

Unchanged: Black

Changed: Blue

New: Green

Deleted: Red

openapi: 3.0.0

info:

title: Accounts API

description: |-

Open API technical specification of the Account APIs.

The full functional description of the input and output parameters is to be found on GitHub on:

[Data model] (https://bitsnorge.github.io/dsop-documentation/dsop_kontroll_datamodel.html).

It is the data providers responsibility to validate all requests for data and to make sure that all requests are validated well enough. See some [recommendations regarding validation of requests in Control API] (https://bitsnorge.github.io/dsop-documentation/dsop_kontroll_validation.html).

version: 2.0.0

servers:

- url: 'https://hostname.no/v2'

security:

- accountsAuth: []

paths:

/accounts:

get:

tags:

- accounts

summary: List of accounts for a specified party and period. Account number can be provided in place of the party identifier for lookup requests directly on the account. Must provide a blank list if no hits.

operationId: listAccounts

parameters:

- name: AccountInfoRequestID

in: header

description: 'Unique reference number / case number that follows the case throughout the different requests.'

required: true

style: simple

explode: false

schema:

type: string

format: uuid

- name: CorrelationID

in: header

description: 'Correlation ID, unique identifier for the technical request.'

required: true

style: simple

explode: false

```

schema:
  type: string
  format: uuid
- name: Legal-Mandate
  in: header
  description: 'The Legal basis used by data consumers in order to fetch data. Should be validated by the data provider.'
  required: true
  style: simple
  explode: false
  schema:
    type: string
- name: PartyID
  in: header
  description: 'Parts identifier, personal identification number, D-number or organization number.'
  required: true
  style: simple
  explode: false
  schema:
    type: string
- name: OnlyPrimaryOwner
  in: query
  description: 'Only returns accounts owned by PartyID if TRUE.'
  required: true
  style: form
  explode: false
  schema:
    type: boolean
- name: AdditionalReferenceID
  in: header
  description: 'Reference ID based on AdditionalReferenceIDType. Should be validated according to the legal-mandate.'
  required: false
  style: simple
  explode: false
  schema:
    type: string
- name: AdditionalReferenceIDType
  in: header
  description: 'What type of reference to expect in AdditionalReferenceID.'
  required: false
  style: simple
  explode: false
  schema:
    enum:
      - poll
      - srf
- name: RequesterID
  in: header
  description: 'Unique identifier of the user who makes the request at the public agency.'
  required: false
  style: simple
  explode: false
  schema:

```

```

    type: string
- name: fromDate
  in: query
  description: 'From date, current date if not stated.'
  required: false
  style: form
  explode: true
  schema:
    type: string
    format: date
- name: toDate
  in: query
  description: 'To date, current date if not stated.'
  required: false
  style: form
  explode: true
  schema:
    type: string
    format: date
responses:
  '200':
    description: Valid response
    content:
      application/json:
        schema:
          $ref: '#/components/schemas/Accounts'
      application/jose:
        schema:
          type: string
          description: Encrypted response according to JWE compact serialization
          format: byte
  '400':
    description: ACC-001 and best possible description of the error from Data Provider. See information regarding specific error
situations on github under API-specification.
    content:
      application/json:
        schema:
          $ref: '#/components/schemas/Error400'
  '401':
    description: ACC-010 and the best possible description of the error from Data Provider. See information regarding specific error
situations on github under API-specification.
    content:
      application/json:
        schema:
          $ref: '#/components/schemas/Error401'
  '403':
    description: ACC-011 and the best possible description of the error from Data Provider. See information regarding specific error
situations on github under API-specification.
    content:
      application/json:
        schema:
          $ref: '#/components/schemas/Error403'

```

```

'405':
  description: ACC-012 and the best possible description of the error from Data Provider. See information regarding specific error
situations on github under API-specification.
  content:
    application/json:
      schema:
        $ref: '#/components/schemas/Error405'
'429':
  description: ACC-022 and the best possible description of the error from Data Provider. See information regarding specific error
situations on github under API-specification.
  content:
    application/json:
      schema:
        $ref: '#/components/schemas/Error429'
'500':
  description: ACC-100 or ACC-500 and the best possible description of the error from Data Provider. See information regarding
specific error situations on github under API-specification for the different ACC codes.
  content:
    application/json:
      schema:
        $ref: '#/components/schemas/Error500'
default:
  description: Best possible description of the error from Data Provider.
  content:
    application/json:
      schema:
        $ref: '#/components/schemas/Error'
'/accounts/{accountReference}':
  get:
    tags:
      - accounts
    summary: 'Account details, including balances, for a specific account'
    operationId: showAccountById
    parameters:
      - name: accountReference
        in: path
        description: Unique reference to the account. Shall match the account number.
        required: true
        style: simple
        explode: false
        schema:
          type: string
      - name: AccountInfoRequestID
        in: header
        description: 'Unique reference number / case number that follows the case throughout the different requests.'
        required: true
        style: simple
        explode: false
        schema:
          type: string
          format: uuid
      - name: CorrelationID

```

```

in: header
description: 'Correlation ID, unique identifier for the technical request'
required: true
style: simple
explode: false
schema:
  type: string
  format: uuid
- name: Legal-Mandate
in: header
description: 'The Legal basis used by data consumers in order to fetch data. Should be validated by the data provider.'
required: true
style: simple
explode: false
schema:
  type: string
- name: AdditionalReferenceID
in: header
description: 'Reference ID based on AdditionalReferenceIDType. Should be validated according to the legal-mandate.'
required: false
style: simple
explode: false
schema:
  type: string
- name: AdditionalReferenceIDType
in: header
description: 'What type of reference to expect in AdditionalReferenceID'
required: false
style: simple
explode: false
schema:
  enum:
    - poll
    - srf
- name: RequesterID
in: header
description: 'Unique identifier of the user who makes the request at the public agency.'
required: false
style: simple
explode: false
schema:
  type: string
- name: fromDate
in: query
description: 'From date, current date if not stated'
required: false
style: form
explode: true
schema:
  type: string
  format: date
- name: toDate

```

```

in: query
description: 'To date, current date if not stated'
required: false
style: form
explode: true
schema:
  type: string
  format: date
responses:
  '200':
    description: Valid response
    content:
      application/json:
        schema:
          $ref: '#/components/schemas/AccountDetails'
      application/jose:
        schema:
          type: string
          description: Encrypted response according to JWE compact serialization
          format: byte
  '400':
    description: ACC-001 and best possible description of the error from Data Provider. See information regarding specific error
    situations on github under API-specification.
    content:
      application/json:
        schema:
          $ref: '#/components/schemas/Error400'
  '401':
    description: ACC-010 and the best possible description of the error from Data Provider. See information regarding specific error
    situations on github under API-specification.
    content:
      application/json:
        schema:
          $ref: '#/components/schemas/Error401'
  '403':
    description: ACC-011 and the best possible description of the error from Data Provider. See information regarding specific error
    situations on github under API-specification.
    content:
      application/json:
        schema:
          $ref: '#/components/schemas/Error403'
  '404':
    description: ACC-002 or ACC-003 and the best possible description of the error from Data Provider. See information regarding
    specific error situations on github under API-specification for the different ACC codes.
    content:
      application/json:
        schema:
          $ref: '#/components/schemas/Error404'
  '405':
    description: ACC-012 and the best possible description of the error from Data Provider. See information regarding specific error
    situations on github under API-specification.
    content:

```

```

    application/json:
      schema:
        $ref: '#/components/schemas/Error405'
  '429':
    description: ACC-022 and the best possible description of the error from Data Provider. See information regarding specific error
situations on github under API-specification.
    content:
      application/json:
        schema:
          $ref: '#/components/schemas/Error429'
  '500':
    description: ACC-100 or ACC-500 and the best possible description of the error from Data Provider. See information regarding
specific error situations on github under API-specification for the different ACC codes.
    content:
      application/json:
        schema:
          $ref: '#/components/schemas/Error500'
  default:
    description: Best possible description of the error from Data Provider
    content:
      application/json:
        schema:
          $ref: '#/components/schemas/Error'
'/accounts/{accountReference}/transactions':
  get:
    tags:
      - transactions
    summary: Transactions for specified account and period. Empty list if no hits. Must support pagination on large result sets (min 1000)
- see separate description in the link element.
    operationId: listTransactions
    parameters:
      - name: accountReference
        in: path
        description: Unique reference to the account. Shall match the account number.
        required: true
        style: simple
        explode: false
        schema:
          type: string
      - name: AccountInfoRequestID
        in: header
        description: 'Unique reference number / case number that follows the case throughout the different requests.'
        required: true
        style: simple
        explode: false
        schema:
          type: string
          format: uuid
      - name: CorrelationID
        in: header
        description: 'Correlation ID, unique identifier for the technical request'
        required: true

```

```

style: simple
explode: false
schema:
  type: string
  format: uuid
- name: Legal-Mandate
  in: header
  description: 'The Legal basis used by data consumers in order to fetch data. Should be validated by the data provider.'
  required: true
  style: simple
  explode: false
  schema:
    type: string
- name: AdditionalReferenceID
  in: header
  description: 'Reference ID based on AdditionalReferenceIDType. Should be validated according to the legal-mandate.'
  required: false
  style: simple
  explode: false
  schema:
    type: string
- name: AdditionalReferenceIDType
  in: header
  description: 'What type of reference to expect in AdditionalReferenceID'
  required: false
  style: simple
  explode: false
  schema:
    enum:
      - poll
      - srf
- name: RequesterID
  in: header
  description: 'Unique identifier of the user who makes the request at the public agency.'
  required: false
  style: simple
  explode: false
  schema:
    type: string
- name: fromDate
  in: query
  description: 'From date, current date if not stated'
  required: false
  style: form
  explode: true
  schema:
    type: string
    format: date
- name: toDate
  in: query
  description: 'To date, current date if not stated'
  required: false

```

```

    style: form
    explode: true
    schema:
      type: string
      format: date
  responses:
    '200':
      description: A list of transactions
      content:
        application/json:
          schema:
            $ref: '#/components/schemas/Transactions'
        application/jose:
          schema:
            type: string
            description: Encrypted response according to JWE compact serialization
            format: byte
    '400':
      description: ACC-001 and best possible description of the error from Data Provider. See information regarding specific error
situations on github under API-specification.
      content:
        application/json:
          schema:
            $ref: '#/components/schemas/Error400'
    '401':
      description: ACC-010 and the best possible description of the error from Data Provider. See information regarding specific error
situations on github under API-specification.
      content:
        application/json:
          schema:
            $ref: '#/components/schemas/Error401'
    '403':
      description: ACC-011 and the best possible description of the error from Data Provider. See information regarding specific error
situations on github under API-specification.
      content:
        application/json:
          schema:
            $ref: '#/components/schemas/Error403'
    '404':
      description: ACC-002 or ACC-003 and the best possible description of the error from Data Provider. See information regarding
specific error situations on github under API-specification for the different ACC codes.
      content:
        application/json:
          schema:
            $ref: '#/components/schemas/Error404'
    '405':
      description: ACC-012 and the best possible description of the error from Data Provider. See information regarding specific error
situations on github under API-specification.
      content:
        application/json:
          schema:
            $ref: '#/components/schemas/Error405'

```

```

'429':
  description: ACC-022 and the best possible description of the error from Data Provider. See information regarding specific error
situations on github under API-specification.
  content:
    application/json:
      schema:
        $ref: '#/components/schemas/Error429'
'500':
  description: ACC-100 or ACC-500 and the best possible description of the error from Data Provider. See information regarding
specific error situations on github under API-specification for the different ACC codes.
  content:
    application/json:
      schema:
        $ref: '#/components/schemas/Error500'
default:
  description: Best possible description of the error from Data Provider
  content:
    application/json:
      schema:
        $ref: '#/components/schemas/Error'
'/accounts/{accountReference}/cards':
  get:
    tags:
      - cards
    summary: List of cards associated with the specified account. Empty list if no hits.
    operationId: listCards
    parameters:
      - name: accountReference
        in: path
        description: Unique reference to the account. Shall not match the account number.
        required: true
        style: simple
        explode: false
        schema:
          type: string
      - name: AccountInfoRequestID
        in: header
        description: 'Unique reference number / case number that follows the case throughout the different requests.'
        required: true
        style: simple
        explode: false
        schema:
          type: string
          format: uuid
      - name: CorrelationID
        in: header
        description: 'Correlation ID, unique identifier for the technical request'
        required: true
        style: simple
        explode: false
        schema:
          type: string

```

```

    format: uuid
- name: Legal-Mandate
  in: header
  description: 'The Legal basis used by data consumers in order to fetch data. Should be validated by the data provider.'
  required: true
  style: simple
  explode: false
  schema:
    type: string
- name: AdditionalReferenceID
  in: header
  description: 'Reference ID based on AdditionalReferenceIDType. Should be validated according to the legal-mandate.'
  required: false
  style: simple
  explode: false
  schema:
    type: string
- name: AdditionalReferenceIDType
  in: header
  description: 'What type of reference to expect in AdditionalReferenceID'
  required: false
  style: simple
  explode: false
  schema:
    enum:
      - poll
      - srf
- name: RequesterID
  in: header
  description: 'Unique identifier of the user who makes the request at the public agency.'
  required: false
  style: simple
  explode: false
  schema:
    type: string
- name: fromDate
  in: query
  description: 'From date, current date if not stated'
  required: false
  style: form
  explode: true
  schema:
    type: string
    format: date
- name: toDate
  in: query
  description: 'To date, current date if not stated'
  required: false
  style: form
  explode: true
  schema:
    type: string

```

```

    format: date
responses:
  '200':
    description: Valid response
    content:
      application/json:
        schema:
          $ref: '#/components/schemas/Cards'
      application/jose:
        schema:
          type: string
          description: Encrypted response according to JWE compact serialization
          format: byte
  '400':
    description: ACC-001 and best possible description of the error from Data Provider. See information regarding specific error
situations on github under API-specification.
    content:
      application/json:
        schema:
          $ref: '#/components/schemas/Error400'
  '401':
    description: ACC-010 and the best possible description of the error from Data Provider. See information regarding specific error
situations on github under API-specification.
    content:
      application/json:
        schema:
          $ref: '#/components/schemas/Error401'
  '403':
    description: ACC-011 and the best possible description of the error from Data Provider. See information regarding specific error
situations on github under API-specification.
    content:
      application/json:
        schema:
          $ref: '#/components/schemas/Error403'
  '404':
    description: ACC-002 or ACC-003 and the best possible description of the error from Data Provider. See information regarding
specific error situations on github under API-specification for the different ACC codes.
    content:
      application/json:
        schema:
          $ref: '#/components/schemas/Error404'
  '405':
    description: ACC-012 and the best possible description of the error from Data Provider. See information regarding specific error
situations on github under API-specification.
    content:
      application/json:
        schema:
          $ref: '#/components/schemas/Error405'
  '429':
    description: ACC-022 and the best possible description of the error from Data Provider. See information regarding specific error
situations on github under API-specification.
    content:

```

```

    application/json:
      schema:
        $ref: '#/components/schemas/Error429'
'500':
  description: ACC-100 or ACC-500 and the best possible description of the error from Data Provider. See information regarding
specific error situations on github under API-specification for the different ACC codes.
  content:
    application/json:
      schema:
        $ref: '#/components/schemas/Error500'
default:
  description: Best possible description of the error from Data Provider
  content:
    application/json:
      schema:
        $ref: '#/components/schemas/Error'
'/accounts/{accountReference}/roles':
  get:
    tags:
      - roles
    summary: Role holders for the specified account. Empty list if no hits.
    operationId: listRoles
    parameters:
      - name: accountReference
        in: path
        description: Unique reference to the account. Shall not match the account number.
        required: true
        style: simple
        explode: false
        schema:
          type: string
      - name: AccountInfoRequestID
        in: header
        description: 'Unique reference number / case number that follows the case throughout the different requests.'
        required: true
        style: simple
        explode: false
        schema:
          type: string
          format: uuid
      - name: CorrelationID
        in: header
        description: 'Correlation ID, unique identifier for the technical request'
        required: true
        style: simple
        explode: false
        schema:
          type: string
          format: uuid
      - name: Legal-Mandate
        in: header
        description: 'The Legal basis used by data consumers in order to fetch data. Should be validated by the data provider.'
```

```

    required: true
    style: simple
    explode: false
    schema:
      type: string
- name: AdditionalReferenceID
  in: header
  description: 'Reference ID based on AdditionalReferenceIDType. Should be validated according to the legal-mandate.'
  required: false
  style: simple
  explode: false
  schema:
    type: string
- name: AdditionalReferenceIDType
  in: header
  description: 'What type of reference to expect in AdditionalReferenceID'
  required: false
  style: simple
  explode: false
  schema:
    enum:
      - poll
      - srf
- name: RequesterID
  in: header
  description: 'Unique identifier of the user who makes the request at the public agency.'
  required: false
  style: simple
  explode: false
  schema:
    type: string
- name: fromDate
  in: query
  description: 'From date, current date if not stated'
  required: false
  style: form
  explode: true
  schema:
    type: string
    format: date
- name: toDate
  in: query
  description: 'To date, current date if not stated'
  required: false
  style: form
  explode: true
  schema:
    type: string
    format: date
responses:
  '200':
    description: Valid response

```

```

content:
  application/json:
    schema:
      $ref: '#/components/schemas/Roles'
  application/jose:
    schema:
      type: string
      description: Encrypted response according to JWE compact serialization
      format: byte
'400':
  description: ACC-001 and best possible description of the error from Data Provider. See information regarding specific error
situations on github under API-specification.
  content:
    application/json:
      schema:
        $ref: '#/components/schemas/Error400'
'401':
  description: ACC-010 and the best possible description of the error from Data Provider. See information regarding specific error
situations on github under API-specification.
  content:
    application/json:
      schema:
        $ref: '#/components/schemas/Error401'
'403':
  description: ACC-011 and the best possible description of the error from Data Provider. See information regarding specific error
situations on github under API-specification.
  content:
    application/json:
      schema:
        $ref: '#/components/schemas/Error403'
'404':
  description: ACC-002 or ACC-003 and the best possible description of the error from Data Provider. See information regarding
specific error situations on github under API-specification for the different ACC codes.
  content:
    application/json:
      schema:
        $ref: '#/components/schemas/Error404'
'405':
  description: ACC-012 and the best possible description of the error from Data Provider. See information regarding specific error
situations on github under API-specification.
  content:
    application/json:
      schema:
        $ref: '#/components/schemas/Error405'
'429':
  description: ACC-022 and the best possible description of the error from Data Provider. See information regarding specific error
situations on github under API-specification.
  content:
    application/json:
      schema:
        $ref: '#/components/schemas/Error429'
'500':

```

description: ACC-100 or ACC-500 and the best possible description of the error from Data Provider. See information regarding specific error situations on github under API-specification for the different ACC codes.

```
content:
  application/json:
    schema:
      $ref: '#/components/schemas/Error500'
```

```
default:
  description: Best possible description of the error from Data Provider
  content:
    application/json:
      schema:
        $ref: '#/components/schemas/Error'
```

components:

schemas:

Account:

required:

- accountIdentifier
- accountReference

type: object

properties:

status:

- \$ref: '#/components/schemas/AccountStatus'

servicer:

- \$ref: '#/components/schemas/FinancialInstitution'

links:

minItems: 0

type: array

items:

allOf:

- \$ref: '#/components/schemas/Link'

accountIdentifier:

\$ref: '#/components/schemas/AccountNumber'

accountReference:

\$ref: '#/components/schemas/AccountReference'

type:

\$ref: '#/components/schemas/AccountType'

currency:

\$ref: '#/components/schemas/CurrencyCode'

primaryOwner:

\$ref: '#/components/schemas/AccountRole'

name:

maxLength: 70

minLength: 1

type: string

AccountDetail:

required:

- accountIdentifier
- accountReference

type: object

properties:

```

status:
  allOf:
    - $ref: '#/components/schemas/AccountStatus'
servicer:
  allOf:
    - $ref: '#/components/schemas/FinancialInstitution'
accountIdentifier:
  $ref: '#/components/schemas/AccountNumber'
accountReference:
  $ref: '#/components/schemas/AccountReference'
type:
  $ref: '#/components/schemas/AccountType'
currency:
  $ref: '#/components/schemas/CurrencyCode'
name:
  maxLength: 70
  minLength: 1
  type: string
balances:
  minItems: 0
  type: array
  items:
    $ref: '#/components/schemas/Balance'
primaryOwner:
  $ref: '#/components/schemas/AccountRole'
startDate:
  $ref: '#/components/schemas/ISODate'
endDate:
  $ref: '#/components/schemas/ISODate'
AccountDetails:
  required:
  - responseDetails
  type: object
  properties:
    responseStatus:
    allOf:
    - $ref: '#/components/schemas/ResponseStatus'
  responseDetails:
    minItems: 0
    type: array
    items:
    allOf:
      - $ref: '#/components/schemas/ResponseDetails'
  account:
    allOf:
      - $ref: '#/components/schemas/AccountDetail'
xml:
  name: accounts
AccountNumber:
  type: string
AccountPermissionType:
  type: string

```

```

enum:
  - rightToUseAlone
  - rightToUseWithOther
  - rightToSeeOnly
AccountRole:
  type: object
  properties:
    permission:
      allOf:
        - $ref: '#/components/schemas/AccountPermissionType'
    identifier:
      $ref: '#/components/schemas/Identifier'
    name:
      maxLength: 140
      minLength: 1
      type: string
    startDate:
      $ref: '#/components/schemas/ISODate'
    endDate:
      $ref: '#/components/schemas/ISODate'
    postalAddress:
      $ref: '#/components/schemas/PostalAddress'
    electronicAddresses:
      minItems: 0
      type: array
      items:
        $ref: '#/components/schemas/ElectronicAddress'
AccountReference:
  type: string
Accounts:
  required:
    - responseDetails
  type: object
  properties:
    responseStatus:
      allOf:
        - $ref: '#/components/schemas/ResponseStatus'
    responseDetails:
      minItems: 0
      type: array
      items:
        allOf:
          - $ref: '#/components/schemas/ResponseDetails'
    accounts:
      minItems: 0
      type: array
      items:
        $ref: '#/components/schemas/Account'
  links:
    minItems: 0
    type: array
    items:

```

```

        allOf:
          - $ref: '#/components/schemas/Link'
      xml:
        name: accounts
    AccountStatus:
      type: string
      enum:
        - enabled
        - disabled
        - deleted
    AccountType:
      type: string
      enum:
        - loanAccount
        - salaryAccount
        - currencyAccount
        - savingsAccount
        - clientAccount
        - taxDeductionAccount
        - businessAccount
        - creditCardAccount
        - prepaidCardAccount
        - accountWithoutBalance
        - otherAccount
    AddressType:
      type: string
      enum:
        - residential
        - business
        - mailTo
        - deliveryTo
    Amount:
      minimum: 0
      exclusiveMinimum: false
      type: number
    Balance:
      type: object
      properties:
        creditLineIncluded:
          allOf:
            - $ref: '#/components/schemas/TrueFalseIndicator'
        amount:
          allOf:
            - $ref: '#/components/schemas/Amount'
        creditDebitIndicator:
          allOf:
            - $ref: '#/components/schemas/CreditOrDebit'
        registered:
          allOf:
            - $ref: '#/components/schemas/ISODateTime'
      type:
        $ref: '#/components/schemas/BalanceType'

```

```

    creditLineAmount:
      $ref: '#/components/schemas/Amount'
    creditLineCurrency:
      $ref: '#/components/schemas/CurrencyCode'
    currency:
      $ref: '#/components/schemas/CurrencyCode'
  BalanceType:
    type: string
    enum:
      - availableBalance
      - bookedBalance
  BankTransactionCode:
    type: object
    properties:
      domain:
        allOf:
          - $ref: '#/components/schemas/DomainType'
      family:
        allOf:
          - $ref: '#/components/schemas/FamilyType'
      subFamily:
        allOf:
          - $ref: '#/components/schemas/SubFamilyType'
      freeText:
        maxLength: 500
        minLength: 1
        type: string
  CardNumber:
    type: string
  Cards:
    required:
    - responseDetails
    type: object
    properties:
      responseStatus:
      allOf:
      - $ref: '#/components/schemas/ResponseStatus'
    responseDetails:
      minItems: 0
      type: array
      items:
      allOf:
        - $ref: '#/components/schemas/ResponseDetails'
    paymentCards:
      minItems: 0
      type: array
      items:
        allOf:
          - $ref: '#/components/schemas/PaymentCard'
  xml:
    name: cards
CardStatus:

```

```
type: string
enum:
  - active
  - blocked
  - closed
  - partlyActivated
  - renewed
```

CardType:

```
type: string
enum:
  - creditCard
  - debitCard
```

CounterParty:

```
type: object
properties:
  accountIdentifier:
    $ref: '#/components/schemas/AccountNumber'
  identifier:
    $ref: '#/components/schemas/Identifier'
  name:
    maxLength: 140
    minLength: 1
    type: string
  type:
    $ref: '#/components/schemas/CounterPartyType'
  postalAddress:
    $ref: '#/components/schemas/PostalAddress'
```

CounterPartyType:

```
type: string
enum:
  - debtor
  - creditor
  - ultimateDebtor
  - ultimateCreditor
```

CountryCode:

```
pattern: '[A-Z]{2,2}'
type: string
```

CreditOrDebit:

```
type: string
enum:
  - credit
  - debit
```

CurrencyCode:

```
pattern: '[A-Z]{3,3}'
type: string
```

CurrencyExchange:

```
type: object
properties:
  originalAmount:
    allOf:
      - $ref: '#/components/schemas/Amount'
  sourceCurrency:
```

```

    allOf:
      - $ref: '#/components/schemas/CurrencyCode'
  targetCurrency:
    allOf:
      - $ref: '#/components/schemas/CurrencyCode'
  unitCurrency:
    allOf:
      - $ref: '#/components/schemas/CurrencyCode'
  exchangeRate:
    $ref: '#/components/schemas/Amount'
DomainType:
  type: string
  enum:
    - accountManagement
    - cashManagement
    - foreignExchange
    - payments
    - securities
    - tradeServices
    - extended
ElectronicAddress:
  required:
    - type
    - value
  type: object
  properties:
    type:
      $ref: '#/components/schemas/ElectronicAddressType'
    value:
      maxLength: 2048
      minLength: 1
      type: string
ElectronicAddressType:
  type: string
  enum:
    - phoneNumber
    - emailAddress
FamilyType:
  type: string
  enum:
    - additionalMiscellaneousCreditOperations
    - additionalMiscellaneousDebitOperations
    - miscellaneousCreditOperations
    - miscellaneousDebitOperations
    - openingAndClosing
    - accountBalancing
    - cashPooling
    - notAvailable
    - customerCardTransactions
    - counterTransactions
    - drafts
    - issuedCashConcentrationTransactions

```

- issuedCreditTransfers
- issuedCheques
- issuedDirectDebits
- lockboxTransactions
- merchantCardTransactions
- other
- receivedCashConcentrationTransactions
- receivedCreditTransfers
- receivedCheques
- receivedDirectDebits
- corporateAction
- documentaryCollection
- standByLetterOfCredit

FinancialInstitution:

required:

- **identifier**

type: object

properties:

 identifier:

 \$ref: '#/components/schemas/Identifier'

 name:

 maxLength: 140

 minLength: 1

 type: string

Identifier:

 required:

- type
- value

 type: object

 properties:

 countryOfResidence:

 allOf:

- \$ref: '#/components/schemas/CountryCode'

 value:

 type: string

 type:

 \$ref: '#/components/schemas/IdentifierType'

IdentifierType:

 type: string

 enum:

- countryIdentificationCode
- nationalIdentityNumber

ISODate:

 type: string

 format: date

ISODateTime:

 type: string

 format: date-time

ISOYearMonth:

 pattern: '^[0-9]+([0][1-9]|1[0-2])\$'

 type: string

Link:

```

required:
  - href
  - rel
type: object
properties:
  rel:
    maxLength: 50
    minLength: 1
    type: string
  href:
    maxLength: 500
    minLength: 1
    type: string
PaymentCard:
  required:
    - cardIdentifier
  type: object
  properties:
    cardIdentifier:
      allOf:
        - $ref: '#/components/schemas/CardNumber'
    holderName:
      maxLength: 140
      minLength: 1
      type: string
    startDate:
      allOf:
        - $ref: '#/components/schemas/ISOYearMonth'
    expiryDate:
      allOf:
        - $ref: '#/components/schemas/ISOYearMonth'
    cardIssuerName:
      maxLength: 140
      minLength: 1
      type: string
    type:
      $ref: '#/components/schemas/CardType'
    cardStatus:
      $ref: '#/components/schemas/CardStatus'
    versionNumber:
      maxLength: 1
      minLength: 1
      type: string
    cardIssuerIdentifier:
      $ref: '#/components/schemas/Identifier'
PostalAddress:
  type: object
  properties:
    postCode:
      maxLength: 16
      minLength: 1
      type: string

```

```
type:
  $ref: '#/components/schemas/AddressType'
streetName:
  maxLength: 70
  minLength: 1
  type: string
buildingNumber:
  maxLength: 16
  minLength: 1
  type: string
townName:
  maxLength: 35
  minLength: 1
  type: string
country:
  $ref: '#/components/schemas/CountryCode'
addressLines:
  minItems: 0
  type: array
  items:
    maxLength: 70
    minLength: 1
    type: string
ResponseDetails:
  required:
    - status
  type: object
  properties:
    status:
      type: string
      enum:
        - partial
        - complete
    message:
      maxLength: 500
      minLength: 1
      type: string
ResponseStatus:
  type: string
  enum:
    - partial
    - complete
Roles:
  required:
    - responseDetails
  type: object
  properties:
    responseStatus:
      allOf:
        - $ref: '#/components/schemas/ResponseStatus'
    responseDetails:
      minItems: 0
```

```

    type: array
    items:
      allOf:
        - $ref: '#/components/schemas/ResponseDetails'
  roles:
    minItems: 0
    type: array
    items:
      $ref: '#/components/schemas/AccountRole'
  xml:
    name: roles
  SubFamilyType:
    type: string
  enum:
    - valueDate
    - chargesGeneric
    - commissions
    - interestsGeneric
    - other
    - accountClosing
    - notAvailable
    - sweeping
    - topping
    - zeroBalancing
    - cashWithdrawal
    - debitCardPayment
    - crossBorderCashWithdrawal
    - cashDeposit
    - debitAdjustmentGeneric
    - travellersChequesDeposit
    - settlementAtMaturity
    - intraCompanyTransfer
    - corporateOwnAccountTransfer
    - crossBorderIntraCompanyTransfer
    - achDebit
    - achReturn
    - achTransactionAtxn
    - automaticTransfer
    - bankCheque
    - booked
    - domesticCreditTransfer
    - dividend
    - sepaCreditTransfer
    - financialInstitutionCreditTransfer
    - principalPayment
    - priorityCreditTransfer
    - reversalDueToPaymentReturn
    - achTransactionSala
    - sameDayValueCreditTransfer
    - standingOrder
    - taxes
    - creditTransferWithAgreedCommercialInformation

```

- crossBorderCreditTransfer
- cashLetter
- cheques
- chequesReversal
- openCheque
- unpaidCheque
- crossBorderCheque
- sepaCoreDirectDebit
- directDebitPayment
- reversalDueToPayment
- reversalDueToPaymentCancellationRequest
- reversalDueToReturnUnpaidDirectDebit
- debit
- deposit
- adjustments
- fees
- creditCardPayment
- pointOfSalePosPayment
- creditAdjustment
- settlementAfterCollection

Transaction:

required:

- transactionIdentifier

type: object

properties:

transactionIdentifier:

type: string

references:

minItems: 0

type: array

items:

allOf:

- \$ref: '#/components/schemas/TransactionReference'

creditDebitIndicator:

allOf:

- \$ref: '#/components/schemas/CreditOrDebit'

reversalIndicator:

allOf:

- \$ref: '#/components/schemas/TrueFalseIndicator'

status:

allOf:

- \$ref: '#/components/schemas/TransactionStatus'

transactionCode:

allOf:

- \$ref: '#/components/schemas/BankTransactionCode'

bookingDate:

allOf:

- \$ref: '#/components/schemas/ISODateTime'

valueDate:

allOf:

- \$ref: '#/components/schemas/ISODateTime'

counterParties:

```

    minItems: 0
    type: array
    items:
      allOf:
        - $ref: '#/components/schemas/CounterParty'
  additionalInfo:
    maxLength: 500
    minLength: 1
    type: string
  currencyExchange:
    allOf:
      - $ref: '#/components/schemas/CurrencyExchange'
  merchant:
    maxLength: 140
    minLength: 1
    type: string
  paymentCard:
    allOf:
      - $ref: '#/components/schemas/PaymentCard'
  registered:
    allOf:
      - $ref: '#/components/schemas/ISODatetime'
  amount:
    $ref: '#/components/schemas/Amount'
  currency:
    $ref: '#/components/schemas/CurrencyCode'
TransactionReference:
  required:
    - type
    - value
  type: object
  properties:
    value:
      type: string
  type:
    $ref: '#/components/schemas/TransactionReferenceType'
TransactionReferenceType:
  type: string
  enum:
    - accountServicerReference
    - archiveReference
    - chequeNumber
    - endToEndIdentification
    - instructionIdentification
    - invoiceNumber
    - mandateIdentification
    - messageIdentification
    - otherReference
    - paymentInformationIdentification
    - remittanceReference
TransactionStatus:
  type: string

```

```

enum:
  - booked
  - pending
  - info
Transactions:
  required:
  - responseDetails
  type: object
  properties:
    responseStatus:
      allOf:
      - $ref: '#/components/schemas/ResponseStatus'
    responseDetails:
      minItems: 0
      type: array
      items:
        allOf:
        - $ref: '#/components/schemas/ResponseDetails'
    transactions:
      minItems: 0
      type: array
      items:
        allOf:
        - $ref: '#/components/schemas/Transaction'
    links:
      minItems: 0
      type: array
      items:
        allOf:
        - $ref: '#/components/schemas/Link'
  xml:
    name: transactions
TrueFalseIndicator:
  type: boolean
Error400:
  type: object
  properties:
    code:
      type: string
      description: 'error code, for automatic handling'
      example: ACC-001
    message:
      type: string
      description: Best possible description of the error from Data Provider.
      example: Best possible description of the error from Data Provider.
  description: Error structure for error message 400
Error401:
  type: object
  properties:
    code:
      type: string
      description: 'error code, for automatic handling'

```

```

    example: ACC-010
  message:
    type: string
    description: Best possible description of the error from Data Provider.
    example: Best possible error description from Data Providers regarding missing authentication information.
  description: Error structure for error message 401
Error403:
  type: object
  properties:
    code:
      type: string
      description: 'error code, for automatic handling'
      example: ACC-011
    message:
      type: string
      description: Best possible description of the error from Data Provider
      example: Best possible error description from Data Providers telling that the Data Consumer is not authorized for the requested
service.
  description: Error structure for error message 403
Error404:
  type: object
  properties:
    code:
      type: string
      description: 'error code, for automatic handling'
      example: ACC-002 or ACC-003
    message:
      type: string
      description: Best possible description of the error from Data Provider
      example: Best possible description of the error from Data Provider.
  description: Error structure for error message 404
Error405:
  type: object
  properties:
    code:
      type: string
      description: 'error code, for automatic handling'
      example: ACC-012
    message:
      type: string
      description: Best possible description of the error from Data Provider
      example: Best possible description of the error from Data Provider.
  description: Error structure for error message 405
Error429:
  type: object
  properties:
    code:
      type: string
      description: 'error code, for automatic handling'
      example: ACC-022
    message:
      type: string

```

```
    description: Best possible description of the error from Data Provider
    example: Best possible description of the error from Data Provider.
description: Error structure for error message 429
Error500:
  type: object
  properties:
    code:
      type: string
      description: 'error code, for automatic handling'
      example: ACC-100 or ACC-500
    message:
      type: string
      description: Best possible description of the error from Data Provider
      example: Best possible description of the error from Data Provider.
description: Error structure for error message 500
Error:
  type: object
  properties:
    code:
      type: string
      description: 'error code, for automatic handling'
      example: ACC-0xx
    message:
      type: string
      description: Best possible description of the error from Data Provider
      example: Best possible description of the error from Data Provider.
description: Error structure for all error messages
securitySchemes:
  accountsAuth:
    type: http
    scheme: bearer
    bearerFormat: Access token (JWT)
```