

Payment Initiation APIs

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1. Overview

Draft Swagger specification for Payment Initiation

1.1. Version information

Version : v1.0-rc2

1.2. Contact information

Contact : Craig Greenhouse

Contact Email : craig.greenhouse@openbanking.org.uk

1.3. License information

License : open-licence

License URL : <https://www.openbanking.org.uk/open-licence>

Terms of service : <https://www.openbanking.org.uk/terms>

1.4. URI scheme

BasePath : /open-banking

Schemes : HTTPS

1.5. Tags

- Payments : Payments endpoints

1.6. Produces

- `application/json`

2. Paths

2.1. Create a payment submission

POST /payment-submissions

2.1.1. Description

Submit a previously setup payment

2.1.2. Parameters

Type	Name	Description	Schema
Header	x-idempotency-key <i>required</i>	Every request will be processed only once per x-idempotency-key. The Idempotency Key will be valid for 24 hours.	string

2.1.3. Body parameter

Setup a single immediate payment

Name : body

Flags : required

Name	Schema
Data <i>required</i>	Payment Submission

Payment Submission

Name	Description	Schema
Initiation <i>required</i>	The Initiation payload is sent by the initiating party to the ASPSP. It is used to request movement of funds from the debtor account to a creditor.	Initiation
PaymentId <i>required</i>	OB: Unique identification as assigned by the ASPSP to uniquely identify the payment setup resource. Length : 1 - 40	string

Initiation

Name	Description	Schema
CreditorAccount <i>required</i>	Unambiguous identification of the account of the creditor to which a credit entry will be posted as a result of the payment transaction.	Creditor Account
CreditorAgent <i>required</i>	Financial institution servicing an account for the creditor.	Creditor Agent

Name	Description	Schema
DebtorAccount <i>optional</i>	Unambiguous identification of the account of the debtor to which a debit entry will be made as a result of the transaction.	Debtor Account
DebtorAgent <i>optional</i>	Financial institution servicing an account for the debtor.	DebtorAgent
EndToEndIdentification <i>required</i>	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. Usage: The end-to-end identification can be used for reconciliation or to link tasks relating to the transaction. It can be included in several messages related to the transaction. OB: The Faster Payments Scheme can only access 31 characters for the EndToEndIdentification field. Length : 1 - 35	string
InstructedAmount <i>required</i>	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.	InstructedAmount
InstructionIdentification <i>required</i>	Unique identification as assigned by an instructing party for an instructed party to unambiguously identify the instruction. Usage: the instruction identification is a point to point reference that can be used between the instructing party and the instructed party to refer to the individual instruction. It can be included in several messages related to the instruction. Length : 1 - 35	string
RemittanceInformation <i>optional</i>	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.	Remittance Information

Creditor Account

Name	Description	Schema
Identification <i>required</i>	Identification assigned by an institution to identify an account. This identification is known by the account owner. Length : 1 - 34	string
Name <i>required</i>	Name of the account, as assigned by the account servicing institution, in agreement with the account owner in order to provide an additional means of identification of the account. Usage: The account name is different from the account owner name. The account name is used in certain user communities to provide a means of identifying the account, in addition to the account owner's identity and the account number. Length : 1 - 70	string

Name	Description	Schema
SchemeName <i>required</i>	Name of the identification scheme, in a coded form as published in an external list.	enum (BBAN, IBAN)
SecondaryIdentification <i>optional</i>	Identification assigned by an institution to identify an account. This identification is known by the account owner. Length : 1 - 34	string

Creditor Agent

Name	Description	Schema
Identification <i>required</i>	Unique and unambiguous identification of a person. Length : 1 - 35	string
SchemeName <i>required</i>	Name of the identification scheme, in a coded form as published in an external list.	enum (BICFI, UKSortCode)

Debtor Account

Name	Description	Schema
Identification <i>required</i>	Identification assigned by an institution to identify an account. This identification is known by the account owner. Length : 1 - 34	string
Name <i>optional</i>	Name of the account, as assigned by the account servicing institution, in agreement with the account owner in order to provide an additional means of identification of the account. Usage: The account name is different from the account owner name. The account name is used in certain user communities to provide a means of identifying the account, in addition to the account owner's identity and the account number. Length : 1 - 70	string
SchemeName <i>required</i>	Name of the identification scheme, in a coded form as published in an external list.	enum (BBAN, IBAN)
SecondaryIdentification <i>optional</i>	Identification assigned by an institution to identify an account. This identification is known by the account owner. Length : 1 - 34	string

DebtorAgent

Name	Description	Schema
Identification <i>required</i>	Unique and unambiguous identification of a person. Length : 1 - 35	string
SchemeName <i>required</i>	Name of the identification scheme, in a coded form as published in an external list.	enum (BICFI, UKSortCode)

InstructedAmount

Name	Description	Schema
Amount <i>required</i>	Pattern : "^-?\d{1,13}\.\d{1,5}\$"	string
Currency <i>required</i>	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. Pattern : "[A-Z]{3}"	string

Remittance Information

Name	Description	Schema
Reference <i>optional</i>	Unique and unambiguous identification of a person. Length : 1 - 35	string
Unstructured <i>optional</i>	Name of the identification scheme, in a coded form as published in an external list. Length : 1 - 140	string

2.1.4. Responses

HTTP Code	Description	Schema
201	Payment submit resource successfully created	Payment Submit POST 201 Response
400	Bad Request	No Content
401	Unauthorized	No Content
403	Forbidden	No Content
409	Conflict	No Content
500	Internal Server Error	No Content

Payment Submit POST 201 Response

Name	Description	Schema
CreationDateTime <i>required</i>	Date and time at which the resource was created.	string (date-time)
Links <i>required</i>	Link URIs relevant to the payload	Links
Meta <i>required</i>	Meta Data Relevant to the payload	Meta
PaymentId <i>required</i>	OB: Unique identification as assigned by the ASPSP to uniquely identify the payment setup resource. Length : 1 - 40	string

Name	Description	Schema
PaymentSubmissionId <i>required</i>	OB: Unique identification as assigned by the ASPSP to uniquely identify the payment submission resource. Length : 1 - 40	string
Status <i>optional</i>	Specifies the status of the payment submission resource.	enum (AcceptedSettlementCompleted, AcceptedSettlementInProcess, Pending, Rejected)

Links

Name	Schema
first <i>optional</i>	string (uri)
last <i>optional</i>	string (uri)
next <i>optional</i>	string (uri)
prev <i>optional</i>	string (uri)
self <i>required</i>	string (uri)

Meta

Name	Schema
total-pages <i>optional</i>	integer (int32)

2.1.5. Consumes

- `application/json`

2.1.6. Produces

- `application/json`

2.1.7. Tags

- Payments

2.1.8. Security

Type	Name	Scopes
oauth2	PSUOAuth2Security	payment

2.2. Create a single immediate payment

POST /payments

2.2.1. Description

Create a single immediate payment

2.2.2. Parameters

Type	Name	Description	Schema
Header	x-fapi-customer-ip-address <i>optional</i>	The PSU's IP address if the PSU is currently logged in with the TPP.	string
Header	x-fapi-customer-last-logged-time <i>optional</i>	The time when the PSU last logged in with the TPP.	string
Header	x-fapi-financial-id <i>required</i>	The unique id of the ASPSP to which the request is issued. The unique id will be issued by OB.	string
Header	x-fapi-interaction-id <i>optional</i>	An RFC4122 UID used as a correlation id.	string
Header	x-idempotency-key <i>required</i>	Every request will be processed only once per x-idempotency-key. The Idempotency Key will be valid for 24 hours.	string

2.2.3. Body parameter

Setup a single immediate payment

Name : body

Flags : required

Name	Schema
Data <i>required</i>	Payment Setup
Risk <i>required</i>	Risk

Payment Setup

Name	Schema
Initiation <i>required</i>	Initiation

Initiation

Name	Description	Schema
CreditorAccount <i>required</i>	Unambiguous identification of the account of the creditor to which a credit entry will be posted as a result of the payment transaction.	Creditor Account
CreditorAgent <i>required</i>	Financial institution servicing an account for the creditor.	Creditor Agent
DebtorAccount <i>optional</i>	Unambiguous identification of the account of the debtor to which a debit entry will be made as a result of the transaction.	Debtor Account
DebtorAgent <i>optional</i>	Financial institution servicing an account for the debtor.	Debtor Agent
EndToEndIdentification <i>required</i>	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. Usage: The end-to-end identification can be used for reconciliation or to link tasks relating to the transaction. It can be included in several messages related to the transaction. OB: The Faster Payments Scheme can only access 31 characters for the EndToEndIdentification field. Length : 1 - 35	string
InstructedAmount <i>required</i>	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.	InstructedAmount
InstructionIdentification <i>required</i>	Unique identification as assigned by an instructing party for an instructed party to unambiguously identify the instruction. Usage: the instruction identification is a point to point reference that can be used between the instructing party and the instructed party to refer to the individual instruction. It can be included in several messages related to the instruction. Length : 1 - 35	string
RemittanceInformation <i>optional</i>	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.	Remittance Information

Creditor Account

Name	Description	Schema
Identification <i>required</i>	Identification assigned by an institution to identify an account. This identification is known by the account owner. Length : 1 - 34	string
Name <i>required</i>	Name of the account, as assigned by the account servicing institution, in agreement with the account owner in order to provide an additional means of identification of the account. Usage: The account name is different from the account owner name. The account name is used in certain user communities to provide a means of identifying the account, in addition to the account owner's identity and the account number. Length : 1 - 70	string
SchemeName <i>required</i>	Name of the identification scheme, in a coded form as published in an external list.	enum (BBAN, IBAN)
SecondaryIdentification <i>optional</i>	Identification assigned by an institution to identify an account. This identification is known by the account owner. Length : 1 - 34	string

Creditor Agent

Name	Description	Schema
Identification <i>required</i>	Unique and unambiguous identification of a person. Length : 1 - 35	string
SchemeName <i>required</i>	Name of the identification scheme, in a coded form as published in an external list.	enum (BICFI, UKSortCode)

Debtor Account

Name	Description	Schema
Identification <i>required</i>	Identification assigned by an institution to identify an account. This identification is known by the account owner. Length : 1 - 34	string
Name <i>optional</i>	Name of the account, as assigned by the account servicing institution, in agreement with the account owner in order to provide an additional means of identification of the account. Usage: The account name is different from the account owner name. The account name is used in certain user communities to provide a means of identifying the account, in addition to the account owner's identity and the account number. Length : 1 - 70	string
SchemeName <i>required</i>	Name of the identification scheme, in a coded form as published in an external list.	enum (BBAN, IBAN)
SecondaryIdentification <i>optional</i>	Identification assigned by an institution to identify an account. This identification is known by the account owner. Length : 1 - 34	string

DebtorAgent

Name	Description	Schema
Identification <i>required</i>	Unique and unambiguous identification of a person. Length : 1 - 35	string
SchemeName <i>required</i>	Name of the identification scheme, in a coded form as published in an external list.	enum (BICFI, UKSortCode)

InstructedAmount

Name	Description	Schema
Amount <i>required</i>	Pattern : "^-?\d{1,13}\.\d{1,5}\$"	string
Currency <i>required</i>	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. Pattern : "[A-Z]{3}"	string

Remittance Information

Name	Description	Schema
Reference <i>optional</i>	Unique and unambiguous identification of a person. Length : 1 - 35	string
Unstructured <i>optional</i>	Name of the identification scheme, in a coded form as published in an external list. Length : 1 - 140	string

Risk

Name	Description	Schema
DeliveryAddress <i>optional</i>	Information that locates and identifies a specific address, as defined by postal services or in free format text.	DeliveryAddress
MerchantCategoryCode <i>optional</i>	Category code conform to ISO 18245, related to the type of services or goods the merchant provides for the transaction Length : 3 - 4	string
MerchantCustomerIdentification <i>optional</i>	The unique customer identifier of the PSU with the merchant. Length : 1 - 70	string
PaymentContextCode <i>optional</i>	Specifies the payment context	enum (BillPayment, EcommerceGoods, EcommerceServices, Other, PersonToPerson)

DeliveryAddress

Name	Description	Schema
AddressLine <i>optional</i>	Information that locates and identifies a specific address, as defined by postal services, that is presented in free format text.	< string > array
BuildingNumber <i>optional</i>	Number that identifies the position of a building on a street. Length : 1 - 16	string
Country <i>required</i>	Nation with its own government, occupying a particular territory. Pattern : "[A-Z]{2}"	string
CountrySubDivision <i>optional</i>	Identifies a subdivision of a country, for instance state, region, county.	< string > array
PostCode <i>optional</i>	Identifier consisting of a group of letters and/or numbers that is added to a postal address to assist the sorting of mail Length : 1 - 16	string
StreetName <i>optional</i>	Name of a street or thoroughfare Length : 1 - 70	string
TownName <i>required</i>	Name of a built-up area, with defined boundaries, and a local government. Length : 1 - 35	string

2.2.4. Responses

HTTP Code	Description	Schema
201	Payment setup resource successfully created	Payment setup POST response
400	Bad Request	No Content
401	Unauthorized	No Content
403	Forbidden	No Content
409	Conflict	No Content
500	Internal Server Error	No Content

Payment setup POST response

Name	Description	Schema
Data <i>required</i>	Reflection of The Main Data Payload, with Created Resource ID, Status and Timestamp	Payment Setup Response
Links <i>required</i>	Link URIs relevant to the payload	Links
Meta <i>required</i>	Meta Data Relevant to the payload	Meta

Name	Description	Schema
Risk <i>required</i>	Reflection of POSTed Risk profile	Risk

Payment Setup Response

Name	Description	Schema
CreationDateT ime <i>required</i>	Date and time at which the resource was created.	string (date-time)
Initiation <i>required</i>	The Initiation payload is sent by the initiating party to the ASPSP. It is used to request movement of funds from the debtor account to a creditor.	Initiation
PaymentId <i>required</i>	OB: Unique identification as assigned by the ASPSP to uniquely identify the payment setup resource. Length : 1 - 40	string
Status <i>optional</i>	Specifies the status of the payment resource.	enum (AcceptedCustomerP rofile, AcceptedTechnicalV alidation, Pending, Rejected)

Initiation

Name	Description	Schema
CreditorAccou nt <i>required</i>	Unambiguous identification of the account of the creditor to which a credit entry will be posted as a result of the payment transaction.	Creditor Account
CreditorAgent <i>required</i>	Financial institution servicing an account for the creditor.	Creditor Agent
DebtorAccoun t <i>optional</i>	Unambiguous identification of the account of the debtor to which a debit entry will be made as a result of the transaction.	Debtor Account
DebtorAgent <i>optional</i>	Financial institution servicing an account for the debtor.	DebtorAgent
EndToEndIde ntification <i>required</i>	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. Usage: The end-to-end identification can be used for reconciliation or to link tasks relating to the transaction. It can be included in several messages related to the transaction. OB: The Faster Payments Scheme can only access 31 characters for the EndToEndIdentification field. Length : 1 - 35	string

Name	Description	Schema
InstructedAmount <i>required</i>	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.	InstructedAmount
InstructionIdentification <i>required</i>	Unique identification as assigned by an instructing party for an instructed party to unambiguously identify the instruction. Usage: the instruction identification is a point to point reference that can be used between the instructing party and the instructed party to refer to the individual instruction. It can be included in several messages related to the instruction. Length : 1 - 35	string
RemittanceInformation <i>optional</i>	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.	Remittance Information

Creditor Account

Name	Description	Schema
Identification <i>required</i>	Identification assigned by an institution to identify an account. This identification is known by the account owner. Length : 1 - 34	string
Name <i>required</i>	Name of the account, as assigned by the account servicing institution, in agreement with the account owner in order to provide an additional means of identification of the account. Usage: The account name is different from the account owner name. The account name is used in certain user communities to provide a means of identifying the account, in addition to the account owner's identity and the account number. Length : 1 - 70	string
SchemeName <i>required</i>	Name of the identification scheme, in a coded form as published in an external list.	enum (BBAN, IBAN)
SecondaryIdentification <i>optional</i>	Identification assigned by an institution to identify an account. This identification is known by the account owner. Length : 1 - 34	string

Creditor Agent

Name	Description	Schema
Identification <i>required</i>	Unique and unambiguous identification of a person. Length : 1 - 35	string
SchemeName <i>required</i>	Name of the identification scheme, in a coded form as published in an external list.	enum (BICFI, UKSortCode)

Debtor Account

Name	Description	Schema
Identification <i>required</i>	Identification assigned by an institution to identify an account. This identification is known by the account owner. Length : 1 - 34	string
Name <i>optional</i>	Name of the account, as assigned by the account servicing institution, in agreement with the account owner in order to provide an additional means of identification of the account. Usage: The account name is different from the account owner name. The account name is used in certain user communities to provide a means of identifying the account, in addition to the account owner's identity and the account number. Length : 1 - 70	string
SchemeName <i>required</i>	Name of the identification scheme, in a coded form as published in an external list.	enum (BBAN, IBAN)
SecondaryIdentification <i>optional</i>	Identification assigned by an institution to identify an account. This identification is known by the account owner. Length : 1 - 34	string

DebtorAgent

Name	Description	Schema
Identification <i>required</i>	Unique and unambiguous identification of a person. Length : 1 - 35	string
SchemeName <i>required</i>	Name of the identification scheme, in a coded form as published in an external list.	enum (BICFI, UKSortCode)

InstructedAmount

Name	Description	Schema
Amount <i>required</i>	Pattern : "^-?\d{1,13}\.\d{1,5}\$"	string
Currency <i>required</i>	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. Pattern : "[A-Z]{3}"	string

Remittance Information

Name	Description	Schema
Reference <i>optional</i>	Unique and unambiguous identification of a person. Length : 1 - 35	string
Unstructured <i>optional</i>	Name of the identification scheme, in a coded form as published in an external list. Length : 1 - 140	string

Links

Name	Schema
first <i>optional</i>	string (uri)
last <i>optional</i>	string (uri)
next <i>optional</i>	string (uri)
prev <i>optional</i>	string (uri)
self <i>required</i>	string (uri)

Meta

Name	Schema
total-pages <i>optional</i>	integer (int32)

Risk

Name	Description	Schema
DeliveryAddress <i>optional</i>	Information that locates and identifies a specific address, as defined by postal services or in free format text.	DeliveryAddress
MerchantCategoryCode <i>optional</i>	Category code conform to ISO 18245, related to the type of services or goods the merchant provides for the transaction Length : 3 - 4	string
MerchantCustomerIdentification <i>optional</i>	The unique customer identifier of the PSU with the merchant. Length : 1 - 70	string
PaymentContextCode <i>optional</i>	Specifies the payment context	enum (BillPayment, EcommerceGoods, EcommerceServices, Other, PersonToPerson)

DeliveryAddress

Name	Description	Schema
AddressLine <i>optional</i>	Information that locates and identifies a specific address, as defined by postal services, that is presented in free format text.	< string > array

Name	Description	Schema
BuildingNumber <i>optional</i>	Number that identifies the position of a building on a street. Length : 1 - 16	string
Country <i>required</i>	Nation with its own government, occupying a particular territory. Pattern : "[A-Z]{2}"	string
CountrySubDivision <i>optional</i>	Identifies a subdivision of a country, for instance state, region, county.	< string > array
PostCode <i>optional</i>	Identifier consisting of a group of letters and/or numbers that is added to a postal address to assist the sorting of mail Length : 1 - 16	string
StreetName <i>optional</i>	Name of a street or thoroughfare Length : 1 - 70	string
TownName <i>required</i>	Name of a built-up area, with defined boundaries, and a local government. Length : 1 - 35	string

2.2.5. Consumes

- application/json

2.2.6. Produces

- application/json

2.2.7. Tags

- Payments

2.2.8. Security

Type	Name	Scopes
oauth2	TPPOAuth2Security	tpp_client_credential

3. Security

3.1. TPPOAuth2Security

TPP client credential authorisation flow with the ASPSP

Type : oauth2

Flow : application

Token URL : /token

Name	Description
tpp_client_credential	TPP Client Credential Scope

3.2. PSUOAuth2Security

OAuth flow, it is required when the PSU needs to perform SCA with the ASPSP when a TPP wants to access an ASPSP resource owned by the PSU

Type : oauth2

Flow : accessCode

Token URL : /authorization

Token URL : /token

Name	Description
payment	Generic payment scope