Read Write APIs

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## 1. Overview

Draft Swagger specification for Read Write

## 1.1. Version information

Version: v0.1

## 1.2. Contact information

Contact : Claudio Viola

Contact Email: claudio.viola@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. Body parameter

Setup a single immediate payment

Name: body Flags: required

Name	Description	Schema
CreditorAccou nt required	Unambiguous identification of the account of the creditor to which a credit entry will be posted as a result of the payment transaction.	CreditorAccount
<b>CreditorAgent</b> required	Financial institution servicing an account for the creditor.	CreditorAgent
<b>DebtorAccoun</b> <b>t</b> optional	Unambiguous identification of the account of the debtor to which a debit entry will be made as a result of the transaction.	DebtorAccount
<b>DebtorAgent</b> optional	Financial institution servicing an account for the debtor.	DebtorAgent
EndToEndIde ntification required	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.  Length: 1 - 35	string
InstructedAm ount required	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
InstructionIde ntification required	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

Name	Description	Schema
MerchantCate goryCode optional	Category code conform to ISO 18245, related to the type of services or goods the merchant provides for the transaction.  Length: 3 - 4	string
PaymentId required	Unique identification as assigned by the ASPSP to uniquely identify the payment setup resource.  Length: 1 - 35	string
RemittanceInf ormation optional	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 an unstructured form.	RemittanceInformati on

#### CreditorAccount

Name	Description	Schema
<b>Identification</b> required	maxLength 34 text <b>Length</b> : 1 - 34	string
Name required	maxLength 70 text  Length: 1 - 70	string
SchemeName required	Name of the identification scheme, in a coded form as published in an external list.	enum (BBAN)

## CreditorAgent

Name	Description	Schema
<b>Identification</b> required	United Kingdom (UK) Sort Code - identifies British financial institutions on the British national clearing systems. The sort code is assigned by the Association for Payments and Clearing Services (APACS).  Pattern: "^SC[0-9]{6,6}\$"	string
SchemeName required	Specifies the external financial institution identification scheme name code in the format of character string.	enum (UKSortCode)

#### **DebtorAccount**

Name	Description	Schema
<b>Identification</b> required	maxLength 34 text <b>Length</b> : 1 - 34	string
Name optional	maxLength 70 text <b>Length</b> : 1 - 70	string
SchemeName required	Name of the identification scheme, in a coded form as published in an external list.	enum (BBAN)

## DebtorAgent

Name	Description	Schema
<b>Identification</b> required	United Kingdom (UK) Sort Code - identifies British financial institutions on the British national clearing systems. The sort code is assigned by the Association for Payments and Clearing Services (APACS).  Pattern: "^SC[0-9]{6,6}\$"	string
SchemeName required	Specifies the external financial institution identification scheme name code in the format of character string.	enum (UKSortCode)

### InstructedAmount

Name	Description	Schema
Amount required	<b>Pattern</b> : "^-?\\d{1,13}\\.\\d{1,5}\$"	string
<b>Currency</b> required	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

#### RemittanceInformation

Name	Description	Schema
	Unique reference, as assigned by the creditor, to unambiguously refer to the payment transaction. Usage: If available, the initiating party should provide this reference in the structured remittance information, to enable reconciliation by the creditor upon receipt of the amount of money. If the business context requires the use of a creditor reference or a payment remit identification, and only one identifier can be passed through the end-to-end chain, the creditor's reference or payment remittance identification should be quoted in the end-to-end transaction identification.  Length: 1 - 35	
<b>Unstructured</b> optional	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 an unstructured form.  Length: 1 - 140	string

## 2.1.3. Responses

HTTP Code	Description	Schema
201	Payment submit resource successfully created	Response 201
400	Bad Request	No Content

HTTP Code	Description	Schema
401	Unauthorized	No Content
403	Forbidden	No Content
409	Conflict	No Content
500	Internal Server Error	No Content

## Response 201

Name	Description	Schema
CreatedAt required	Date and time at which the resource was created.	string (date-time)
Links required		< Links > array
PaymentId required	Unique identification as assigned by the ASPSP to uniquely identify the payment setup resource. <b>Length</b> : 1 - 35	string
PaymentSubm issionId required	Unique identification as assigned by the ASPSP to uniquely identify the payment submission resource. <b>Length</b> : 1 - 35	string
<b>Status</b> required	Status of the payment setup resource	enum (AcceptedSettlement InProcess, AcceptedSettlementC ompleted, Received, Rejected)

#### Links

Name	Schema
<b>href</b> optional	string (uri)
method optional	enum (GET)
rel optional	enum (self)

## **2.1.4. Consumes**

• application/json

### 2.1.5. Produces

• application/json

## 2.1.6. Tags

• Payments

## **2.1.7. Security**

Туре	Name	Scopes
oauth2	PSUOAuth2Secur ity	payment

# 2.2. Get a payment submission

GET /payment-submissions/{PaymentSubmissionId}

## 2.2.1. Description

Get payment submission

## 2.2.2. Parameters

Type	Name	Description	Schema
Path	issionId	Unique identification as assigned by the ASPSP to uniquely identify the payment submission	string
raui	required	resource.	String

## 2.2.3. Responses

HTTP Code	Description	Schema
200	Payment resource successfully retrieved	Response 200
400	Bad Request	No Content
401	Unauthorized	No Content
403	Forbidden	No Content
404	Not Found	No Content
500	Internal Server Error	No Content

#### **Response 200**

Name	Description	Schema
CreatedAt required	Date and time at which the resource was created.	string (date-time)
Links required		< Links > array
PaymentId required	Unique identification as assigned by the ASPSP to uniquely identify the payment setup resource.  Length: 1 - 35	string
PaymentSubm issionId required	Unique identification as assigned by the ASPSP to uniquely identify the payment submission resource.  Length: 1 - 35	string

Name	Description	Schema
<b>Status</b> required	Status of the payment setup resource	enum (AcceptedSettlement InProcess, AcceptedSettlementC ompleted, Received, Rejected)

#### Links

Name	Schema
<b>href</b> optional	string (uri)
method optional	enum (GET)
rel optional	enum (self)

## 2.2.4. Produces

• application/json

## 2.2.5. Tags

• Payments

## 2.2.6. Security

Туре	Name	Scopes
oauth2	TPPOAuth2Securi ty	tpp_client_credential

# 2.3. Create a single immediate payment

POST /payments

## 2.3.1. Description

Create a single immediate payment

### 2.3.2. Parameters

Type	Name	Description	Schema
Header	Idempotency- Key required	Every request will be processed only once per idempotency-key	string

## 2.3.3. Body parameter

Setup a single immediate payment

Name: body Flags: required

Name	Description	Schema
CreditorAccou nt required	Unambiguous identification of the account of the creditor to which a credit entry will be posted as a result of the payment transaction.	CreditorAccount
<b>CreditorAgent</b> required	Financial institution servicing an account for the creditor.	CreditorAgent
DebtorAccoun t optional	Unambiguous identification of the account of the debtor to which a debit entry will be made as a result of the transaction.	DebtorAccount
<b>DebtorAgent</b> optional	Financial institution servicing an account for the debtor.	DebtorAgent
EndToEndIde ntification required	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.  Length: 1 - 35	string
InstructedAm ount required	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

Name	Description	Schema
InstructionIde ntification required	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
MerchantCate goryCode optional	Category code conform to ISO 18245, related to the type of services or goods the merchant provides for the transaction.  Length: 3 - 4	string
RemittanceInf ormation optional	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 an unstructured form.	RemittanceInformati on

#### CreditorAccount

Name	Description	Schema
<b>Identification</b> required	maxLength 34 text <b>Length</b> : 1 - 34	string
Name required	maxLength 70 text <b>Length</b> : 1 - 70	string
SchemeName required	Name of the identification scheme, in a coded form as published in an external list.	enum (BBAN)

## CreditorAgent

Name	Description	Schema
<b>Identification</b> required	United Kingdom (UK) Sort Code - identifies British financial institutions on the British national clearing systems. The sort code is assigned by the Association for Payments and Clearing Services (APACS).  Pattern: "^SC[0-9]{6,6}\$"	string
SchemeName required	Specifies the external financial institution identification scheme name code in the format of character string.	enum (UKSortCode)

#### **DebtorAccount**

Name	Description	Schema
<b>Identification</b> required	maxLength 34 text <b>Length</b> : 1 - 34	string
Name optional	maxLength 70 text <b>Length</b> : 1 - 70	string

Name	Description	Schema
SchemeName required	Name of the identification scheme, in a coded form as published in an external list.	enum (BBAN)

## DebtorAgent

Name	Description	Schema
<b>Identification</b> required	United Kingdom (UK) Sort Code - identifies British financial institutions on the British national clearing systems. The sort code is assigned by the Association for Payments and Clearing Services (APACS).  Pattern: "^SC[0-9]{6,6}\$"	string
SchemeName required	Specifies the external financial institution identification scheme name code in the format of character string.	enum (UKSortCode)

#### InstructedAmount

Name	Description	Schema
Amount required	<b>Pattern</b> : "^-?\\d{1,13}\\.\\d{1,5}\$"	string
<b>Currency</b> required	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

#### RemittanceInformation

Name	Description	Schema
	Unique reference, as assigned by the creditor, to unambiguously refer to the payment transaction. Usage: If available, the initiating party should provide this reference in the structured remittance information, to enable reconciliation by the creditor upon receipt of the amount of money. If the business context requires the use of a creditor reference or a payment remit identification, and only one identifier can be passed through the end-to-end chain, the creditor's reference or payment remittance identification should be quoted in the end-to-end transaction identification.  Length: 1 - 35	string
<b>Unstructured</b> optional	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 an unstructured form.  Length: 1 - 140	string

## 2.3.4. 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
<b>CreatedAt</b> required	Date and time at which the resource was created.	string (date-time)
CreditorAccou nt required	Unambiguous identification of the account of the creditor to which a credit entry will be posted as a result of the payment transaction.	CreditorAccount
<b>CreditorAgent</b> required	Financial institution servicing an account for the creditor.	CreditorAgent
DebtorAccoun t optional	Unambiguous identification of the account of the debtor to which a debit entry will be made as a result of the transaction.	DebtorAccount
<b>DebtorAgent</b> optional	Financial institution servicing an account for the debtor.	DebtorAgent
EndToEndIde ntification required	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.  Length: 1 - 35	string
InstructedAm ount required	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

Name	Description	Schema
InstructionIde ntification required	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
Links required		< Links > array
MerchantCate goryCode optional	Category code conform to ISO 18245, related to the type of services or goods the merchant provides for the transaction.  Length: 3 - 4	string
PaymentId required	Unique identification as assigned by the ASPSP to uniquely identify the payment setup resource.  Length: 1 - 35	string
RemittanceInf ormation optional	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 an unstructured form.  Length: 1 - 140	string
<b>Status</b> required	Status of the payment setup resource	enum (Pending, AcceptedTechnicalV alidation, AcceptedCustomerPr ofile, Rejected)

#### CreditorAccount

Name	Description	Schema
<b>Identification</b> required	maxLength 34 text <b>Length</b> : 1 - 34	string
Name required	maxLength 70 text  Length: 1 - 70	string
SchemeName required	Name of the identification scheme, in a coded form as published in an external list.	enum (BBAN)

### CreditorAgent

Name	Description	Schema
<b>Identification</b> required	United Kingdom (UK) Sort Code - identifies British financial institutions on the British national clearing systems. The sort code is assigned by the Association for Payments and Clearing Services (APACS).  Pattern: "^SC[0-9]{6,6}\$"	string

Name	Description	Schema
SchemeName	Specifies the external financial institution identification	annum (III/ContCodo)
required	scheme name code in the format of character string.	enum (UKSortCode)

#### DebtorAccount

Name	Description	Schema
<b>Identification</b> required	maxLength 34 text  Length: 1 - 34	string
Name optional	maxLength 70 text  Length: 1 - 70	string
SchemeName required	Name of the identification scheme, in a coded form as published in an external list.	enum (BBAN)

## DebtorAgent

Name	Description	Schema
<b>Identification</b> required	United Kingdom (UK) Sort Code - identifies British financial institutions on the British national clearing systems. The sort code is assigned by the Association for Payments and Clearing Services (APACS).  Pattern: "^SC[0-9]{6,6}\$"	string
SchemeName required	Specifies the external financial institution identification scheme name code in the format of character string.	enum (UKSortCode)

### InstructedAmount

Name	Description	Schema
Amount required	<b>Pattern</b> : "^-?\\d{1,13}\\.\\d{1,5}\$"	string
<b>Currency</b> required	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

#### Links

Name	Schema
<b>href</b> optional	string (uri)
method optional	enum (GET)
rel optional	enum (self)

## **2.3.5. Consumes**

• application/json

## 2.3.6. Produces

• application/json

## **2.3.7. Tags**

• Payments

## 2.3.8. Security

Туре	Name	Scopes
oauth2	TPPOAuth2Securi	tpp_client_credential

# 2.4. Get a single immediate payment

GET /payments/{PaymentId}

## 2.4.1. Description

Get a single immediate payment

### 2.4.2. Parameters

Туре	Name	Description	Schema
Path	PaymentId required	Unique identification as assigned by the ASPSP to uniquely identify the payment setup resource.	string

### 2.4.3. Responses

HTTP Code	Description	Schema
200	Payment resource successfully retrieved	Payment setup GET response
400	Bad Request	No Content
401	Unauthorized	No Content
403	Forbidden	No Content
404	Not Found	No Content
500	Internal Server Error	No Content

#### Payment setup GET response

Name	Description	Schema
CreatedAt required	Date and time at which the resource was created.	string (date-time)
CreditorAccou nt required	Unambiguous identification of the account of the creditor to which a credit entry will be posted as a result of the payment transaction.	CreditorAccount
<b>CreditorAgent</b> required	Financial institution servicing an account for the creditor.	CreditorAgent
DebtorAccoun t optional	Unambiguous identification of the account of the debtor to which a debit entry will be made as a result of the transaction.	DebtorAccount
<b>DebtorAgent</b> optional	Financial institution servicing an account for the debtor.	DebtorAgent

Name	Description	Schema
EndToEndIde ntification required	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.  Length: 1 - 35	string
InstructedAm ount required	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
InstructionIde ntification required	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
Links required		< Links > array
MerchantCate goryCode optional	Category code conform to ISO 18245, related to the type of services or goods the merchant provides for the transaction.  Length: 3 - 4	string
PaymentId required	Unique identification as assigned by the ASPSP to uniquely identify the payment setup resource.  Length: 1 - 35	string
RemittanceInf ormation optional	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 an unstructured form.  Length: 1 - 140	string
<b>Status</b> required	Status of the payment setup resource	enum (Pending, AcceptedTechnicalV alidation, AcceptedCustomerPr ofile, Rejected)

#### CreditorAccount

Name	Description	Schema
Identification	maxLength 34 text	atring
required	Length: 1 - 34	string

Name	Description	Schema
Name required	maxLength 70 text <b>Length</b> : 1 - 70	string
SchemeName required	Name of the identification scheme, in a coded form as published in an external list.	enum (BBAN)

## CreditorAgent

Name	Description	Schema
<b>Identification</b> required	United Kingdom (UK) Sort Code - identifies British financial institutions on the British national clearing systems. The sort code is assigned by the Association for Payments and Clearing Services (APACS).  Pattern: "^SC[0-9]{6,6}\$"	string
SchemeName required	Specifies the external financial institution identification scheme name code in the format of character string.	enum (UKSortCode)

#### **DebtorAccount**

Name	Description	Schema
<b>Identification</b> required	maxLength 34 text  Length: 1 - 34	string
Name optional	maxLength 70 text <b>Length</b> : 1 - 70	string
SchemeName required	Name of the identification scheme, in a coded form as published in an external list.	enum (BBAN)

## DebtorAgent

Name	Description	Schema
<b>Identification</b> required	United Kingdom (UK) Sort Code - identifies British financial institutions on the British national clearing systems. The sort code is assigned by the Association for Payments and Clearing Services (APACS).  Pattern: "^SC[0-9]{6,6}\$"	string
SchemeName required	Specifies the external financial institution identification scheme name code in the format of character string.	enum (UKSortCode)

#### InstructedAmount

Name	Description	Schema
Amount required	<b>Pattern</b> : "^-?\\d{1,13}\\.\\d{1,5}\$"	string

Name	Description	Schema
<b>Currency</b> required	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

#### Links

Name	Schema
<b>href</b> optional	string (uri)
method optional	enum (GET)
rel optional	enum (self)

#### 2.4.4. Produces

• application/json

## 2.4.5. Tags

• Payments

### **2.4.6. Security**

Туре	Name	Scopes
oauth2	TPPOAuth2Securi ty	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_cre dential	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