for the creditor agent.
	{arrayItem}			[0..*]	Further information related to the processing of the payment instruction that may need to be acted upon by the creditor's agent. The instruction may relate to a level of service, or may be an instruction that has to be executed by the creditor's agent, or may be information required by the creditor's agent.
		code		[0..1]	Coded information related to the processing of the payment instruction, provided by the initiating party, and intended for the creditor's agent. **CODE / NAME / DESCRIPTION** **CHQB** — PayCreditorByCheque — (Ultimate) creditor must be paid by cheque. **HOLD** — HoldCashForCreditor — Amount of money must be held for the (ultimate) creditor, who will call. Pay on identification. **PHOB** — PhoneBeneficiary — Please advise/contact (ultimate) creditor/claimant by phone. **TELB** — Telecom — Please advise/contact (ultimate) creditor/claimant by the most efficient means of telecommunication.
		instructionInformation		[0..1]	Further information complementing the coded instruction or instruction to the creditor's agent that is bilaterally agreed or specific to a user community.
	purpose			[0..1]	ISO20022: Underlying reason for the payment transaction, as published in an external purpose code list. API: The following values are allowed for Payment Request **CODE / NAME / DESCRIPTION** **ACCT** — AccountManagement — Funds moved between 2 accounts of same account holder at the same bank) **CASH** — CashManagementTransfer — (general cash management instruction) may be used for Transfer Initiation **COMC** — CommercialPayment — Transaction is related to a payment of commercial credit or debit. **CPKC** — CarparkCharges — General Carpark Charges Transaction is related to carpark charges. **SALA** — SalaryPayment — Transaction is the payment of salaries. **TRPT** — RoadPricing — Transport RoadPricing Transaction is for the payment to top-up pre-paid card and electronic road pricing for the purpose of transportation.

FIELD			MULT.	DESC.
regulatoryReportingCodes			[0..1]	List of needed regulatory reporting codes for international payments
	{arrayItem}		[1..10]	Information needed due to regulatory and statutory requirements. Economical codes to be used are provided by the National Competent Authority
remittanceInformation			[0..1]	ISO20022: Information supplied to enable the matching of an entry with the items that the transfer is intended to settle, such as commercial invoices in an accounts' receivable system. API: • Only one occurrence of the unstructured information is allowed. • Only one occurrence of the structured information is allowed. • Structured and unstructured information can coexist.
	unstructured		[0..1]	Unstructured remittance information. Each implementation may add a pattern in order to specify its own character set constraints.
		{arrayItem}	[1..*]	Relevant information to the transaction
	structured		[0..1]	Structured remittance information
		{arrayItem}	[1..*]	See generic structure StructuredRemittanceInformation
transactionStatus			[0..1]	See generic structure TransactionIndividualStatusCode
statusReasonInformation			[0..1]	See generic structure StatusReasonInformation
supplementaryData			[0..1]	ISO20022: Additional information that cannot be captured in the structured elements and/or any other specific block. API: This structure is used to embed the relevant URLs for returning the status report to the PISP and to specify which authentication approaches are accepted by the PISP and which was chosen by the ASPSP The [acceptedAuthenticationApproach] property can only be set by the PISP. • Authentication approaches that are supported by the PISP. The PISP can provide several choices separated by commas. • Case of none of the accepted approaches is supported by the ASPSP, the latest will respond with HTTP400 (Bad request) and specify wich approaches are actually supported. The [appliedAuthentication] will be set by the ASPSP. • The ASPSP, based on the authentication approaches proposed by the PISP, choose the one that it can processed, in respect with the preferences and constraints of the PSU and indicates in this field which approach was chosen. • It may happen that the ASPSP considers that, in case of payment cancellation request, there is no need for authentication and will then return "NONE".
	acceptedAuthenticationApproach		[0..1]	List of authentication approaches
		{arrayItem}	[0..*]	Authentication approaches that can be applied. REDIRECT: the PSU is redirected by the TPP to the ASPSP which processes identification and authentication DECOUPLED: the TPP identifies the PSU and forwards the identification to the ASPSP which processes the authentication through a decoupled device NONE: there is no need for the PSU to authenticate
	appliedAuthenticationApproach		[0..1]	Authentication approaches that can be applied. REDIRECT: the PSU is redirected by the TPP to the ASPSP which processes identification and authentication DECOUPLED: the TPP identifies the PSU and forwards the identification to the ASPSP which processes the authentication through a decoupled device NONE: there is no need for the PSU to authenticate
	appliedAuthentication		[0..1]	Can only be set by the ASPSP. This field allows the ASPSP to inform the PISP about the way authentication was processed during the payment request confirmation.
	scaHint		[0..1]	can only be set by the PISP Hint given by the merchant and/or the PISP about an SCA exemption context
	successfulReportUrl		[0..1]	URL to be used by the ASPSP in order to notify the PISP of the finalisation of the authentication and consent process in REDIRECT and DECOUPLED approach
	unsuccessfulReportUrl		[0..1]	URL to be used by the ASPSP in order to notify the PISP of the failure of the authentication and consent process in REDIRECT and DECOUPLED approach If this URL is not provided by the PISP, the ASPSP will use the "successfulReportUrl" even in case of failure of the Payment Request processing
	nextStatusRequestHint		[0..1]	Date and time at which the PISP is suggested to ask again for the status of the payment request.
	loginHintToken		[0..1]	The LOGIN_HINT_TOKEN is a piece of data that may be provided to the API client by the API server, once a PSU has been identified and authenticated. • through a response to a token introspection request (RFC7662) • through a status response to a Payment Request This LOGIN_HINT_TOKEN can then be sent back by the API client to the API server through the posting of a new Payment request. This will help the API server to identify the relevant PSU and ease the authentication process.
investigationStatus			[0..1]	Boolean indicator aiming to clarify that the relevant transaction is under dispute investigation.

4.1.5. FinancialInstitutionIdentification

FIELD			MULT.	DESC.
FinancialInstitutionIdentification				ISO20022: Unique and unambiguous identification of a financial institution, as assigned under an internationally recognised or proprietary identification scheme.
	bicFi		[1..1]	ISO20022: Code allocated to a financial institution by the ISO 9362 Registration Authority as described in ISO 9362 "Banking - Banking telecommunication messages - Business identification code (BIC)".
	clearingSystemMemberId		[0..1]	ISO20022: Information used to identify a member within a clearing system. API: to be used for some specific international credit transfers in order to identify the beneficiary bank
		clearingSystemId	[1..1]	ISO20022: Specification of a pre-agreed offering between clearing agents or the channel through which the payment instruction is processed.
		memberId	[1..1]	ISO20022: Identification of a member of a clearing system.
	lei		[0..1]	Legal Entity Identifier is a code allocated to a party as described in ISO 17442 "Financial Services - Legal Entity Identifier (LEI)".
	name		[0..1]	Name of the financial institution
	postalAddress		[0..1]	ISO20022: Information that locates and identifies a specific address, as defined by postal services.
		addressType	[0..1]	ISO20022: Identifies the nature of the postal address. API: Cannot be used for SEPA payments. Proprietary codes can be specified and documented if needed. _(see table below)_
		department	[0..1]	ISO20022: Identification of a division of a large organisation or building. API: Cannot be used for SEPA payments.
		subDepartment	[0..1]	ISO20022: Identification of a sub-division of a large organisation or building. API: Cannot be used for SEPA payments.
		streetName	[0..1]	ISO20022: Name of a street or thoroughfare. API: Cannot be used for SEPA payments.
		buildingNumber	[0..1]	ISO20022: Number that identifies the position of a building on a street. API: Cannot be used for SEPA payments.
		buildingName	[0..1]	ISO20022: Name of the building or house. API: Cannot be used for SEPA payments.
		postCode	[0..1]	ISO20022: Identifier consisting of a group of letters and/or numbers that is added to a postal address to assist the sorting of mail. API: Cannot be used for SEPA payments.
		townName	[0..1]	ISO20022: Name of a built-up area, with defined boundaries, and a local government. API: Cannot be used for SEPA payments.
		countrySubDivision	[0..1]	ISO20022: Identifies a subdivision of a country such as state, region, county. API: Cannot be used for SEPA payments.
		country	[1..1]	ISO20022: Country in which a person resides (the place of a person's home). In the case of a company, it is the country from which the affairs of that company are directed.
		addressLine	[0..1]	Unstructured address. The lines must embed zip code and town name. For SEPA payments, only two address lines are allowed.
		{arrayItem}	[1..7]	Address line

Table for addressType:

CODE	NAME	DESCRIPTION
BIZZ	Business	Address is the business address
DLVY	Delivery	Address is the address to which delivery is to take place
MLTO	Mail To	Address is the address to which mail is sent
PBOX	PO Box	Address is a postal office (PO) box
ADDR	Postal	Address is the complete postal address
HOME	Home	Address is the home address

4.1.6. GenericIdentification

FIELD		MULT.	DESC.
GenericIdentification			ISO20022: Unique identification of an account, a person or an organisation, as assigned by an issuer. API: The ASPSP will document which account reference type it will support.
	identification	[1..1]	API: Identifier
	schemeName	[1..1]	Name of the identification scheme. Possible values for the scheme name, partially based on ISO20022 external code list, are the following:

CODE	NAME	DESCRIPTION
BANK	BankPartyIdentification	Unique and unambiguous assignment made by a specific bank or similar financial institution to identify a relationship as defined between the bank and its client.
BBAN	BBANIdentifier	Basic Bank Account Number (BBAN) - identifier used nationally by financial institutions, ie, in individual countries, generally as part of a National Account Numbering Scheme(s), to uniquely identify the account of a customer.
COID	CountryIdentificationCode) : Country authority given organisation identification (e.g., corporate registration number)	
SREN	SIREN	The SIREN number is a 9 digit code assigned by INSEE, the French National Institute for Statistics and Economic Studies, to identify an organisation in France.
SRET	SIRET	The SIRET number is a 14 digit code assigned by INSEE, the French National Institute for Statistics and Economic Studies, to identify an organisation unit in France. It consists of the SIREN number, followed by a five digit classification number, to identify the local geographical unit of that entity.
NIDN	NationalIdentityNumber	Number assigned by an authority to identify the national identity number of a person.

Other values are also permitted, for instance:

CODE	NAME	DESCRIPTION
OAUT	OAUTH2	OAUTH2 access token that is owned by the PISP being also an AISP and that can be used in order to identify the PSU
CPAN	CardPan	Card PAN
MPAN	MaskedPan	Card PAN where some digits were replaced for security reason
TPAN	TokenizedPan	Token which was provided by a Token Service Provider (TSP) in order to obfuscate a real card PAN. The TSP must be identified in the issuer field
TBAN	TokenizedIBAN	Token which was provided by a Token Service Provider (TSP) in order to obfuscate an IBAN. The TSP must be identified in the issuer field

Each implementation of the STET PSD2 API must specify in its own documentation which schemes can actually been used

FIELD		MULT.	DESC.
	issuer	[0..1]	ISO20022: Entity that assigns the identification. this could a country code or any organisation name or identifier that can be recognized by both parties

4.1.7. GenericLink

FIELD		MULT.	DESC.
GenericLink			hypertext reference
	href	[1..1]	URI to be used. HREF stands for Hypertext REFerence.
	templated	[0..1]	This field must be set with "true" when [href] is an URI template, i.e. with parameters that will be set by the client afterwards. Parameter fields must be included by the API server according to RFC6570. Otherwise, this property must be absent or set to false default value: false

4.1.8. PartyIdentification

FIELD			MULT.	DESC.
PartyIdentification				API : Description of a Party which can be either a person or an organization.
	name		[1..1]	ISO20022: Name by which a party is known and which is usually used to identify that party. The [organisationId] property allows the specification of an unique and unambiguous way to identify an organisation. The [privateId] property allows the specification of an unique and unambiguous way to identify a person.
	dateAndPlaceOfBirth		[0..1]	Date and place of birth of a person. This information must be requested for detection of Fraud, Money-Laundering and Terrorism Financing in case of international payment.
		birthDate	[1..1]	Date on which a person is born.
		cityOfBirth	[1..1]	City where a person was born.
		countryOfBirth	[1..1]	Country where a person was born.
	postalAddress		[0..1]	ISO20022: Information that locates and identifies a specific address, as defined by postal services.
		addressType	[0..1]	ISO20022: Identifies the nature of the postal address. API: Cannot be used for SEPA payments. Proprietary codes can be specified and documented if needed. **CODE** / **NAME** / **DESCRIPTION** **BIZZ** / Business / Address is the business address **DLVY** / Delivery / Address is the address to which delivery is to take place **MLTO** / Mail To / Address is the address to which mail is sent **PBOX** / PO Box / Address is a postal office (PO) box **ADDR** / Postal / Address is the complete postal address **HOME** / Home / Address is the home address
		department	[0..1]	ISO20022: Identification of a division of a large organisation or building. API: Cannot be used for SEPA payments.
		subDepartment	[0..1]	ISO20022: Identification of a sub-division of a large organisation or building. API: Cannot be used for SEPA payments.
		streetName	[0..1]	ISO20022: Name of a street or thoroughfare. API: Cannot be used for SEPA payments.
		buildingNumber	[0..1]	ISO20022: Number that identifies the position of a building on a street. API: Cannot be used for SEPA payments.
		buildingName	[0..1]	ISO20022: Name of the building or house. API: Cannot be used for SEPA payments.
		postCode	[0..1]	ISO20022: Identifier consisting of a group of letters and/or numbers that is added to a postal address to assist the sorting of mail. API: Cannot be used for SEPA payments.
		townName	[0..1]	ISO20022: Name of a built-up area, with defined boundaries, and a local government. API: Cannot be used for SEPA payments.
		countrySubDivision	[0..1]	ISO20022: Identifies a subdivision of a country such as state, region, county. API: Cannot be used for SEPA payments.
		country	[1..1]	ISO20022: Country in which a person resides (the place of a person's home). In the case of a company, it is the country from which the affairs of that company are directed.
		addressLine	[0..1]	Unstructured address. The lines must embed zip code and town name. For SEPA payments, only two address lines are allowed.

FIELD			MULT.	DESC.
		{arrayItem}	[1..7]	Address line
	contactDetails		[0..1]	Indicates how to contact the party.
		phoneNumber	[0..1]	The collection of information which identifies a specific phone or FAX number as defined by telecom services. It consists of a "+" followed by the country code (from 1 to 3 characters) then a "-" and finally, any combination of numbers, "(", ")", "+" and "-" (up to 30 characters).
		faxNumber	[0..1]	The collection of information which identifies a specific phone or FAX number as defined by telecom services. It consists of a "+" followed by the country code (from 1 to 3 characters) then a "-" and finally, any combination of numbers, "(", ")", "+" and "-" (up to 30 characters).
		emailAddress	[0..1]	email address of the contact
	organisationId		[0..1]	See generic structure GenericIdentification
	privateId		[0..1]	See generic structure GenericIdentification
	lei		[0..1]	Legal Entity Identifier is a code allocated to a party as described in ISO 17442 "Financial Services - Legal Entity Identifier (LEI)".

4.1.9. PaymentInformationStatusCode

FIELD	MULT.	DESC.
PaymentInformationStatusCode		ISO20022: Specifies the status of the payment information. API: Mandatory. The following values are allowed to provide the status of the Payment Request

CODE	NAME	DESCRIPTION
ACCO	AcceptedCustomerCOnfirmed	The customer, during his/her authentication, has confirmed the payment request.
ACCP	AcceptedCustomerProfile	Preceding check of technical validation was successful. Customer profile check was also successful.
ACSC	AcceptedSettlementCompleted	Settlement on the debtor's account was completed. In the case of SCTInst, this status must not been set by the debtor's Bank before the reception of the positive confirmation.
ACSP	AcceptedSettlementInProcess	All preceding checks such as technical validation and customer profile were successful. Dynamic risk assessment is now also successful and therefore the Payment Request was accepted for execution.
ACTC	AcceptedTechnicalValidation	Authentication and syntactical and semantical validation are successful.
ACWC	AcceptedWithChange	Instruction is accepted but a change will be made, such as date or remittance not sent.
ACWP	AcceptedWithoutPosting	Payment instruction included in the credit transfer is accepted without being posted to the creditor customer's account.
CANC	Cancelled	Payment initiation was successfully cancelled after having received a request for cancellation.
PART	PartiallyAccepted	A number of transactions were accepted, whereas another number of transactions have not yet achieved 'accepted' status.
PATC	PartiallyAcceptedTechnicalCorrect	Payment initiation needs multiple authentications, where some but not yet all were performed. Syntactical and semantical validations are successful.
RCVD	Received	Payment initiation was received by the receiving agent.
PDNG	Pending	Payment request or individual transaction included in the Payment Request is pending. Further checks and status update will be performed.
RJCT	Rejected	Payment request was rejected.

4.1.10. PaymentRequestResource

FIELD			MULT.	DESC.
PaymentRequestResource				ISO20022: The PaymentRequestResource message is sent by the Creditor sending party to the Debtor receiving party, directly or through agents. It is used by a Creditor to request movement of funds from the debtor account to a creditor. API: Information about the creditor (Id, account and agent) must be placed at instruction level. Thus multi-beneficiary payments can be handled. The requested execution date must be placed at payment level even when all instructions are requested to be executed at the same date. The latest case includes: • multiple instructions having different requested execution dates • standing orders settings
	resourceId		[0..1]	API: Identifier assigned by the ASPSP for further use of the created resource through API calls. The API client cannot set or modify the value of this field. Since this value can be exchanged between the server and the client as an URL element or for support information, it must not contain sensitive value such as personal or business data. However it is the duty of each ASPSP to perform its own risk analysis on this topic.
	paymentInformationId		[1..1]	ISO20022: Reference assigned by a sending party to unambiguously identify the payment information block within the message. API: This field is a clue for idempotency check by the ASPSP in order to avoid duplicate SCA or payment execution. However the ASPSP may use other mechanisms.
	batchBooking		[0..1]	Identifies whether a single entry per individual transaction or a batch entry for the sum of the amounts of all transactions within the group of a message is requested. Meaning When True: Identifies that a batch entry for the sum of the amounts of all transactions in the batch or message is requested. Meaning When False: Identifies that a single entry for each of the transactions in the batch or message is requested. Default value: each ASPSP must be able to specify its own default value.
	creationDateTime		[1..1]	ISO20022: Date and time at which a (group of) payment instruction(s) was created by the instructing party.
	numberOfTransactions		[1..1]	ISO20022: Number of individual transactions contained in the message. API: Each ASPSP will specify a maximum value for this field taking into accounts its specificities about payment request handling
	initiatingParty		[1..1]	See generic structure PartyIdentification
	acceptDebtorAccountChange		[0..1]	indicator that the debtor account can be changed in the payment request by the ASPSP if needed • true: debtor account can be changed (default value) • false: debtor account cannot be changed
	acceptChargeHandlingChange		[0..1]	indicator that the charge handling can be changed in the payment request by the ASPSP if needed • true: charge handling can be changed (default value) • false: charge handling cannot be changed
	acceptInstantPaymentDowngrade		[0..1]	Indicator that the requested instant SEPA Credit Transfer method can be downgraded by the ASPSP into a plain-vanilla SEPA Credit Transfer, when Instant SCT cannot apply or is refused by the PSU. Eventually, it is up to the ASPSP to downgrade or reject the payment. In case of a downgrade, the ASPSP will have to update de relevant field [LocalInstrument] and remove the "INST" value in order to keep the PISP informed. • true: payment method can be downgraded • false: payment method cannot be downgraded (default value)
	paymentTypeInformation		[1..1]	ISO20022: Set of elements used to further specify the type of transaction.
		instructionPriority	[0..1]	ISO20022: Indicator of the urgency or order of importance that the instructing party would like the instructed party to apply to the processing of the instruction. API: This field is useless for SCTInst and thus should be ignored.
		serviceLevel	[0..1]	ISO20022: Agreement under which or rules under which the transaction should be processed. Specifies a pre-agreed service or level of service between the parties, as published in an external service level code list. API: Only "SEPA" (SEPA Credit Transfer) value is allowed
		localInstrument	[0..1]	ISO20022: User community specific instrument. Usage: This element is used to specify a local instrument, local clearing option and/or further qualify the service or service level. API: "INST" value is to be used in order to ask for an SEPA instant Payment (SCTInst). For International payments, this field may be valued with one of the ISO20022 external code to specify which payment instrument should be used by the creditor's bank.

FIELD			MULT.	DESC.
	categoryPurpose		[0..1]	ISO20022: Specifies the high level purpose of the instruction based on a set of pre-defined categories. This is used by the initiating party to provide information concerning the processing of the payment. It is likely to trigger special processing by any of the agents involved in the payment chain. API: The following values are allowed:

CODE	NAME	DESCRIPTION
CASH	CashManagementTransfer	Transaction is a general cash management instruction.
CORT	TradeSettlementPayment	Transaction is related to settlement of a trade, e.g. a foreign exchange deal or a securities transaction.
DVPM	DeliverAgainstPayment	Code used to pre-advise the account servicer of a forthcoming deliver against payment instruction.
INTC	IntraCompanyPayment	Transaction is an intra-company payment, i.e. a payment between two companies belonging to the same group.
SALA	SalaryPayment	Transaction is the payment of salaries.
TREA	TreasuryPayment	Transaction is related to treasury operations. E.g. financial contract settlement.

FIELD			MULT.	DESC.
	debtor		[0..1]	See generic structure PartyIdentification
	debtorAccount		[0..1]	See generic structure AccountIdentification
	debtorAgent		[0..1]	See generic structure FinancialInstitutionIdentification
	chargeBearer		[0..1]	ISO20022: Specifies which party/parties will bear the charges associated with the processing of the payment transaction. The following values are allowed:

CODE	NAME	DESCRIPTION
DEBT	BorneByDebtor	All transaction charges are to be borne by the debtor.
CRED	BorneByCreditor	All transaction charges are to be borne by the creditor.
SHAR	Shared	In a credit transfer context, means that transaction charges on the sender side are to be borne by the debtor, transaction charges on the receiver side are to be borne by the creditor. In a direct debit context, means that transaction charges on the sender side are to be borne by the creditor, transaction charges on the receiver side are to be borne by the debtor.
SLEV	FollowingServiceLevel	Charges are to be applied following the rules agreed in the service level and/or scheme.

FIELD			MULT.	DESC.
	paymentInformationStatus		[0..1]	See generic structure PaymentInformationStatusCode
	statusReasonInformation		[0..1]	See generic structure StatusReasonInformation
	fundsAvailability		[0..1]	Indicator that the payment can be covered or not by the funds available on the relevant account • true: payment is covered • false: payment is not covered This indicator must be provided by the ASPSP when the Booking Information is present and set to "False". This indicator will not be provided if the Booking Information is absent or set to "True".
	booking		[0..1]	Indicator that the payment can be immediately booked or not • true: payment is booked • false: payment is not booked Booking a transaction means that the funds required by this transaction are immediately reserved and that a subsequent transaction will not interfere with the proper execution of the payment. However, usual fraud detection mechanisms might still be triggered and result as a rejection of the payment. This indicator must be provided when the relevant Credit Transfer will be executed as soon as possible but not as an instant payment. This indicator is irrelevant and will not be provided for delayed payments. This indicator is only relevant for the first occurrence of a standing order when this occurrence is not delayed and will be executed as soon as possible. Case the Information System cannot handle this immediate booking, the ASPSP will have to provide the funds availability information.
	creditTransferTransaction		[1..1]	ISO20022: Payment processes required to transfer cash from the debtor to the creditor. API: Each ASPSP will specify a maxItems value for this field taking into accounts its specificities about payment request handling
		{arrayItem}	[1..*]	See generic structure CreditTransferTransactionResource

FIELD			MULT.	DESC.
supplementaryData			[1..1]	ISO20022: Additional information that cannot be captured in the structured elements and/or any other specific block. API: This structure is used to embed the relevant URLs for returning the status report to the PISP and to specify which authentication approaches are accepted by the PISP and which was chosen by the ASPSP The [acceptedAuthenticationApproach] property can only be set by the PISP. • Authentication approaches that are supported by the PISP. The PISP can provide several choices separated by commas. • Case of none of the accepted approaches is supported by the ASPSP, the latest will respond with HTTP400 (Bad request) and specify wich approaches are actually supported. The [appliedAuthentication] will be set by the ASPSP. • The ASPSP, based on the authentication approaches proposed by the PISP, choose the one that it can processed, in respect with the preferences and constraints of the PSU and indicates in this field which approach was chosen. • It may happen that the ASPSP considers that, in case of payment cancellation request, there is no need for authentication and will then return "NONE".
	acceptedAuthenticationApproach		[0..1]	List of authentication approaches
		{arrayItem}	[0..*]	Authentication approaches that can be applied. REDIRECT: the PSU is redirected by the TPP to the ASPSP which processes identification and authentication DECOUPLED: the TPP identifies the PSU and forwards the identification to the ASPSP which processes the authentication through a decoupled device NONE: there is no need for the PSU to authenticate
	appliedAuthenticationApproach		[0..1]	Authentication approaches that can be applied. REDIRECT: the PSU is redirected by the TPP to the ASPSP which processes identification and authentication DECOUPLED: the TPP identifies the PSU and forwards the identification to the ASPSP which processes the authentication through a decoupled device NONE: there is no need for the PSU to authenticate
	appliedAuthentication		[0..1]	Can only be set by the ASPSP. This field allows the ASPSP to inform the PISP about the way authentication was processed during the payment request confirmation.
	scaHint		[0..1]	can only be set by the PISP Hint given by the merchant and/or the PISP about an SCA exemption context
	successfulReportUrl		[0..1]	URL to be used by the ASPSP in order to notify the PISP of the finalisation of the authentication and consent process in REDIRECT and DECOUPLED approach
	unsuccessfulReportUrl		[0..1]	URL to be used by the ASPSP in order to notify the PISP of the failure of the authentication and consent process in REDIRECT and DECOUPLED approach If this URL is not provided by the PISP, the ASPSP will use the "successfulReportUrl" even in case of failure of the Payment Request processing
	nextStatusRequestHint		[0..1]	Date and time at which the PISP is suggested to ask again for the status of the payment request.
	loginHintToken		[0..1]	The LOGIN_HINT_TOKEN is a piece of data that may be provided to the API client by the API server, once a PSU has been identified and authenticated. • through a response to a token introspection request (RFC7662) • through a status response to a Payment Request This LOGIN_HINT_TOKEN can then be sent back by the API client to the API server through the posting of a new Payment request. This will help the API server to identify the relevant PSU and ease the authentication process.

4.1.11. StatusReasonInformation

FIELD	MULT.	DESC.
StatusReasonInformation		ISO20022: Provides detailed information on the status reason. API: Can only be used in case the status is equal to "RJCT" or "CANC". Only the following values are allowed:

CODE	NAME	DESCRIPTION
AC01	IncorectAccountNumber	the account number is either invalid or does not exist
AC04	ClosedAccountNumber	the account is closed and cannot be used
AC06	BlockedAccount	the account is blocked and cannot be used
AG01	TransactionForbidden	Transaction forbidden on this type of account
AG03	TransactionNotSupported	Transaction type not supported/authorized on this account
AM02	NotAllowedAccount	SPecific transaction/message amount is greater than allowed maximum
AM04	InsufficientFunds	Amount of funds available to cover specified message amount is insufficient
AM18	InvalidNumberOfTransactions	the number of transactions exceeds the ASPSP acceptance limit
CH03	RequestedExecutionDateOrRequestedCollectionDateTooFarInFuture	The requested execution date is too far in the future
CH04	RequestedExecutionDateOrRequestedCollectionDateTooFarInPast	Value in Requested Execution Date or Requested Collection Date is too far in the past
CNOR	CreditorBankIsNotRegistered	Creditor bank is not registered under this BIC in the CSM
CUST	RequestedByCustomer	The reject is due to the debtor: refusal or lack of liquidity
DS02	OrderCancelled	An authorized user has cancelled the order
DUPL	DuplicatePayment	Payment is a duplicate of another payment. Can only be set by a PISP for a payment request cancellation.
FF01	InvalidFileFormat	The reject is due to the original Payment Request which is invalid (syntax, structure or values)
FRAD	FraudulentOriginated	the Payment Request is considered as fraudulent
MS03	NotSpecifiedReasonAgentGenerated	No reason specified by the ASPSP
NOAS	NoAnswerFromCustomer	The PSU has neither accepted nor rejected the Payment Request and a time-out has occurred
RR01	MissingDebtorAccountOrIdentification	The Debtor account and/or Identification are missing or inconsistent
RR03	MissingCreditorNameOrAddress	Specification of the creditor's name and/or address needed for regulatory requirements is insufficient or missing.
RR04	RegulatoryReason	Reject from regulatory reason
RR12	InvalidPartyID	Invalid or missing identification required within a particular country or payment type.
TECH	TechnicalProblem	Technical problems resulting in an erroneous transaction. Can only be set by a PISP for a payment request cancellation.

4.1.12. StructuredRemittanceInformation

FIELD	MULT.	DESC.
StructuredRemittanceInformation		Information supplied to enable the matching/reconciliation of an entry with the items that the payment is intended to settle, such as commercial invoices in an accounts' receivable system, in a structured form.
referredDocumentInformation	[0..1]	Provides the identification and the content of the referred documents.

					FIELD	MULT.	DESC.
					{arrayItem}	[1..*]	Provides the identification and the content of the referred document.
					type	[0..1]	Specifies a code and the issuer of this code.
					code	[1..1]	Provides the code.
					issuer	[0..1]	Identification of the issuer of the code.
					number	[0..1]	Unique and unambiguous identification of the referred document.
					relatedDate	[0..1]	Date associated with the referred document.
					lineDetails	[0..1]	Sets of elements used to provide the content of the referred document line.
					{arrayItem}	[1..*]	Set of elements used to provide the content of the referred document line.
					identification	[0..1]	Provides identification of the document line. the [type] property must be used for specifying the type of referred document type.
					type	[0..1]	Specifies a code and the issuer of this code.
					code	[1..1]	Provides the code.
					issuer	[0..1]	Identification of the issuer of the code.
					number	[0..1]	Unique and unambiguous identification of the referred document line.
					relatedDate	[0..1]	Date associated with the referred document line.
					description	[0..1]	Description associated with the document line.
					amount	[0..1]	ISO20022: Provides details on the amounts of the document line. API: Amounts must always be set as positive values.

PROPERTY	DESCRIPTION
duePayableAmount	Amount specified is the exact amount due and payable to the creditor.
discountAppliedAmount	Amount of discount to be applied to the amount due and payable to the creditor.
creditNoteAmount	Amount of a credit note.
taxAmount	Amount of the tax.
adjustmentAmountAndReason	Specifies detailed information on the amount and reason of the adjustment.
remittedAmount	Amount of money remitted.

					FIELD	MULT.	DESC.
					duePayableAmount	[0..1]	See generic structure AmountType
					discountAppliedAmount	[0..1]	ISO20022: Typed Amount API: Amounts must always be set as positive values.
					type	[0..1]	Type of the amount
					amount	[1..1]	See generic structure AmountType
					creditNoteAmount	[0..1]	See generic structure AmountType
					taxAmount	[0..1]	ISO20022: Typed Amount API: Amounts must always be set as positive values.
					type	[0..1]	Type of the amount
					amount	[1..1]	See generic structure AmountType
					adjustmentAmountAndReason	[0..1]	ISO20022: Specifies detailed information on the amount and reason of the adjustment. API: Amounts must always be set as positive values.
					amount	[1..1]	See generic structure AmountType

FIELD					MULT.	DESC.
				creditDebitIndicator	[0..1]	Accounting flow of the amount

CODE	DESCRIPTION
CRDT	Credit type amount
DBIT	Debit type amount

FIELD					MULT.	DESC.
				reason	[0..1]	Specifies the reason for the adjustment.
				additionalInformation	[0..1]	Provides further details on the document adjustment.
				remittedAmount	[0..1]	See generic structure AmountType
	referredDocumentAmount				[0..1]	ISO20022: Provides details on the amounts of the document line. API: Amounts must always be set as positive values.

PROPERTY	DESCRIPTION
duePayableAmount	Amount specified is the exact amount due and payable to the creditor.
discountAppliedAmount	Amount of discount to be applied to the amount due and payable to the creditor.
creditNoteAmount	Amount of a credit note.
taxAmount	Amount of the tax.
adjustmentAmountAndReason	Specifies detailed information on the amount and reason of the adjustment.
remittedAmount	Amount of money remitted.

FIELD					MULT.	DESC.
		duePayableAmount			[0..1]	See generic structure AmountType
		discountAppliedAmount			[0..1]	ISO20022: Typed Amount API: Amounts must always be set as positive values.
			type		[0..1]	Type of the amount
			amount		[1..1]	See generic structure AmountType
		creditNoteAmount			[0..1]	See generic structure AmountType
		taxAmount			[0..1]	ISO20022: Typed Amount API: Amounts must always be set as positive values.
			type		[0..1]	Type of the amount
			amount		[1..1]	See generic structure AmountType
		adjustmentAmountAndReason			[0..1]	ISO20022: Specifies detailed information on the amount and reason of the adjustment. API: Amounts must always be set as positive values.
			amount		[1..1]	See generic structure AmountType
			creditDebitIndicator		[0..1]	Accounting flow of the amount

CODE	DESCRIPTION
CRDT	Credit type amount
DBIT	Debit type amount

FIELD					MULT.	DESC.
			reason		[0..1]	Specifies the reason for the adjustment.
			additionalInformation		[0..1]	Provides further details on the document adjustment.
		remittedAmount			[0..1]	See generic structure AmountType
	creditorReferenceInformation				[0..1]	Reference information provided by the creditor to allow the identification of the underlying documents.
		type			[0..1]	Specifies a code and the issuer of this code.
			code		[1..1]	Provides the code.
			issuer		[0..1]	Identification of the issuer of the code.
		reference			[0..1]	Unique reference, as assigned by the creditor, to unambiguously refer to the payment transaction.
	invoicer				[0..1]	See generic structure PartyIdentification
	invoicee				[0..1]	See generic structure PartyIdentification

FIELD			MULT.	DESC.
taxRemittance			[0..1]	ISO20022: Details about tax paid, or to be paid, to the government in accordance with the law, including pre-defined parameters such as thresholds and type of account. API: Amounts must always be set as positive values. The [totalTaxableBaseAmount] property indicates the total amount of money on which the tax is based. The [totalTaxAmount] property indicates the total amount of money as result of the calculation of the tax.
	creditor		[0..1]	Set of elements used to identify a party of the transaction to which the tax applies. The [authorization] property aims to provide the details of the authorised tax paying party.
		taxIdentification	[0..1]	Tax identification number of the party.
		registrationIdentification	[0..1]	Unique identification, as assigned by an organisation, to unambiguously identify a party.
		taxType	[0..1]	Type of tax payer.
		authorisation	[0..1]	Title and Name of the party or the party's authorised reprensentative.
		title	[0..1]	Title or position of the party or the party's authorised reprensentative.
		name	[0..1]	Name of the party or the party's authorised reprensentative.
	debtor		[0..1]	Set of elements used to identify a party of the transaction to which the tax applies. The [authorization] property aims to provide the details of the authorised tax paying party.
		taxIdentification	[0..1]	Tax identification number of the party.
		registrationIdentification	[0..1]	Unique identification, as assigned by an organisation, to unambiguously identify a party.
		taxType	[0..1]	Type of tax payer.
		authorisation	[0..1]	Title and Name of the party or the party's authorised reprensentative.
		title	[0..1]	Title or position of the party or the party's authorised reprensentative.
		name	[0..1]	Name of the party or the party's authorised reprensentative.
	ultimateDebtor		[0..1]	Set of elements used to identify a party of the transaction to which the tax applies. The [authorization] property aims to provide the details of the authorised tax paying party.
		taxIdentification	[0..1]	Tax identification number of the party.
		registrationIdentification	[0..1]	Unique identification, as assigned by an organisation, to unambiguously identify a party.
		taxType	[0..1]	Type of tax payer.
		authorisation	[0..1]	Title and Name of the party or the party's authorised reprensentative.
		title	[0..1]	Title or position of the party or the party's authorised reprensentative.
		name	[0..1]	Name of the party or the party's authorised reprensentative.
	administrationZone		[0..1]	Territorial part of a country to which the tax payment is related.
	referenceNumber		[0..1]	Tax reference information that is specific to a taxing agency.
	method		[0..1]	Method used to indicate the underlying business or how the tax is paid.
	totalTaxableBaseAmount		[0..1]	See generic structure AmountType
	totalTaxAmount		[0..1]	See generic structure AmountType
	date		[0..1]	Date by which tax is due.
	sequenceNumber		[0..1]	Sequential number of the tax report.

FIELD				MULT.	DESC.
record				[0..1]	Records of tax details
	{arrayItem}			[1..*]	Record of tax details the [period] property embeds the set of elements used to provide details on the period of time related to the tax payment. the [amount] property embeds the set of elements used to provide information on the amount of the tax record.
		type		[0..1]	High level code to identify the type of tax details.
		category		[0..1]	Specifies the tax code as published by the tax authority.
		categoryDetails		[0..1]	Provides further details of the category tax code.
		debtorStatus		[0..1]	Code provided by local authority to identify the status of the party that has drawn up the settlement document.
		certificateIdentification		[0..1]	Identification number of the tax report as assigned by the taxing authority.
		formsCode		[0..1]	Identifies, in a coded form, on which template the tax report is to be provided.
		period		[0..1]	Set of elements used to provide details on the period of time related to the tax payment. The [type] property aims to identify the period related to the tax payment.
			year	[0..1]	Year related to the tax payment.
			type	[0..1]	Identification of the period related to the tax payment. **CODE / DESCRIPTION table below**
			fromDate	[0..1]	Start date of the range.
			toDate	[0..1]	End date of the range.
		taxAmount		[0..1]	ISO20022: Set of elements used to provide information on the amount of the tax record. API: Amounts must always be set as positive values. **PROPERTY / DESCRIPTION table below**
			rate	[0..1]	Rate expressed as a percentage, ie, in hundredths, eg, 0.7 is 7/10 of a percent, and 7.0 is 7%.
			taxableBaseAmount	[0..1]	See generic structure AmountType
			totalAmount	[0..1]	See generic structure AmountType
			details	[0..1]	Set of elements used to provide details on the tax period and amount.

The CODE / DESCRIPTION table for the "type" field:

CODE	DESCRIPTION
MM01	FirstMonth Tax is related to the second month of the period.
MM02	SecondMonth Tax is related to the first month of the period.
MM03	ThirdMonth Tax is related to the third month of the period.
MM04	FourthMonth Tax is related to the fourth month of the period.
MM05	FifthMonth Tax is related to the fifth month of the period.
MM06	SixthMonth Tax is related to the sixth month of the period.
MM07	SeventhMonth Tax is related to the seventh month of the period.
MM08	EighthMonth Tax is related to the eighth month of the period.
MM09	NinthMonth Tax is related to the ninth month of the period.
MM10	TenthMonth Tax is related to the tenth month of the period.
MM11	EleventhMonth Tax is related to the eleventh month of the period.
MM12	TwelfthMonth Tax is related to the twelfth month of the period.
QTR1	FirstQuarter Tax is related to the first quarter of the period.
QTR2	SecondQuarter Tax is related to the second quarter of the period.
QTR3	ThirdQuarter Tax is related to the third quarter of the period.
QTR4	FourthQuarter Tax is related to the fourth quarter of the period.
HLF1	FirstHalf Tax is related to the first half of the period.
HLF2	SecondHalf Tax is related to the second half of the period.

The PROPERTY / DESCRIPTION table for the "taxAmount" field:

PROPERTY	DESCRIPTION
rate	Rate used to calculate the tax.
taxableBaseAmount	Amount of money on which the tax is based.
totalAmount	Total amount that is the result of the calculation of the tax for the record.
details	Set of elements used to provide details on the tax period and amount.

					FIELD	MULT.	DESC.
					{arrayItem}	[1..*]	ISO20022: Elements used to provide details on the tax period and amount. API: Amounts must always be set as positive values. **PROPERTY** / **DESCRIPTION** **period** — Set of elements used to provide details on the period of time related to the tax payment. **amount** — Underlying tax amount related to the specified period.
					period	[0..1]	Set of elements used to provide details on the period of time related to the tax payment. The [type] property aims to identify the period related to the tax payment.
					year	[0..1]	Year related to the tax payment.
					type	[0..1]	Identification of the period related to the tax payment. **CODE** / **DESCRIPTION** **MM01** — FirstMonth Tax is related to the second month of the period. **MM02** — SecondMonth Tax is related to the first month of the period. **MM03** — ThirdMonth Tax is related to the third month of the period. **MM04** — FourthMonth Tax is related to the fourth month of the period. **MM05** — FifthMonth Tax is related to the fifth month of the period. **MM06** — SixthMonth Tax is related to the sixth month of the period. **MM07** — SeventhMonth Tax is related to the seventh month of the period. **MM08** — EighthMonth Tax is related to the eighth month of the period. **MM09** — NinthMonth Tax is related to the ninth month of the period. **MM10** — TenthMonth Tax is related to the tenth month of the period. **MM11** — EleventhMonth Tax is related to the eleventh month of the period. **MM12** — TwelfthMonth Tax is related to the twelfth month of the period. **QTR1** — FirstQuarter Tax is related to the first quarter of the period. **QTR2** — SecondQuarter Tax is related to the second quarter of the period. **QTR3** — ThirdQuarter Tax is related to the third quarter of the period. **QTR4** — FourthQuarter Tax is related to the fourth quarter of the period. **HLF1** — FirstHalf Tax is related to the first half of the period. **HLF2** — SecondHalf Tax is related to the second half of the period.
					fromDate	[0..1]	Start date of the range.
					toDate	[0..1]	End date of the range.
					amount	[1..1]	See generic structure AmountType
					additionalInformation	[0..1]	Further details of the tax record.

4.1.13. TransactionIndividualStatusCode

FIELD	MULT.	DESC.
TransactionIndividualStatusCode		ISO20022: Specifies the status of the payment information group. API: Only the following values are allowed to provide the status of the subsequent CREDIT TRANSFER to the Payment Request

CODE	NAME	DESCRIPTION
ACSC	AcceptedSettlementCompleted	Settlement on the debtor's account was completed. In the case of SCTInst, this status must not been set by the debtor's Bank before the reception of the positive confirmation. The transaction cannot be cancelled.
ACSP	AcceptedSettlementInProcess	All preceding checks such as technical validation and customer profile were successful and therefore the Payment Request was accepted for execution. The transaction cannot be cancelled.
ACTC	AcceptedTechnicalValidation	Authentication and syntactical and semantical validation are successful. The transaction might be cancelled.
CANC	Cancelled	Payment initiation was successfully cancelled after having received a request for cancellation.
PDNG	Pending	Payment request or individual transaction included in the Payment Request is pending. Further checks and status update will be performed. The transaction might be cancelled.
RJCT	Rejected	Payment request or individual transaction included in the Payment Request was rejected.

4.2. Retrieval of the PSU accounts (AISP)

4.2.1. Description

This call returns all payment accounts that are relevant for the PSU on behalf of whom the AISP is connected.

Thanks to HYPERMEDIA, each account is returned with the links aiming to ease access to the relevant transactions and balances.

The result may be subject to pagination (i.e. retrieving a partial result in case of having too many results) through a set of pages by the ASPSP. Thereafter, the AISP may ask for the first, next, previous or last page of results.

4.2.2. Prerequisites

- The TPP was registered by the Registration Authority for the AISP role.
- The TPP and the PSU have a contract that was enrolled by the ASPSP
  - At this step, the ASPSP has delivered an OAUTH2 "Authorization Code" or "Resource Owner Password" access token to the TPP (cf. paragraph 3.4.2).
- The TPP and the ASPSP have successfully processed a mutual check and authentication
- The TPP has presented its OAUTH2 "Authorization Code" or "Resource Owner Password" access token which allows the ASPSP to identify the relevant PSU and retrieve the linked PSU context (cf. paragraph 3.4.2) if any.
- The ASPSP takes into account the access token that establishes the link between the PSU and the AISP.

4.2.3. Business Flow

The TPP sends a request to the ASPSP for retrieving the list of the PSU payment accounts.

The ASPSP computes the relevant PSU accounts and builds the answer as an accounts list.

The result may be subject to pagination in order to avoid an excessive result set.

Each payment account will be provided with its characteristics.

4.2.4. Request

get /accounts

4.2.4.1. Query Parameters

FIELD	MULT.	DESC.
workspace	[0..1]	Workspace to be used for processing an AISP request. If not provided, the default workspace is computed from the authentication that was used for getting the OAuth2 Access Token.

4.2.5. Response

4.2.5.1. Body (application/hal+json; charset=utf-8)

FIELD					MULT.	DESC.
{responseBody}					[1..1]	HYPERMEDIA structure used for returning the list of the available accounts to the AISP
	accounts				[1..1]	List of PSU account that are made available to the TPP
		{arrayItem}			[0..*]	PSU account that is made available to the TPP. The ASPSP is able to set up specific accounts in order to provide card transactions with a delayed debit. This account must be specific to a given card. Consequently, when the card is renewed, a new account will be set up. ASPSP might also set-up different accounts for one given card but with different imputation dates. The remanence of these accounts is up to the ASPSP but must be equal or greater than the one which is provided through the Web-Banking interface. Case a payment card is blocked, any relevant information (balances, transactions…) that is available through the ASPSP PSU-interfaces must also be available through the API till the end of remanence period.
			workspace		[0..1]	Some ASPSP may provide different user workspaces that can be accessed by the same authenticated PSU. In this case, the AISP is able to retrieve the different pieces of account information by specifying the relevant workspace as a QUERY parameter. Identification of the workspace to be used when processing the request. If not present, the default workspace to be used is the one that is linked to the authentication processed during the OAuth2 access token request.
				identification	[1..1]	identification of the workspace to be used as an optional query parameter for some AISP queries
				label	[1..1]	textual description of the workspace as specified by the ASPSP in relationship wth the PSU
			resourceId		[0..1]	API: Identifier assigned by the ASPSP for further use of the created resource through API calls. The API client cannot set or modify the value of this field. Since this value can be exchanged between the server and the client as an URL element or for support information, it must not contain sensitive value such as personal or business data. However it is the duty of each ASPSP to perform its own risk analysis on this topic.
			bicFi		[0..1]	ISO20022: Code allocated to a financial institution by the ISO 9362 Registration Authority as described in ISO 9362 "Banking - Banking telecommunication messages - Business identification code (BIC)".
			accountId		[0..1]	See generic structure AccountIdentification
			name		[1..1]	Label of the PSU account In case of a delayed debit card transaction set, the name shall specify the holder name and can also provide the imputation date
			details		[0..1]	Specifications that might be provided by the ASPSP ● characteristics of the account ● characteristics of the relevant card
			linkedAccount		[0..1]	Case of a set of pending card transactions, the ASPSP will provide the relevant cash account the card is set up on. When used, this field must be valued with the resourceId of the relevant cash account.
			usage		[0..1]	Specifies the usage of the account **CODE** / **DESCRIPTION** **PRIV** / Private personal account **ORGA** / Professional account Case of a set of pending card transactions, this field does not have to be set since the usage is inherited from the linked account.
			cashAccountType		[1..1]	Specifies the type of the account **CODE** / **DESCRIPTION** **CACC** / Cash account **CARD** / List of card based transactions
			product		[0..1]	Product Name of the Bank for this account, proprietary definition
			balances		[0..1]	list of balances provided by the ASPSP
				{arrayItem}	[1..*]	See generic structure BalanceResource

FIELD			MULT.	DESC.
		psuStatus	[0..1]	ISO20022: Specifies the type of account ownership.

ISO20022: Specifies the type of account ownership.

NAME	DESCRIPTION
Account Holder	Person which is the sole holder of the account.
Account Co-Holder	Person which shares with others the holding of the account.
Attorney	Generic case of a person having a mandate to access the account data.
Custodian For Minor	Entity that holds shares/units on behalf of a legal minor. Although the account is registered under the name of the minor, the custodian retains control of the account.
Legal Guardian	Entity that was appointed by a legal authority to act on behalf of a person judged to be incapacitated.
Nominee	Entity named by the beneficial owner to act on its behalf, often to facilitate dealing, or to conceal the identity of the beneficiary.
Successor On Death	Deceased's estate, or successor, to whom the respective percentage of ownership will be transferred upon the death of one of the owners.
Trustee	Legal owners of the property. However, the beneficiary has the equitable or beneficial ownership.

FIELD			MULT.	DESC.
		_links	[1..1]	links that can be used for further navigation when browsing Account Information at one account level

links that can be used for further navigation when browsing Account Information at one account level

LINK	DESCRIPTION
owners	link to the owners identities for a given account
balances	link to the balances of a given account
transactions	link to the transactions of a given account
overdrafts	link to the lists of overdrafts of a given account

FIELD			MULT.	DESC.
		owners	[0..1]	See generic structure GenericLink
		balances	[0..1]	See generic structure GenericLink
		transactions	[0..1]	See generic structure GenericLink
		overdrafts	[0..1]	See generic structure GenericLink
	_links		[1..1]	Links that can be used for further navigation when browsing Account Information at top level

Links that can be used for further navigation when browsing Account Information at top level

LINK	DESCRIPTION
self	link to the list of all available accounts
consents	link to the consents forwarding
endUserIdentity	link to the end-user identity
trustedBeneficiaries	link to the list of trusted beneficiaries
worspaces	array of link to each relevant workspaces
first	link to the first page of the accounts result
last	link to the last page of the accounts result
next	link to the next page of the accounts result
prev	link to the previous page of the accounts result

FIELD		MULT.	DESC.
	self	[1..1]	See generic structure GenericLink
	consents	[0..1]	See generic structure GenericLink
	endUserIdentity	[0..1]	See generic structure GenericLink
	trustedBeneficiaries	[0..1]	See generic structure GenericLink
	workspaces	[0..1]	list of all workspaces that can be accessed by the PSU
	{arrayItem}	[0..*]	See generic structure GenericLink
	first	[0..1]	See generic structure GenericLink
	last	[0..1]	See generic structure GenericLink
	next	[0..1]	See generic structure GenericLink
	prev	[0..1]	See generic structure GenericLink

4.3. Retrieval of an account owners (AISP)

4.3.1. Description

This call returns the owners identities for a given PSU account that is specified by the AISP through an account resource identification.

This call cannot be used when the account is owned by a legal entity where the identity of this entity is directly available in the account structure (field [company]).

4.3.2. Prerequisites

- The TPP was registered by the Registration Authority for the AISP role
- The TPP and the PSU have a contract that was enrolled by the ASPSP
  - At this step, the ASPSP has delivered an OAUTH2 "Authorization Code" or "Resource Owner Password" access token to the TPP (cf. paragraph 3.4.2).
- The TPP and the ASPSP have successfully processed a mutual check and authentication
- The TPP has presented its OAUTH2 "Authorization Code" or "Resource Owner Password" access token which allows the ASPSP to identify the relevant PSU and retrieve the linked PSU context (cf. paragraph 3.4.2) is any.
- The ASPSP takes into account the access token that establishes the link between the PSU and the AISP.
- The TPP has previously retrieved the list of available accounts for the PSU

4.3.3. Business flow

The AISP requests the ASPSP on one of the PSU's accounts.

The ASPSP answers by the identities of the account owners.

4.3.4. Request

<div align="center">

get /accounts/{accountResourceId}/owners

</div>

4.3.4.1. Path Parameters

FIELD	MULT.	DESC.
accountResourceId	[1..1]	Identification of account resource to fetch

4.3.4.2. Query Parameters

FIELD	MULT.	DESC.
workspace	[0..1]	Workspace to be used for processing an AISP request. If not provided, the default workspace is computed from the authentication that was used for getting the OAuth2 Access Token.

4.3.5. Response

4.3.5.1. Body (application/hal+json; charset=utf-8)

FIELD				MULT.	DESC.
{responseBody}				[1..1]	HYPERMEDIA structure used for returning the identities of the account owners. These owners are either real persons or a company. • in the first case, the [identities] block must be used • in the second cas, the [company] property specifies the identity of the company owning the account.
	company			[0..1]	See generic structure GenericIdentification
	identities			[0..1]	identity of the account owners.
		{arrayItem}		[0..*]	HYPERMEDIA structure used for returning the identity of the PSU
			fullName	[1..1]	Last name and first name
			namePrefix	[0..1]	Specifies the terms used to formally address a person. This field accepts the following code values | CODE	DESCRIPTION
---	---
DOCT	Doctor
MADM	Madam
MISS	Miss
MIST	Mister	
			firstName	[0..1]	First name
			lastName	[0..1]	Last name
		_links		[1..1]	links that can be used for further navigation when browsing balances Information at one account level | LINK	DESCRIPTION
---	---
self	link to the owners of a given account
parent-list	link to the list of all available accounts
balances	link to the balances for a given account
transactions	link to the transactions of a given account
overdrafts	link to the lists of overdrafts of a given account	
		self		[1..1]	See generic structure GenericLink
		parent-list		[0..1]	See generic structure GenericLink
		balances		[0..1]	See generic structure GenericLink
		transactions		[0..1]	See generic structure GenericLink
		overdrafts		[0..1]	See generic structure GenericLink

4.4. Retrieval of an account balances report (AISP)

4.4.1. Description

This call returns a set of balances for a given PSU account that is specified by the AISP through an account resource Identification

4.4.2. Prerequisites

- The TPP was registered by the Registration Authority for the AISP role
- The TPP and the PSU have a contract that was enrolled by the ASPSP
  - At this step, the ASPSP has delivered an OAUTH2 "Authorization Code" or "Resource Owner Password" access token to the TPP (cf. paragraph 3.4.2).
- The TPP and the ASPSP have successfully processed a mutual check and authentication
- The TPP has presented its OAUTH2 "Authorization Code" or "Resource Owner Password" access token which allows the ASPSP to identify the relevant PSU and retrieve the linked PSU context (cf. paragraph 3.4.2) if any.
- The ASPSP takes into account the access token that establishes the link between the PSU and the AISP.
- The TPP has previously retrieved the list of available accounts for the PSU

4.4.3. Business flow

The AISP requests the ASPSP on one of the PSU's accounts.

The ASPSP answers by providing a list of balances on this account.

- The ASPSP should provide at least one balance on the account.
  - For cash account, this balance should be the accounting balance (CACC)
  - For card transactions account, the accounting balance is meaningless and must be replaced by an other type of balance (OTHR).
- Case of no registered transaction on the account, this balance will have an amount equal to zero.
- The ASPSP can provide other balance restitutions, e.g. instant balance, as well, if possible.
- Actually, from the PSD2 perspective, any other balances that are provided through the Web-Banking service of the ASPSP must also be provided by this ASPSP through the API.

4.4.4. Request

get /accounts/{accountResourceId}/balances

4.4.4.1. Path Parameters

FIELD	MULT.	DESC.
accountResourceId	[1..1]	Identification of account resource to fetch

4.4.4.2. Query Parameters

FIELD	MULT.	DESC.
workspace	[0..1]	Workspace to be used for processing an AISP request. If not provided, the default workspace is computed from the authentication that was used for getting the OAuth2 Access Token.

4.4.5. Response

4.4.5.1. Body (application/hal+json; charset=utf-8)

FIELD			MULT.	DESC.	
{responseBody}			[1..1]	HYPERMEDIA structure used for returning the list of the relevant balances for a given account to the AISP	
	balances		[1..1]	List of account balances	
		{arrayItem}	[1..*]	See generic structure BalanceResource	
	_links		[1..1]	links that can be used for further navigation when browsing balances Information at one account level	
				LINK	**DESCRIPTION**
				self	link to the balances of a given account
				parent-list	link to the list of all available accounts
				owners	link to the owners identities for a given account
				transactions	link to the transactions of a given account
				overdrafts	link to the lists of overdrafts of a given account
		self	[1..1]	See generic structure GenericLink	
		parent-list	[0..1]	See generic structure GenericLink	
		owners	[0..1]	See generic structure GenericLink	
		transactions	[0..1]	See generic structure GenericLink	
		overdrafts	[0..1]	See generic structure GenericLink	

4.5. Retrieval of an account transaction set (AISP)

4.5.1. Description

This call returns transactions for an account for a given PSU account that is specified by the AISP through an account resource identification.

The request may use some filter parameter in order to restrict the query

- on a given imputation date range
- past a given incremental technical identification

The result may be subject to pagination (i.e. retrieving a partial result in case of having too many results) through a set of pages by the ASPSP. Thereafter, the AISP may ask for the first, next, previous or last page of results.

4.5.2. Prerequisites

- The TPP was registered by the Registration Authority for the AISP role
- The TPP and the PSU have a contract that was enrolled by the ASPSP
  - At this step, the ASPSP has delivered an OAUTH2 "Authorization Code" or "Resource Owner Password" access token to the TPP (cf. paragraph 3.4.2).
- The TPP and the ASPSP have successfully processed a mutual check and authentication
- The TPP has presented its OAUTH2 "Authorization Code" or "Resource Owner Password" access token which allows the ASPSP to identify the relevant PSU and retrieve the linked PSU context (cf. paragraph 3.4.2) is any.
- The ASPSP takes into account the access token that establishes the link between the PSU and the AISP.
- The TPP has previously retrieved the list of available accounts for the PSU

4.5.3. Business flow

The AISP requests the ASPSP on one of the PSU's accounts. It may specify some selection criteria.

The ASPSP answers by a set of transactions that matches the query.

- The result may be subject to pagination in order to avoid an excessive result set.
- Case of no registered transaction on the account, this result will be an empty list.

The default transaction set, in the absence of filter query parameter, has to be specified and documented by the implementation.

The sort order of transaction might be specific to each ASPSP, due to each Information System constraints.

4.5.4. Request

get /accounts/{accountResourceId}/transactions

4.5.4.1. Path Parameters

FIELD	MULT.	DESC.
accountResourceId	[1..1]	Identification of account resource to fetch

4.5.4.2. Query Parameters

FIELD	MULT.	DESC.
dateFrom	[0..1]	Inclusive minimal imputation date of the transactions. Transactions having an imputation date equal to this parameter are included within the result.
dateTo	[0..1]	Exclusive maximal imputation date of the transactions. Transactions having an imputation date equal to this parameter are not included within the result.
dateType	[0..1]	This parameter specifies the type of date on which [dateFrom] and [dateTo] apply. If not provided, the ASPSP will use its own default date type as specified in its implementation documentation. The implementation documentation must also specify which date types are supported.
entryReferenceFrom	[0..1]	Specifies the value on which the result has to be computed. Only the transaction having a technical identification greater than this value must be included within the result
entryReferenceto	[0..1]	Specifies the value on which the result has to be computed. Only the transaction having a technical identification less than or equal to this value must be included within the result
workspace	[0..1]	Workspace to be used for processing an AISP request. If not provided, the default workspace is computed from the authentication that was used for getting the OAuth2 Access Token.

4.5.5. Response

4.5.5.1. Body (application/hal+json; charset=utf-8)

FIELD				MULT.	DESC.
{responseBody}				[1..1]	HYPERMEDIA structure used for returning the list of the transactions for a given account to the AISP
	transactions			[1..1]	List of transactions
		{arrayItem}		[0..*]	ISO20022: Structure of a transaction. • the [charges] property provides information on the charges, pre-advised or included in the entry amount. • the [relatedParties] property specifies either the debtor or the creditor counterpart information API: • Amounts must always be set as positive values in complement with the Credit/Debit indicator. • At least expectedBookingDate or bookingDate must be provided"
			resourceId	[0..1]	API: Identifier assigned by the ASPSP for further use of the created resource through API calls. The API client cannot set or modify the value of this field. Since this value can be exchanged between the server and the client as an URL element or for support information, it must not contain sensitive value such as personal or business data. However it is the duty of each ASPSP to perform its own risk analysis on this topic.
			entryReference	[0..1]	Technical incremental identification of the transaction used for reconciliation by the AISP. Once assigned, this value cannot be changed for the relevant transaction. It is assumed that this value is unique and thus cannot be shared by several transactions. The reconciliation of transactions can be done by the [resourceId] or the [entryReference] field. If none of these fields cannot be provided, it is therefore suggested that the [remittanceInformation] field, once set, should not be updated afterwards. Actually the [additionalTransactionInformation] field can be used to update the details of a given transaction.

			FIELD	MULT.	DESC.
			transactionAmount	[1..1]	See generic structure AmountType
			creditDebitIndicator	[1..1]	Accounting flow of the amount | CODE	DESCRIPTION | |---|---| | **CRDT** | Credit type amount | | **DBIT** | Debit type amount |
			transactionAmountDetails	[0..1]	Provides detailed information on the original amount. The [instructedAmount] property identifies the amount of money to be moved between the debtor and creditor, before deduction of charges, expressed in the currency as ordered by the initiating party and provides currency exchange information in case the instructed amount and/or currency is/are different from the entry amount and/or currency. The [transactionAmount] property identifies the amount of money to be moved between the debtor and creditor, before deduction of charges, expressed in the currency as ordered by the initiating party and provides currency exchange information in case the instructed amount and/or currency is/are different from the entry amount and/or currency. The [cunterValueAmount] property embbeds the set of elements used to provide the countervalue amount and currency exchange information. • This can be either the counter amount quoted in an FX deal, or the result of the currency information applied to an instructed amount, before deduction of charges. The [announcedPostingAmount] property specifies the amount of money, based on terms of corporate action event and balance of underlying securities, entitled to/from the account owner. • In some situations, this amount may alternatively be called entitled amount.
			instructedAmount	[0..1]	ISO20022: details on amount and currency exchange The [amount] property is the amount of money to be exchanged against another amount of money in the counter currency. The [sourceCurency] property indicates the currency from which an amount is to be converted in a currency conversion. The [targetCurrency] property indicates the currency into which an amount is to be converted in a currency conversion. The [unitCurrency] indicates the currency in which the rate of exchange is expressed in a currency exchange. In the example 1GBP = xxxCUR, the unit currency is GBP. API: Amounts must always be set as positive values.
			type	[0..1]	specifies the type of amount in case of proprietary amount
			amount	[1..1]	See generic structure AmountType
			sourceCurrency	[1..1]	Specifies the currency of the amount or of the account. A code allocated to a currency by a Maintenance Agency under an international identification scheme, as described in the latest edition of the international standard ISO 4217 "Codes for the representation of currencies and funds".
			targetCurrency	[0..1]	Specifies the currency of the amount or of the account. A code allocated to a currency by a Maintenance Agency under an international identification scheme, as described in the latest edition of the international standard ISO 4217 "Codes for the representation of currencies and funds".
			unitCurrency	[0..1]	Specifies the currency of the amount or of the account. A code allocated to a currency by a Maintenance Agency under an international identification scheme, as described in the latest edition of the international standard ISO 4217 "Codes for the representation of currencies and funds".
			exchangeRate	[1..1]	Factor used to convert an amount from one currency into another. This reflects the price at which one currency was bought with another currency. ExchangeRate expresses the ratio between UnitCurrency and QuotedCurrency (ExchangeRate = UnitCurrency/QuotedCurrency).
			contractIdentification	[0..1]	Unique identification to unambiguously identify the foreign exchange contract.
			quotationDate	[0..1]	Date and time at which an exchange rate is quoted.
			transactionAmount	[0..1]	ISO20022: details on amount and currency exchange The [amount] property is the amount of money to be exchanged against another amount of money in the counter currency. The [sourceCurency] property indicates the currency from which an amount is to be converted in a currency conversion. The [targetCurrency] property indicates the currency into which an amount is to be converted in a currency conversion. The [unitCurrency] indicates the currency in which the rate of exchange is expressed in a currency exchange. In the example 1GBP = xxxCUR, the unit currency is GBP. API: Amounts must always be set as positive values.
			type	[0..1]	specifies the type of amount in case of proprietary amount
			amount	[1..1]	See generic structure AmountType
			sourceCurrency	[1..1]	Specifies the currency of the amount or of the account. A code allocated to a currency by a Maintenance Agency under an international identification scheme, as described in the latest edition of the international standard ISO 4217 "Codes for the representation of currencies and funds".
			targetCurrency	[0..1]	Specifies the currency of the amount or of the account. A code allocated to a currency by a Maintenance Agency under an international identification scheme, as described in the latest edition of the international standard ISO 4217 "Codes for the representation of currencies and funds".

			FIELD	MULT.	DESC.
			unitCurrency	[0..1]	Specifies the currency of the amount or of the account. A code allocated to a currency by a Maintenance Agency under an international identification scheme, as described in the latest edition of the international standard ISO 4217 "Codes for the representation of currencies and funds".
			exchangeRate	[1..1]	Factor used to convert an amount from one currency into another. This reflects the price at which one currency was bought with another currency. ExchangeRate expresses the ratio between UnitCurrency and QuotedCurrency (ExchangeRate = UnitCurrency/QuotedCurrency).
			contractIdentification	[0..1]	Unique identification to unambiguously identify the foreign exchange contract.
			quotationDate	[0..1]	Date and time at which an exchange rate is quoted.
			counterValueAmount	[0..1]	ISO20022: details on amount and currency exchange The [amount] property is the amount of money to be exchanged against another amount of money in the counter currency. The [sourceCurency] property indicates the currency from which an amount is to be converted in a currency conversion. The [targetCurrency] property indicates the currency into which an amount is to be converted in a currency conversion. The [unitCurrency] indicates the currency in which the rate of exchange is expressed in a currency exchange. In the example 1GBP = xxxCUR, the unit currency is GBP. API: Amounts must always be set as positive values.
			type	[0..1]	specifies the type of amount in case of proprietary amount
			amount	[1..1]	See generic structure AmountType
			sourceCurrency	[1..1]	Specifies the currency of the amount or of the account. A code allocated to a currency by a Maintenance Agency under an international identification scheme, as described in the latest edition of the international standard ISO 4217 "Codes for the representation of currencies and funds".
			targetCurrency	[0..1]	Specifies the currency of the amount or of the account. A code allocated to a currency by a Maintenance Agency under an international identification scheme, as described in the latest edition of the international standard ISO 4217 "Codes for the representation of currencies and funds".
			unitCurrency	[0..1]	Specifies the currency of the amount or of the account. A code allocated to a currency by a Maintenance Agency under an international identification scheme, as described in the latest edition of the international standard ISO 4217 "Codes for the representation of currencies and funds".
			exchangeRate	[1..1]	Factor used to convert an amount from one currency into another. This reflects the price at which one currency was bought with another currency. ExchangeRate expresses the ratio between UnitCurrency and QuotedCurrency (ExchangeRate = UnitCurrency/QuotedCurrency).
			contractIdentification	[0..1]	Unique identification to unambiguously identify the foreign exchange contract.
			quotationDate	[0..1]	Date and time at which an exchange rate is quoted.
			announcedPostingAmount	[0..1]	ISO20022: details on amount and currency exchange The [amount] property is the amount of money to be exchanged against another amount of money in the counter currency. The [sourceCurency] property indicates the currency from which an amount is to be converted in a currency conversion. The [targetCurrency] property indicates the currency into which an amount is to be converted in a currency conversion. The [unitCurrency] indicates the currency in which the rate of exchange is expressed in a currency exchange. In the example 1GBP = xxxCUR, the unit currency is GBP. API: Amounts must always be set as positive values.
			type	[0..1]	specifies the type of amount in case of proprietary amount
			amount	[1..1]	See generic structure AmountType
			sourceCurrency	[1..1]	Specifies the currency of the amount or of the account. A code allocated to a currency by a Maintenance Agency under an international identification scheme, as described in the latest edition of the international standard ISO 4217 "Codes for the representation of currencies and funds".
			targetCurrency	[0..1]	Specifies the currency of the amount or of the account. A code allocated to a currency by a Maintenance Agency under an international identification scheme, as described in the latest edition of the international standard ISO 4217 "Codes for the representation of currencies and funds".
			unitCurrency	[0..1]	Specifies the currency of the amount or of the account. A code allocated to a currency by a Maintenance Agency under an international identification scheme, as described in the latest edition of the international standard ISO 4217 "Codes for the representation of currencies and funds".
			exchangeRate	[1..1]	Factor used to convert an amount from one currency into another. This reflects the price at which one currency was bought with another currency. ExchangeRate expresses the ratio between UnitCurrency and QuotedCurrency (ExchangeRate = UnitCurrency/QuotedCurrency).
			contractIdentification	[0..1]	Unique identification to unambiguously identify the foreign exchange contract.
			quotationDate	[0..1]	Date and time at which an exchange rate is quoted.
			proprietaryAmount	[0..1]	Set of elements used to provide information on the original amount and currency exchange.

FIELD				MULT.	DESC.
			{arrayItem}	[0..*]	ISO20022: details on amount and currency exchange The [amount] property is the amount of money to be exchanged against another amount of money in the counter currency. The [sourceCurency] property indicates the currency from which an amount is to be converted in a currency conversion. The [targetCurrency] property indicates the currency into which an amount is to be converted in a currency conversion. The [unitCurrency] indicates the currency in which the rate of exchange is expressed in a currency exchange. In the example 1GBP = xxxCUR, the unit currency is GBP. API: Amounts must always be set as positive values.
			type	[0..1]	specifies the type of amount in case of proprietary amount
			amount	[1..1]	See generic structure AmountType
			sourceCurrency	[1..1]	Specifies the currency of the amount or of the account. A code allocated to a currency by a Maintenance Agency under an international identification scheme, as described in the latest edition of the international standard ISO 4217 "Codes for the representation of currencies and funds".
			targetCurrency	[0..1]	Specifies the currency of the amount or of the account. A code allocated to a currency by a Maintenance Agency under an international identification scheme, as described in the latest edition of the international standard ISO 4217 "Codes for the representation of currencies and funds".
			unitCurrency	[0..1]	Specifies the currency of the amount or of the account. A code allocated to a currency by a Maintenance Agency under an international identification scheme, as described in the latest edition of the international standard ISO 4217 "Codes for the representation of currencies and funds".
			exchangeRate	[1..1]	Factor used to convert an amount from one currency into another. This reflects the price at which one currency was bought with another currency. ExchangeRate expresses the ratio between UnitCurrency and QuotedCurrency (ExchangeRate = UnitCurrency/QuotedCurrency).
			contractIdentification	[0..1]	Unique identification to unambiguously identify the foreign exchange contract.
			quotationDate	[0..1]	Date and time at which an exchange rate is quoted.
		status		[1..1]	Type of Transaction (see code table below)
		endToEndId		[0..1]	ISO20022: Unique identification assigned by the initiating party to unambiguously identify the transaction. This identification is passed on, unchanged, throughout the entire end-to-end chain.
		expectedBookingDate		[0..1]	Expected booking date of the transaction on the account if the transaction is not yet booked.
		bookingDate		[0..1]	Real booking date of the transaction on the account
		valueDate		[0..1]	Value date of the transaction on the account
		transactionDate		[0..1]	Date used for specific purposes: • for card transaction: date of the commercial transaction • for credit transfer: acquiring date of the transaction as seen by the Payer's Bank • for direct debit: receiving date of the transaction as seen by the Payer's Bank
		bankTransactionCode		[0..1]	Set of elements used to fully identify the type of underlying transaction resulting in an entry. ISO20022 provides a list of possible Bank Transaction Code combinations Transaction codification might also be specified at national community level. For instance a French Transaction codification is available It applies with paragraph 2 code table using the following mapping: • domain must be set with "FR" • family must be set with one of the values that are provided in the [code Famille] column (e.g. "OPCA") • subFamily must be set with one of the values that are provided in the [code operation] column (e.g. "05") • code might be set with a proprietary transaction code that must be documented by the implementation.
			domain	[1..1]	Set of elements used to provide the domain, the family and the sub-family of the bank transaction code, in a structured and hierarchical format.

Status code table:

CODE	NAME	DESCRIPTION
BOOK	ClosingBooked	Accounted transaction
PDNG	Pending	Transaction that is to be accounted and does already affect the instant balance
FUTR	Future	Entry is on the books of the account servicer and value will be applied to the account owner at a future date and time.
INFO	Information	Entry is only provided for information, and no booking on the account owner's account in the account servicer's ledger was performed.

			FIELD	MULT.	DESC.
			family	[1..1]	Specifies the family and the sub-family of the bank transaction code, within a specific domain, in a structured and hierarchical format.
			subFamily	[1..1]	Specifies the sub-product family within a specific family.
			code	[0..1]	Proprietary bank transaction code to identify the underlying transaction.
			issuer	[0..1]	Identification of the issuer of the proprietary bank transaction code.
		charges		[0..1]	ISO20022: Provides further details on the charges related to the payment transaction. API: Amounts must always be set as positive values.
			totalChargesAndTaxAmount	[0..1]	See generic structure AmountType
			record	[0..1]	Provides details of the individual charges record.
			{arrayItem}	[0..*]	ISO20022: Provides further individual record details on the charges related to the payment transaction. • The [amount] proprty specifies the transaction charges to be paid by the charge bearer. • The [creditDebitIndicator] property indicates whether the charges amount is a credit or a debit amount. A zero amount is considered to be a credit. • the [code] property is the charge type, in a coded form • the [rate] property is the rate used to calculate the amount of the charge or fee. • the [bearer] property specifies which party/parties will bear the charges associated with the processing of the payment transaction. • the [agent] property specifies the agent that takes the transaction charges or to which the transaction charges are due. • the [tax] property provides details on the tax applied to charges. API: Amounts must always be set as positive values.
				amount	[0..1]	See generic structure AmountType
				creditDebitIndicator	[0..1]	Accounting flow of the amount

Accounting flow of the amount (creditDebitIndicator):

CODE	DESCRIPTION
CRDT	Credit type amount
DBIT	Debit type amount

				FIELD	MULT.	DESC.
				chargeIncludedIndicator	[0..1]	Indicates whether the charge should be included in the amount or is added as pre-advice. One of the following values must be used: • Meaning When True: Included • Meaning When False: Pre-advised
				code	[0..1]	Specifies a code and the issuer of this code.
					code	[1..1]	Provides the code.
					issuer	[0..1]	Identification of the issuer of the code.
				rate	[0..1]	Rate expressed as a percentage, ie, in hundredths, eg, 0.7 is 7/10 of a percent, and 7.0 is 7%.
				bearer	[0..1]	ISO20022: Specifies which party/parties will bear the charges associated with the processing of the payment transaction. The following values are allowed:

bearer values:

CODE	NAME	DESCRIPTION
DEBT	BorneByDebtor	All transaction charges are to be borne by the debtor.
CRED	BorneByCreditor	All transaction charges are to be borne by the creditor.
SHAR	Shared	In a credit transfer context, means that transaction charges on the sender side are to be borne by the debtor, transaction charges on the receiver side are to be borne by the creditor. In a direct debit context, means that transaction charges on the sender side are to be borne by the creditor, transaction charges on the receiver side are to be borne by the debtor.
SLEV	FollowingServiceLevel	Charges are to be applied following the rules agreed in the service level and/or scheme.

| | | | | agent | [0..1] | See generic structure FinancialInstitutionIdentification |

					FIELD	MULT.	DESC.
				tax		[0..1]	ISO20022: Provides details on the tax applied to charges. ● The [rate] property is the rate used to calculate the tax. ● the [amount] property is the amount of money resulting from the calculation of the tax. API: Amounts must always be set as positive values.
					identification	[0..1]	Unique reference to unambiguously identify the nature of the tax levied, such as Value Added Tax (VAT).
					rate	[0..1]	Rate expressed as a percentage, ie, in hundredths, eg, 0.7 is 7/10 of a percent, and 7.0 is 7%.
					amount	[0..1]	See generic structure AmountType
			relatedParties			[0..1]	information about the parties that are related to the transaction
				initiatingParty		[0..1]	See generic structure PartyIdentification
				debtorAgent		[0..1]	See generic structure FinancialInstitutionIdentification
				debtor		[0..1]	See generic structure PartyIdentification
				debtorAccount		[0..1]	See generic structure AccountIdentification
				ultimateDebtor		[0..1]	See generic structure PartyIdentification
				creditorAgent		[0..1]	See generic structure FinancialInstitutionIdentification
				creditor		[0..1]	See generic structure PartyIdentification
				creditorAccount		[0..1]	See generic structure AccountIdentification
				ultimateCreditor		[0..1]	See generic structure PartyIdentification
		remittanceInformation				[0..1]	ISO20022: Information supplied to enable the matching of an entry with the items that the transfer is intended to settle, such as commercial invoices in an accounts' receivable system. API: ● Only one occurrence of the unstructured information is allowed. ● Only one occurrence of the structured information is allowed. ● Structured and unstructured information can coexist.
			unstructured			[0..1]	Unstructured remittance information. Each implementation may add a pattern in order to specify its own character set constraints.
				{arrayItem}		[1..*]	Relevant information to the transaction
			structured			[0..1]	Structured remittance information
				{arrayItem}		[1..*]	See generic structure StructuredRemittanceInformation
		additionalTransactionInformation				[0..1]	Additional information about reconciliation.
		standingOrderCharacteristics				[0..1]	Specifies the characteristics of a standing order.
			startDate			[1..1]	The first applicable day of execution for a given period.
			endDate			[0..1]	The last applicable day of execution for a given period. If not given, the period is considered as endless.
			executionRule			[1..1]	Execution date shifting rule for standing orders This data attribute defines the behaviour when recurring payment dates falls on a weekend or bank holiday. The payment is then executed either the "preceding" or "following" working day. ASPSP might reject the request due to the communicated value, if rules in Online-Banking are not supporting this execution rule. CODE / DESCRIPTION table below

CODE	DESCRIPTION
FWNG	following
PREC	preceding

			FIELD	MULT.	DESC.
			frequency	[1..1]	Frequency rule for standing orders. The following codes from the "EventFrequency7Code" of ISO 20022 are supported. <table><tr><th>CODE</th><th>DESCRIPTION</th></tr><tr><td>**DAIL**</td><td>Daily</td></tr><tr><td>**WEEK**</td><td>Weekly</td></tr><tr><td>**TOWK**</td><td>EveryTwoWeeks</td></tr><tr><td>**MNTH**</td><td>Monthly</td></tr><tr><td>**TOMN**</td><td>EveryTwoMonths</td></tr><tr><td>**QUTR**</td><td>Quarterly</td></tr><tr><td>**SEMI**</td><td>SemiAnnual</td></tr><tr><td>**YEAR**</td><td>Annual</td></tr></table> However, each ASPSP might restrict these values into a subset if needed.
		merchantCategoryCode		[0..1]	Category code conform to ISO 18245, related to the type of services or goods the merchant provides for the transaction.
		_links		[0..1]	links that can be used for further retrieving details on a given transaction <table><tr><th>LINK</th><th>DESCRIPTION</th></tr><tr><td>**details**</td><td>link to the details of the transaction</td></tr></table>
			details	[0..1]	See generic structure GenericLink
		bookingPeriod		[0..1]	definition of a time period
			startDate	[0..1]	The first applicable day of execution for a given period.
			endDate	[0..1]	The last applicable day of execution for a given period. If not given, the period is considered as endless.
		cardId		[0..1]	See generic structure GenericIdentification
	_links			[1..1]	links that can be used for further navigation when browsing transactions Information at one account level <table><tr><th>LINK</th><th>DESCRIPTION</th></tr><tr><td>**self**</td><td>link to the transactions of a given account</td></tr><tr><td>**parent-list**</td><td>link to the list of all available accounts</td></tr><tr><td>**owners**</td><td>link to the owners identities for a given account</td></tr><tr><td>**balances**</td><td>link to the balances of a given account</td></tr><tr><td>**overdrafts**</td><td>link to the lists of overdrafts of a given account</td></tr><tr><td>**first**</td><td>link to the first page of the transactions result</td></tr><tr><td>**last**</td><td>link to the last page of the transactions result</td></tr><tr><td>**next**</td><td>link to the next page of the transactions result</td></tr><tr><td>**prev**</td><td>link to the previous page of the transactions result</td></tr></table>
		self		[1..1]	See generic structure GenericLink
		parent-list		[0..1]	See generic structure GenericLink
		owners		[0..1]	See generic structure GenericLink
		balances		[0..1]	See generic structure GenericLink
		overdrafts		[0..1]	See generic structure GenericLink
		first		[0..1]	See generic structure GenericLink
		last		[0..1]	See generic structure GenericLink
		next		[0..1]	See generic structure GenericLink
		prev		[0..1]	See generic structure GenericLink

4.6. Retrieval of transaction details (AISP)

4.6.1. Description

This call returns the details of a transaction from a given PSU account.

The AISP has to specified

- the account through an account resource identification
- the transaction through a transaction resource identifcation

4.6.2. Prerequisites

- The TPP was registered by the Registration Authority for the AISP role
- The TPP and the PSU have a contract that was enrolled by the ASPSP
    - At this step, the ASPSP has delivered an OAUTH2 "Authorization Code" or "Resource Owner Password" access token to the TPP (cf. paragraph 3.4.2).
- The TPP and the ASPSP have successfully processed a mutual check and authentication
- The TPP has presented its OAUTH2 "Authorization Code" or "Resource Owner Password" access token which allows the ASPSP to identify the relevant PSU and retrieve the linked PSU context (cf. paragraph 3.4.2) is any.
- The ASPSP takes into account the access token that establishes the link between the PSU and the AISP.
- The TPP has previously retrieved the list of available accounts for the PSU and the transactions from one given account
- A transaction includes a "details" hyperlink which indicates that detailed information is available for this transaction.

4.6.3. Business flow

The AISP requests the ASPSP on one of the transactions.

The ASPSP answers by the details on this transaction.

4.6.4. Request

get /accounts/{accountResourceId}/transactions/{transactionResourceId}/details

4.6.4.1. Path Parameters

FIELD	MULT.	DESC.
accountResourceId	[1..1]	Identification of account resource to fetch

FIELD	MULT.	DESC.
transactionResourceId	[1..1]	Identification of transaction resource to fetch

4.6.5. Response

4.6.5.1. Body (application/hal+json; charset=utf-8)

FIELD			MULT.	DESC.
{responseBody}			[1..1]	HYPERMEDIA structure used for returning the details of a given transaction
	details		[1..1]	Details of the transactions
		{arrayItem}	[0..*]	
	_links		[1..1]	links that can be used after retrieving details on a given transaction <table><tr><th>LINK</th><th>DESCRIPTION</th></tr><tr><td>**transactions**</td><td>link to the transaction list</td></tr><tr><td>**accounts**</td><td>link to the list of all available accounts</td></tr></table>
		transactions	[0..1]	See generic structure GenericLink
		accounts	[0..1]	See generic structure GenericLink

4.7. Retrieval of an account overdraft (AISP)

4.7.1. Description

This call returns the overdrafts that can be used for a given PSU account that is specified by the AISP through an account resource identification.

The request may use some filter parameter in order to restrict the query

4.7.2. Prerequisites

- The TPP was registered by the Registration Authority for the AISP role
- The TPP and the PSU have a contract that was enrolled by the ASPSP
  - At this step, the ASPSP has delivered an OAUTH2 "Authorization Code" or "Resource Owner Password" access token to the TPP (cf. paragraph 3.4.2).
- The TPP and the ASPSP have successfully processed a mutual check and authentication
- The TPP has presented its OAUTH2 "Authorization Code" or "Resource Owner Password" access token which allows the ASPSP to identify the relevant PSU and retrieve the linked PSU context (cf. paragraph 3.4.2) is any.
- The ASPSP takes into account the access token that establishes the link between the PSU and the AISP.
- The TPP has previously retrieved the list of available accounts for the PSU

4.7.3. Business flow

The AISP requests the ASPSP on one of the PSU's accounts.

The ASPSP answers by the overdraft that can be applied.

4.7.4. Request

get /accounts/{accountResourceId}/overdrafts

4.7.4.1. Path Parameters

FIELD	MULT.	DESC.
accountResourceId	[1..1]	Identification of account resource to fetch

4.7.4.2. Query Parameters

FIELD	MULT.	DESC.
workspace	[0..1]	Workspace to be used for processing an AISP request. If not provided, the default workspace is computed from the authentication that was used for getting the OAuth2 Access Token.

4.7.5. Response

4.7.5.1. Body (application/hal+json; charset=utf-8)

FIELD			MULT.	DESC.
{responseBody}			[1..1]	HYPERMEDIA structure used for returning the list of the overdrafts that can apply on a given account to the AISP
	Overdrafts		[1..1]	ISO20022: Overdraft characteristics API: Amounts must always be set as positive values.
		allowedAmount	[1..1]	See generic structure AmountType
	_links		[1..1]	links that can be used for further navigation when browsing overdrafts Information at one account level {LINK TABLE BELOW}
		Self	[1..1]	See generic structure GenericLink
		parent-list	[0..1]	See generic structure GenericLink
		owners	[0..1]	See generic structure GenericLink
		balances	[0..1]	See generic structure GenericLink
		transactions	[0..1]	See generic structure GenericLink

LINK	DESCRIPTION
self	link to the overdrafts of a given account
parent-list	link to the list of all available accounts
owners	link to the owners identities for a given account
balances	link to the balances of a given account
transactions	link to the transactions of a given account

4.8. Forwarding the PSU consent (AISP)

4.8.1. Description

In the mixed detailed consent on accounts

- the AISP captures the consent of the PSU
- then it forwards this consent to the ASPSP

This consent replaces any prior consent that was previously sent by the AISP.

4.8.2. Prerequisites

- The TPP was registered by the Registration Authority for the AISP role.
- The TPP and the PSU have a contract that was enrolled by the ASPSP
  - At this step, the ASPSP has delivered an OAUTH2 "Authorization Code" or "Resource Owner Password" access token to the TPP (cf. paragraph 3.4.2).
- The TPP and the ASPSP have successfully processed a mutual check and authentication
- The TPP has presented its OAUTH2 "Authorization Code" or "Resource Owner Password" access token which allows the ASPSP to identify the relevant PSU and retrieve the linked PSU context (cf. paragraph 3.4.2) if any.
- The ASPSP takes into account the access token that establishes the link between the PSU and the AISP.

4.8.3. Business Flow

The PSU specifies to the AISP which of his/her accounts will be accessible and which functionalities should be available.

The AISP forwards these settings to the ASPSP.

The ASPSP answers by HTTP201 return code.

4.8.4. Request

put /consents

4.8.4.1. Body (application/json)

FIELD	MULT.	DESC.
{requestBody}	[1..1]	Requested access services.
owners	[1..1]	List of accessible accounts for one given functionality

		FIELD	MULT.	DESC.
		{arrayItem}	[0..*]	See generic structure AccountIdentification
	balances		[1..1]	List of accessible accounts for one given functionality
		{arrayItem}	[0..*]	See generic structure AccountIdentification
	transactions		[1..1]	List of accessible accounts for one given functionality
		{arrayItem}	[0..*]	See generic structure AccountIdentification
	overdrafts		[0..1]	List of accessible accounts for one given functionality
		{arrayItem}	[0..*]	See generic structure AccountIdentification
	trustedBeneficiaries		[0..1]	Indicator that access to the trusted beneficiaries list was granted or not to the AISP by the PSU • true: the access was granted • false: the access was not granted
	trustedWorkspaceBeneficiaries		[0..1]	Indicator, for each given workspace, that access to the trusted beneficiaries list was granted or not to the AISP by the PSU.
		{arrayItem}	[0..*]	list of workspaces for which the PSU has given consent to the access by the AISP
		workspace	[0..1]	Identification of the workspace. If not provided, the default workspace is computed from the authentication that was used for getting the OAuth2 Access Token.
		access	[0..1]	Indicator that access to the trusted beneficiaries list was granted or not to the AISP by the PSU for the default workspace • true: the access was granted • false: the access was not granted
	psuIdentity		[1..1]	Indicator that access to the PSU identity, first name and last name, was granted or not to the AISP by the PSU • true: the access was granted • false: the access was not granted

4.8.5. Response

No body response is returned for this API call.

4.9. Retrieval of the identity of the end-user (AISP)

4.9.1. Description

This call returns the identity of the PSU (end-user).

4.9.2. Prerequisites

- The TPP was registered by the Registration Authority for the AISP role.
- The TPP and the PSU have a contract that was enrolled by the ASPSP
  - At this step, the ASPSP has delivered an OAUTH2 "Authorization Code" or "Resource Owner Password" access token to the TPP (cf. paragraph 3.4.2).
- The TPP and the ASPSP have successfully processed a mutual check and authentication
- The TPP has presented its OAUTH2 "Authorization Code" or "Resource Owner Password" access token which allows the ASPSP to identify the relevant PSU and retrieve the linked PSU context (cf. paragraph 3.4.2) if any.
- The ASPSP takes into account the access token that establishes the link between the PSU and the AISP.

4.9.3. Business Flow

The AISP asks for the identity of the PSU.

The ASPSP answers with the identity, i.e. first and last names of the end-user.

4.9.4. Request

get /end-user-identity

No Path, Query or Body parameter are specified for this API call.

4.9.5. Response

4.9.5.1. Body (application/hal+json; charset=utf-8)

FIELD			MULT.	DESC.
{responseBody}			[1..1]	HYPERMEDIA structure used for returning the identity of the PSU. The [identity] property specifies the identity of the PSU which has granted access to the AISP on the accounts data This information can be retrieved based on the PSU's authentication that occurred during the OAUTH2 access token initialisation.
	identity		[1..1]	HYPERMEDIA structure used for returning the identity of the PSU
		fullName	[1..1]	Last name and first name

	FIELD	MULT.	DESC.
	namePrefix	[0..1]	Specifies the terms used to formally address a person. This field accepts the following code values | CODE	DESCRIPTION | |---|---| | **DOCT** | Doctor | | **MADM** | Madam | | **MISS** | Miss | | **MIST** | Mister |
	firstName	[0..1]	First name
	lastName	[0..1]	Last name
	_links	[1..1]	links that can be used for further navigation after retrieving end-user identity | LINK	DESCRIPTION | |---|---| | **self** | link to the end-user identity | | **accounts** | link to the list of all available accounts | | **consents** | link to the consents forwarding | | **trustedBeneficiaries** | link to the list of trusted beneficiaries |
	self	[1..1]	See generic structure GenericLink
	accounts	[0..1]	See generic structure GenericLink
	consents	[0..1]	See generic structure GenericLink
	trustedBeneficiaries	[0..1]	See generic structure GenericLink

4.10. Retrieval of the trusted beneficiaries list (AISP)

4.10.1. Description

This call returns all trusted beneficiaries that were set by the PSU.

Those beneficiaries can benefit from an SCA exemption during payment initiation.

The result may be subject to pagination (i.e. retrieving a partial result in case of having too many results) through a set of pages by the ASPSP. Thereafter, the AISP may ask for the first, next, previous or last page of results.

4.10.2. Prerequisites

- The TPP was registered by the Registration Authority for the AISP role.
- The TPP and the PSU have a contract that was enrolled by the ASPSP
  - At this step, the ASPSP has delivered an OAUTH2 "Authorization Code" or "Resource Owner Password" access token to the TPP (cf. paragraph 3.4.2).
- The TPP and the ASPSP have successfully processed a mutual check and authentication
- The TPP has presented its OAUTH2 "Authorization Code" or "Resource Owner Password" access token which allows the ASPSP to identify the relevant PSU and retrieve the linked PSU context (cf. paragraph 3.4.2) if any.
- The ASPSP takes into account the access token that establishes the link between the PSU and the AISP.

4.10.3. Business Flow

The AISP asks for the trusted beneficiaries list.

The ASPSP answers with a list of beneficiary details structure.

4.10.4. Request

get /trusted-beneficiaries

4.10.4.1. Query Parameters

FIELD	MULT.	DESC.
workspace	[0..1]	Workspace to be used for processing an AISP request. If not provided, the default workspace is computed from the authentication that was used for getting the OAuth2 Access Token.

4.10.5. Response

4.10.5.1. Body (application/hal+json; charset=utf-8)

FIELD				MULT.	DESC.
{responseBody}				[1..1]	HYPERMEDIA structure used for returning the list of the whitelisted beneficiaries
	beneficiaries			[1..1]	List of trusted beneficiaries
		{arrayItem}		[0..*]	Specification of a beneficiary
			workspace	[0..1]	Some ASPSP may provide different user workspaces that can be accessed by the same authenticated PSU. In this case, the AISP is able to retrieve the different pieces of account information by specifying the relevant workspace as a QUERY parameter. Identification of the workspace to be used when processing the request. If not present, the default workspace to be used is the one that is linked to the authentication processed during the OAuth2 access token request.
			identification	[1..1]	identification of the workspace to be used as an optional query parameter for some AISP queries
			label	[1..1]	textual description of the workspace as specified by the ASPSP in relationship wth the PSU
		id		[0..1]	Id of the beneficiary
		isTrusted		[0..1]	The ASPSP having not implemented the trusted beneficiaries list must not set this flag. Otherwise, the ASPSP indicates whether or not the beneficiary was registered by the PSU within the trusted beneficiaries list. • true: the beneficiary is actually a trusted beneficiary • false: the beneficiary is not a trusted beneficiary
		creditorAgent		[0..1]	See generic structure FinancialInstitutionIdentification
		creditor		[1..1]	See generic structure PartyIdentification
		creditorAccount		[0..1]	See generic structure AccountIdentification
	_links			[1..1]	links that can be used for further navigation when browsing Account Information at one account level <table><tr><th>LINK</th><th>DESCRIPTION</th></tr><tr><td>self</td><td>link to the list of trusted beneficiaries</td></tr><tr><td>accounts</td><td>link to the list of all available accounts</td></tr><tr><td>consents</td><td>link to the consents forwarding</td></tr><tr><td>endUserIdentity</td><td>link to the end-user identity</td></tr><tr><td>first</td><td>link to the first page of the beneficiaries result</td></tr><tr><td>last</td><td>link to the last page of the beneficiaries result</td></tr><tr><td>next</td><td>link to the next page of the beneficiaries result</td></tr><tr><td>prev</td><td>link to the previous page of the beneficiaries result</td></tr></table>
		self		[1..1]	See generic structure GenericLink
		accounts		[0..1]	See generic structure GenericLink
		consents		[0..1]	See generic structure GenericLink
		endUserIdentity		[0..1]	See generic structure GenericLink
		first		[0..1]	See generic structure GenericLink
		last		[0..1]	See generic structure GenericLink
		next		[0..1]	See generic structure GenericLink
		prev		[0..1]	See generic structure GenericLink

4.11. Payment coverage check request (CBPII)

4.11.1. Description

The CBPII can ask an ASPSP to check if a given amount can be covered by the liquidity that is available on a PSU cash account or payment card.

4.11.2. Prerequisites

- The TPP was registered by the Registration Authority for the CBPII role
- The TPP and the PSU have a contract that was registered by the ASPSP
    - At this step, the ASPSP has delivered an "Authorization Code", a "Resource Owner Password" or a "Client Credential" OAUTH2 access token to the TPP (cf. paragraph 3.4.2).
    - Each ASPSP has to implement either the "Authorization Code"/"Resource Owner Password" or the "Client Credential" OAUTH2 access token model.
    - Doing this, it will edit the [security] section on this path in order to specify which model it has chosen
- The TPP and the ASPSP have successfully processed a mutual check and authentication
- The TPP has presented its OAUTH2 "Authorization Code", "Resource Owner Password" or "Client Credential" access token which allows the ASPSP to identify the relevant PSU.

4.11.3. Business flow

The CBPII requests the ASPSP for a payment coverage check against either a bank account or a card primary identifier.

This request cannot handle exchange rate and must be specified with the relevant account currency.

The ASPSP answers with a structure embedding the original request and the result as a Boolean.

4.11.4. Request

post /funds-confirmations

4.11.4.1. Body (application/json)

FIELD	MULT.	DESC.
{requestBody}	[1..1]	Payment coverage request structure. The request must rely either on a cash account or a payment card. The [instructedAmount] property is the payment account on wchich the request is processed. This amount must be positive. Amounts must always be set as positive values.
paymentCoverageRequestId	[1..1]	Identification of the payment Coverage Request
payee	[0..1]	The merchant where the card is accepted as information to the PSU.
instructedAmount	[0..1]	See generic structure AmountType
accountId	[1..1]	See generic structure AccountIdentification

4.11.5. Response

4.11.5.1. Body (application/hal+json; charset=utf-8)

FIELD	MULT.	DESC.
{responseBody}	[1..1]	HYPERMEDIA structure used for returning the payment coverage report to the CBPII
request	[1..1]	Payment coverage request structure. The request must rely either on a cash account or a payment card. The [instructedAmount] property is the payment account on wihich the request is processed. This amount must be positive. Amounts must always be set as positive values.
paymentCoverageRequestId	[1..1]	Identification of the payment Coverage Request
payee	[0..1]	The merchant where the card is accepted as information to the PSU.
instructedAmount	[0..1]	See generic structure AmountType
accountId	[1..1]	See generic structure AccountIdentification
result	[1..1]	Result of the coverage check : • true: the payment can be covered • false: the payment cannot be covered
_links	[1..1]	links that can be used for further navigation to post another coverage request.
self	[1..1]	See generic structure GenericLink

4.12. Payment request initiation (PISP)

4.12.1. Description

The following use cases can be applied:

- payment request on behalf of a merchant
- transfer request on behalf of the account's owner
- standing-order request on behalf of the account's owner

4.12.1.1. Data content

A payment request or a transfer request might embed several payment instructions having

- one single execution date or multiple execution dates
- one single beneficiary or multiple beneficiaries

Having at the same time multiple beneficiaries and multiple execution date might not be a relevant business case, although it is technically allowed.

Each implementation will have to specify which business use cases are actually supported.

A standing order request must embed one single payment instruction and must address one single beneficiary.

- The beneficiary must be set at the payment level
- The standing order specific characteristics (start date, periodicity…) must be set at the instruction level

Payment request can rely for execution on different payment instruments:

- SEPA Credit Transfer (SCT)
- Domestic Credit Transfer in a non-Euro-currency
- International payment

The following table indicates how to use the different fields, depending on the payment instrument:

STRUCTURE	SEPA PAYMENTS	DOMESTIC PAYMENTS IN NON-EURO CURRENCY	INTERNATIONAL PAYMENTS
PaymentTypeInformation/InstructionPriority (payment level)	"HIGH" for high-priority SCT, "NORM" for other SCT, Ignored for SCTInst	"HIGH" for high-priority CT, "NORM" or ignored for other CT	"HIGH" for high-priority payments, "NORM" or ignored for other payments
PaymentTypeInformation/ServiceLevel (payment level)	"SEPA" for SCT and SCTInst	ignored	ignored

STRUCTURE	SEPA PAYMENTS	DOMESTIC PAYMENTS IN NON-EURO CURRENCY	INTERNATIONAL PAYMENTS
PaymentTypeInformation/CategoryPurpose (payment level)	"CASH" for transfer request, "DVPM" for payment request on behalf of a merchant		"CORT" for generic international payments, "INTC" for transfers between two branches within the same company, "TREA" for treasury transfers
PaymentTypeInformation/LocalInstrument (payment level)	"INST" pour les SCTInst, otherwise ignored	Ignored or valued with ISO20022 external code	
RequestedExecutionDate (at transaction level)	Optional. if set by the PISP, it indicates the date on debit on the ordering party account. If not set by the PISP, this requests the ASPSP to execute the payment instruction as soon as possible.		
EndToEndIdentification (at transaction level)	Mandatory	Optional	
UltimateDebtor (at transaction level)	Optional		
UltimateCreditor (at transaction level)	Optional		
InstructedAmount (at transaction level)	Mandatory		Mandatory and exclusive use of one of these structures
EquivalentAmount (at transaction level)	Not used		Mandatory and exclusive use of one of these structures
ChargeBearer (at transaction level)	"SLEV" for SCT and SCTInst	"SLEV" or "SHAR"	"CRED", "DEBT" or "SHAR"
Purpose (at transaction level)	Optional		
RegulatoryReportingCode (at transaction level)	Not used	Mandatory (possibly multiple values)	
InstructionForCreditorAgent (at transaction level)	Not used		Optional (possibly multiple values)
RemittanceInformation	Mandatory. Structured or unstructured, depending on the local rules and constraints		
Debtor (at payment level)	Mandatory, 2 address lines only	Mandatory, 4 address lines only	Mandatory. Complete strustured address can be used.
DebtorAccount (at payment level)	Optional	Optional. Account currency may be specified	
DebtorAgent (at payment level)	Optional		
Creditor (at transaction level)	Mandatory, 2 address lines only	Mandatory, 4 address lines only	Mandatory. Complete strustured address can be used. Date and place of birth must be specified
CreditorAccount (at transaction level)	Mandatory	Mandatory. Account currency may be specified	
CreditorAgent (at transaction level)	Optional		
ClearingSystemId et ClearingSystemMemberId (at transaction level)	Not used		Optional
IntermediaryAgent et IntermediaryAgentAccount (at transaction level)	Not used	Optional	

4.12.1.2. Prerequisites for all use cases

- The TPP was registered by the Registration Authority for the PISP role
- The TPP was provided with an OAUTH2 "Client Credential" access token by the ASPSP (cf. paragraph 3.4.2).
- The TPP and the ASPSP have successfully processed a mutual check and authentication
- The TPP has presented its "OAUTH2 Client Credential" access token

4.12.1.3. Business flow

Payment Request use case

The PISP forwards a payment request on behalf of a merchant.

The PSU buys some goods or services on an e-commerce website held by a merchant. Among other payment method, the merchant suggests the use of a PISP service. As there is obviously a contract between the merchant and the PISP, there is

no need for the ASPSP to check the existence of such a contract between the PSU and this PISP to initiate the process.

Case of the PSU that chooses to use the PISP service:

- The merchant forwards the requested payment characteristics to the PISP and redirects the PSU to the PISP portal.
- The PISP requests from the PSU which ASPSP will be used.
- The PISP prepares the Payment Request and sends this request to the ASPSP.
- The Request can embed several payment instructions having different requested execution date.
- The beneficiary, as being the merchant, is set at the payment level.

Transfer Request use case

The PISP forwards a transfer request on behalf of the owner of the account.

- The PSU provides the PISP with all information needed for the transfer.
- The PISP prepares the Transfer Request and sends this request to the relevant ASPSP that holds the debtor account.
- The Request can embed several payment instructions having different beneficiaries.
- The requested execution date, as being the same for all instructions, is set at the payment level.

Standing Order Request use case

The PISP forwards a Standing Order request on behalf of the owner of the account.

- The PSU provides the PISP with all information needed for the Standing Order.
- The PISP prepares the Standing Order Request and sends this request to the relevant ASPSP that holds the debtor account.
- The Request embeds one single payment instruction with
  - The requested execution date of the first occurrence
  - The requested execution frequency of the payment in order to compute further execution dates
  - An execution rule to handle cases when the computed execution dates cannot be processed (e.g. bank holydays)
  - An optional end date for closing the standing Order

4.12.2. Request

post /payment-requests

4.12.2.1. Query Parameters

FIELD	MULT.	DESC.
ui_locales	[0..1]	End-User's preferred languages and scripts for the user interface, represented as a space-separated list of BCP47 [RFC5646] language tag values, ordered by preference.

4.12.2.2. Body (application/json)

FIELD	MULT.	DESC.
{requestBody}	[1..1]	See generic structure PaymentRequestResource

4.12.3. Response

4.12.3.1. Body (application/hal+json; charset=utf-8)

FIELD			MULT.	DESC.
{responseBody}			[1..1]	Data forwarded by the ASPSP top the PISP after creation of the Payment Request resource creation The ASPSP, based on the authentication approaches proposed by the PISP, choose the one that it can processed, in respect with the preferences and constraints of the PSU and indicates in this field which approach was chosen. It may happen that the ASPSP considers that, in case of payment cancellation request, there is no need for authentication and will then return "NONE".
	appliedAuthenticationApproach		[0..1]	Authentication approaches that can be applied. REDIRECT: the PSU is redirected by the TPP to the ASPSP which processes identification and authentication DECOUPLED: the TPP identifies the PSU and forwards the identification to the ASPSP which processes the authentication through a decoupled device NONE: there is no need for the PSU to authenticate
	nonce		[0..1]	Challenge to be sent in order to avoid replay of the authentication process.
	_links		[0..1]	links that can be used for further navigation, especially in REDIRECT approach {{LINK_TABLE}}
		consentApproval	[0..1]	See generic structure GenericLink

Inner table for _links:

LINK	DESCRIPTION
consentApproval	URL to be used by the PISP in order to start the ASPSP authentication and consent management process

4.13. Retrieval of a payment request (PISP)

4.13.1. Description

The following use cases can be applied:

- retrieval of a payment request on behalf of a merchant
- retrieval of a transfer request on behalf of the account's owner
- retrieval of a standing-order request on behalf of the account's owner

The PISP has previously sent a Request through a POST command.

- The ASPSP has registered the Request, updated if necessary the relevant identifiers in order to avoid duplicates and returned the location of the updated Request.
- The PISP gets the Request that was updated with the resource identifiers, and eventually the status of the Payment/Transfer Request and the status of the subsequent credit transfer.

4.13.2. Prerequisites

- The TPP was registered by the Registration Authority for the PISP role
- The TPP was provided with an OAUTH2 "Client Credential" access token by the ASPSP (cf. paragraph 3.4.2).
- The TPP has previously posted a Request which was saved by the ASPSP (cf. paragraph 4.5.3)
  - The ASPSP has answered with a location link to the saved Payment/Transfer Request (cf. paragraph 4.5.4)
- The TPP and the ASPSP have successfully processed a mutual check and authentication
- The TPP has presented its "OAUTH2 Client Credential" access token

4.13.3. Business flow

The PISP asks to retrieve the Payment/Transfer Request that was saved by the ASPSP. The PISP uses the location link provided by the ASPSP in response of the posting of this request.

The ASPSP returns the previously posted Payment/Transfer Request which is enriched with:

- The resource identifiers given by the ASPSP
- The status information of the Payment Request and of the subsequent credit transfer

The status information must be available during at least 30 calendar days after the posting of the Payment Request. However, the ASPSP may increase this availability duration, based on its own rules.

4.13.4. Request

get /payment-requests/{paymentRequestResourceId}

4.13.4.1. Path Parameters

FIELD	MULT.	DESC.
paymentRequestResourceId	[1..1]	Identification of the Payment Request Resource

4.13.5. Response

4.13.5.1. Body (application/hal+json; charset=utf-8)

FIELD			MULT.	DESC.
{responseBody}			[1..1]	HYPERMEDIA structure used for returning the original Payment Request to the PISP
	paymentRequest		[1..1]	See generic structure PaymentRequestResource
	_links		[1..1]	links that can be used for further navigation when having post a Payment Request in order to get the relevant status report. <table><tr><td>**LINK**</td><td>DESCRIPTION</td></tr><tr><td>**request**</td><td>This link provides the payment-request URL for retrieving or modifying</td></tr><tr><td>**confirmation**</td><td>This link shall not be provided when the confirmation was already posted.</td></tr><tr><td>**transactions**</td><td>The ASPSP might choose to provide the relevant transactions of a Payment Request through a specific link</td></tr></table>
		request	[0..1]	See generic structure GenericLink
		confirmation	[0..1]	See generic structure GenericLink
		transactions	[0..1]	See generic structure GenericLink

4.14. Cancellation of a Payment/Transfer Request (PISP)

4.14.1. Description

The PISP sent a Payment/Transfer Request through a POST command.

The ASPSP registered the Payment/Transfer Request, updated if necessary the relevant identifiers in order to avoid duplicates and returned the location of the updated Request.

The PISP got the Payment/Transfer Request that was updated with the resource identifiers, and eventually the status of the Payment/Transfer Request and the status of the subsequent credit transfer.

The PISP requests for the payment cancellation (global cancellation) or for some payment instructions cancellation (partial cancellation)

No other modification of the Payment/Transfer Request is allowed.

4.14.2. Prerequisites

- The TPP was registered by the Registration Authority for the PISP role
- The TPP was provided with an OAUTH2 "Client Credential" access token by the ASPSP (cf. paragraph 3.4.2).
- The TPP previously posted a Payment/Transfer Request which was saved by the ASPSP (cf. paragraph 4.5.3)
  - The ASPSP answered with a location link to the saved Payment/Transfer Request (cf. paragraph 4.5.4)
  - The PISP retrieved the saved Payment/Transfer Request (cf. paragraph 4.5.4)
- The TPP and the ASPSP successfully processed a mutual check and authentication
- The TPP presented its "OAUTH2 Client Credential" access token.
- The TPP presented the payment/transfer request.
- The PSU was successfully authenticated.

4.14.3. Business flow

4.14.3.1. Payment/Transfer request cancellation circumstances

The cancellation of a Payment/Transfer request might be triggered by the PISP upon request of the PSU.

It can also be triggered by the PISP itself in case of error or fraud detection.

Since the consequence of the cancellation will be a rejection of the Payment/Transfer request globally or limited to some of its instructions, the modification of the payment request will focus on setting the relevant status to the value "CANC".

This "CANC" status must however be explained through a reason code that can be set with the following values:

REASON	DESCRIPTION
DS02	The PSU himsef/herself ordered the cancellation.
DUPL	The PISP requested the cancellation for a duplication of a previous Payment/Transfer request
FRAD	The PISP requested the cancellation for fraudulent origin of the Payment/Transfer request
TECH	The PISP requested the cancellation for a technical issue on its side

4.14.3.2. Payment/Transfer request cancellation level

- Case of a payment with multiple instructions or a standing order, the PISP asks to cancel the whole Payment/Transfer or Standing Order Request including all non-executed payment instructions by setting the [paymentInformationStatus] and the relevant [statusReasonInformation] at payment level.
- Case of a payment with multiple instructions, the PISP asks to cancel one or several payment instructions by setting the [transactionStatus] and the relevant [statusReasonInformation] at each relevant instruction level.

The cancellation request might need a PSU authentication before committing, especially when the request is PSU-driven. In other cases, the ASPSP may consider that a PSU authentication is irrelevant.

In order to meet all possibilities, the cancellation request must nevertheless include:

- The specification of the authentication approaches that are supported by the PISP (any combination of "REDIRECT" and "DECOUPLED" values).
- In case of possible REDIRECT or DECOUPLED authentication approach, one or two call-back URLs to be used by the ASPSP at the finalisation of the authentication and consent process :
    - The first call-back URL will be called by the ASPSP if the Transfer Request is processed without any error or rejection by the PSU
    - The second call-back URL is to be used by the ASPSP in case of processing error or rejection by the PSU. Since this second URL is optional, the PISP might not provide it. In this case, the ASPSP will use the same URL for any processing result.
    - Both call-back URLS must be used in a TLS-secured request.
- In case of possible "DECOUPLED" approach, a PSU identifier that can be processed by the ASPSP for PSU recognition.
- The ASPSP saves the updated Payment/Transfer Request and answers to the PISP. The answer embeds
    - The specification of the chosen authentication approach taking into account both the PISP and the PSU capabilities.

> o In case of chosen REDIRECT authentication approach, the URL to be used by the PISP for redirecting the PSU in order to perform an authentication.

Case of the PSU neither gives nor denies his/her consent, the Cancellation Request shall expire and is then rejected to the PISP. The expiration delay is specified by each ASPSP.

If any modification of the payment request other than cancellation is applied by the PISP, the ASPSP must reject the request with HTTP403 without modifying the payment request resource.

There is no need for the PISP to post a confirmation of the cancellation request.

4.14.4. Request

put /payment-requests/{paymentRequestResourceId}

4.14.4.1. Path Parameters

FIELD	MULT.	DESC.
paymentRequestResourceId	[1..1]	Identification of the Payment Request Resource

4.14.4.2. Body (application/json)

FIELD	MULT.	DESC.
{requestBody}	[1..1]	See generic structure PaymentRequestResource

4.14.5. Response

4.14.5.1. Body (application/hal+json; charset=utf-8)

FIELD			MULT.	DESC.
{responseBody}			[1..1]	Data forwarded by the ASPSP top the PISP after creation of the Payment Request resource creation The ASPSP, based on the authentication approaches proposed by the PISP, choose the one that it can processed, in respect with the preferences and constraints of the PSU and indicates in this field which approach was chosen. It may happen that the ASPSP considers that, in case of payment cancellation request, there is no need for authentication and will then return "NONE".
	appliedAuthenticationApproach		[0..1]	Authentication approaches that can be applied. REDIRECT: the PSU is redirected by the TPP to the ASPSP which processes identification and authentication DECOUPLED: the TPP identifies the PSU and forwards the identification to the ASPSP which processes the authentication through a decoupled device NONE: there is no need for the PSU to authenticate
	nonce		[0..1]	Challenge to be sent in order to avoid replay of the authentication process.
	_links		[0..1]	links that can be used for further navigation, especially in REDIRECT approach | LINK	DESCRIPTION
---	---
consentApproval	URL to be used by the PISP in order to start the ASPSP authentication and consent management process	
		consentApproval	[0..1]	See generic structure GenericLink

4.15. Confirmation of a payment request using an OAUTH2 Authorization code grant (PISP)

4.15.1. Description

The PISP confirms one of the following requests or modifications:

- payment request on behalf of a merchant
- transfer request on behalf of the account's owner
- standing-order request on behalf of the account's owner

The ASPSP answers with a status of the relevant request and the subsequent Credit Transfer.

4.15.2. Prerequisites

- The TPP was registered by the Registration Authority for the PISP role
- The TPP was provided with an OAUTH2 "Client Credential" access token by the ASPSP (cf. paragraph 3.4.2).
- The TPP has previously posted a Request which was saved by the ASPSP (cf. paragraph 4.5.3)
- The ASPSP has answered with a location link to the saved Payment Request (cf. paragraph 4.5.4)
- The TPP has retrieved the saved request in order to get the relevant resource Ids (cf. paragraph 4.6).
- The PSU was authenticated by the ASPSP through an OAUTH2 authorization code grant flow (REDIRECT approach) and the PISP got the relevant token
- The TPP and the ASPSP have successfully processed a mutual check and authentication
- The TPP has presented its "OAUTH2 Authorization Code" access token

4.15.3. Business flow

Once the PSU was authenticated through an OAUTH2 authorization code grant flow (REDIRECT approach), it is the due to the PISP to confirm the Request to the ASPSP in order to complete the process flow.

The ASPSP must wait for confirmation before executing the subsequent Credit Tranfer.

Any further confirmation by the PISP on the same Payment-Request must be ignored.

4.15.4. Request

4.15.4.1. Path Parameters

FIELD	MULT.	DESC.
paymentRequestResourceId	[1..1]	Identification of the Payment Request Resource

4.15.4.2. Body (application/json)

FIELD	MULT.	DESC.
{requestBody}	[1..1]	Confirmation request resource
nonce	[0..1]	Challenge to be sent in order to avoid replay of the authentication process.
psuAuthenticationFactor	[0..1]	authentication factor forwarded by the TPP to the ASPSP in order to fulfil the strong customer authentication process

4.15.5. Response

4.15.5.1. Body (application/hal+json; charset=utf-8)

FIELD	MULT.	DESC.
{responseBody}	[1..1]	HYPERMEDIA structure used for returning the original Payment Request to the PISP
paymentRequest	[1..1]	See generic structure PaymentRequestResource
_links	[1..1]	links that can be used for further navigation when having post a Payment Request in order to get the relevant status report. | LINK	DESCRIPTION
---	---
request	This link provides the payment-request URL for retrieving or modifying
confirmation	This link shall not be provided when the confirmation was already posted.
transactions	The ASPSP might choose to provide the relevant transactions of a Payment Request through a specific link	
request	[0..1]	See generic structure GenericLink
confirmation	[0..1]	See generic structure GenericLink
transactions	[0..1]	See generic structure GenericLink

4.16. Retrieval of the Credit Transfert Transactions that were processed for a given payment request (PISP)

4.16.1. Description

The PISP gets the execution history of a payment request.

This entry-point is an alternative to the retrieval of the history through the retrieval of the payment request.

So, each ASPSP may choose or not to implement this entry-point.

4.16.2. Prerequisites

- The TPP was registered by the Registration Authority for the PISP role
- The TPP has previously posted a Standing Order Request which was saved by the ASPSP (cf. paragraph 4.5.3)
  - The ASPSP has answered with a location link to the saved Payment Request (cf. paragraph 4.5.4)
  - The TPP has retrieved the saved request in order to get the relevant resource Ids (cf. paragraph 4.6).
- The TPP and the ASPSP have successfully processed a mutual check and authentication
- The TPP was provided with an OAUTH2 "Client Credential" access token by the ASPSP (cf. paragraph 3.4.2).
- The TPP presented its "OAUTH2 Client Credential" access token.

4.16.3. Business flow

The PISP post the history request.

The ASPSP answers with the list of relevant transactions.

4.16.4. Request

get /payment-requests/{paymentRequestResourceId}/transactions

4.16.4.1. Path Parameters

FIELD	MULT.	DESC.
paymentRequestResourceId	[1..1]	Identification of the Payment Request Resource

4.16.5. Response

4.16.5.1. Body (application/hal+json; charset=utf-8)

FIELD			MULT.	DESC.
{responseBody}			[1..1]	HYPERMEDIA structure used for returning the transactions of a given payment request to the PISP
	creditTransferTransaction		[1..1]	ISO20022: Payment processes required to transfer cash from the debtor to the creditor. API: Each ASPSP will specify a maxItems value for this field taking into accounts its specificities about payment request handling
		{arrayItem}	[0..*]	See generic structure CreditTransferTransactionResource
	_links		[1..1]	links that can be used for further navigation when retrieving the transaction of a payment request. **LINK / DESCRIPTION table:** **self** — link to the transactions **parent** — This link shall point to the parent payment request. **first** — link to the first page of the transactions result **last** — link to the last page of the transactions result **next** — link to the next page of the transactions result **prev** — link to the previous page of the transactions result
		self	[0..1]	See generic structure GenericLink
		parent	[0..1]	See generic structure GenericLink
		first	[0..1]	See generic structure GenericLink
		last	[0..1]	See generic structure GenericLink
		next	[0..1]	See generic structure GenericLink
		prev	[0..1]	See generic structure GenericLink

The _links cell contains the following sub-table:

LINK	DESCRIPTION
self	link to the transactions
parent	This link shall point to the parent payment request.
first	link to the first page of the transactions result
last	link to the last page of the transactions result
next	link to the next page of the transactions result
prev	link to the previous page of the transactions result