

# **SNAP BI (proposed)**

# 1 Confirmation of Funds API Profile

#### **Overview**

The Confirmation of Funds API Profile describes the flows and common functionality for the Confirmation of Funds API, which allows an Electronic or a Card Based Payment Instrument Issuer ("CBPII") to:

- Register an intent to confirm funds by creating a "funds confirmation consent" resource with an ASPSP, for agreement between the PSU and ASPSP. This consent is a long lived consent, and contains the length of time (expiration date) the customer (PSU) would like to provide; and
- Subsequently make a request to confirm funds are available.
  - Funds can only be confirmed against the currency of the account.

#### 1.1 Consent Authorisation

The CBPII **must** create a **funds-confirmation-consent** resource through a **POST** operation. This resource outlines the *consent* that the CBPII claims the PSU has committed to agreeing with the ASPSP, to retrieve confirmation of funds information. At this stage, the consent is not yet agreed between the PSU and the ASPSP.

The ASPSP responds with a ConsentId. This is the intent-id that is used when initiating the authorization code grant (as described in the **Consent Framework**).

As part of the authorization code grant:

- The ASPSP authenticates the PSU.
- The ASPSP plays back the consent (registered by the CBPII) back to the PSU to agree the consent. The PSU may agree or decline the consent in its entirety (but not selectively).

Once these steps are complete, the consent is considered to have been agreed between the ASPSP and the PSU. A call to GET /funds-confirmation-consent/{ConsentId} will always be the first call once an CBPII has a valid access token, this allow ASPSP updating the consent status from "AwaitingAuthorisation" to be "Authorised".



# 1.2 API Endpoints

Name	Method	Grant type	Scope	Idempotent	Message Signing
/funds-confirmation-consents	POST	client credentials	fundsconfirmation	No	No
/funds-confirmation-consents/{ConsentId}	GET	client credentials	fundsconfirmation	No	No
	DELETE	client credentials	fundsconfirmation	No	No
/funds-confirmation	POST	authorization code	fundsconfirmation	No	No
/funds-confirmation/setLimit	POST	authorization code	fundsconfirmation	No	No
/funds-confirmation/{FundsConfirmationId}	GET	client credentials	fundsconfirmation	No	No

# 1.3 Funds Confirmation Consent

The Funds Confirmation Consent resource is used by an CBPII to register an intent to confirm funds.

# a. Funds Confirmation Consent - Request

Name	n	Definition
expirationDateTime	01	Specified date and time the funds confirmation authorisation will expire. If this is not populated, the authorisation will be open ended. ex:2017-05-02T00:00:00+00:00
chargeBearer	01	Charge Bearer code, indicates which entity bears the charge for the transaction. set to DEBT for Debtor. [DEBT, CRED, SHAR, SLEV]
debtorAccount	11	Unambiguous identification of the account of the debtor to which a confirmation of funds consent will be applied.
schemeName	11	Name of the identification scheme, in a coded form as published in an external list. E.g., SNAP.PAN, SNAP.CARD
identification	11	Identification assigned by an institution to identify an account. This identification is known by the account owner.
secondaryIdentification	01	This is secondary identification of the account, as assigned by the account servicing institution. This can be used by building societies to additionally



Name	n	Definition
		identify accounts with a roll number (in addition to a sort code and account number combination).

# b. Funds Confirmation Consent - ResponseData Dictionary

Name	N	Definition
ConsentId	11	Unique identification as assigned to identify the funds confirmation consent resource.
creationDateTime	11	Date and time at which the resource was created. ex: 2017-05-02T00:00+00:00
status	11	Specifies the status of consent resource in code form.
statusUpdateDateTime	11	Date and time at which the resource status was updated. ex: 2017-05-02T00:00+00:00
expirationDateTime	01	Specified date and time the funds confirmation authorisation will expire. If this is not populated, the authorisation will be open ended. ex:2017-05-02T00:00:00+00:00
debtorAccount	11	Unambiguous identification of the account of the debtor to which a confirmation of funds consent will be applied.
schemeName	11	Name of the identification scheme, in a coded form as published in an external list. E.g., SNAP.PAN, SNAP.CARD
identification	11	Identification assigned by an institution to identify an account. This identification is known by the account owner.
secondaryIdentification	01	This is secondary identification of the account, as assigned by the account servicing institution. This can be used by building societies to additionally identify accounts with a roll number (in addition to a sort code and account number combination).
charges	0n	Set of elements used to provide details of a charge for the payment initiation.
description	01	Charges description
chargeBearer	11	Charge Bearer code, indicates which entity bears the charge for the transaction. set to DEBT for Debtor. [DEBT, CRED, SHAR, SLEV]
type	11	Charge type, in a coded form. E.g., [Charge.Fee   Charge.Tax]
amount	11	Amount of money to be moved as associated with the charge type.



Name	N	Definition
amount	11	A number of monetary units specified in an active currency where the unit of currency is explicit and compliant with ISO 4217.
currency	11	A code allocated to a currency by a Maintenance Agency under an international identification scheme, as Codes for the representation of currencies and funds.

# c. Consents Endpoints

# POST /funds-confirmation-consents - Example

```
POST /funds-confirmation-consents HTTP/1.1
Content-Type: application/json
Authorization: Bearer 1t1satruthun1v3rs4lly
Accept: application/json; charset=utf-8
x-api-key: bb9a6cee-8739-4cce-a501-80cf2f4457fc
x-fapi-auth-date: Mon, 13 Nov 2017 19:49:37 GMT
x-fapi-customer-ip-address: 92.11.92.11
x-fapi-interaction-id: hook5i13-ntIg-4th3-rP41-3ro535touch3

{
    "debtorAccount": {
        "schemeName": "SNAP.PAN",
            "identification": "566245671529",
            "secondaryIdentification": "0813776686"
},
    "expirationDateTime": "2022-05-02T00:00:00+00:00"
}
```



## GET /funds-confirmation-consents/{ConsentId} - Example

```
GET /funds-confirmation-consents/88379 HTTP/1.1
Authorization: Bearer Jhingapulaav
x-fapi-interaction-id: 93bac548-d2de-4546-b106-880a5018460d
x-api-key: bb9a6cee-8739-4cce-a501-80cf2f4457fc
Accept: application/json
```



```
HTTP/1.1 200 OK
x-fapi-interaction-id: 93bac548-d2de-4546-b106-880a5018460d
Content-Type: application/json

{
    "ConsentId": "88379",
    "creationDateTime": "2022-04-01T00:00:00+00:00",
    "status": "AwaitingAuthorisation",
    "statusUpdateDateTime": "2022-04-01T00:00:00+00:00",
    "expirationDateTime": "2022-05-02T00:00:00+00:00",
    "debtorAccount": {
        "schemeName": "SNAP.PAN",
        "identification": "566245671529",
        "secondaryIdentification": "62813776686543"
    },
    "charges": [
        {
            "chargeBearer": "DEBT",
            "type": "Charge.Fee",
            "amount": {
                 "amount": "1500.00",
                  "currency": "IDR"
            }
        }
        ],
        "=links": {
            "self": "../funds-confirmation-consents/88379"
      }
}
```

## DELETE /funds-confirmation-consents/{ConsentId} - Example

#### Request

```
DELETE /funds-confirmation-consents/88379 HTTP/1.1
Authorization: Bearer Sarsonkasaag
x-api-key: bb9a6cee-8739-4cce-a501-80cf2f4457fc
x-fapi-auth-date: Sun, 10 Sep 2017 19:43:31 GMT
x-fapi-customer-ip-address: 104.25.212.99
x-fapi-interaction-id: 93bac548-d2de-4546-b106-880a5018460d
```

```
HTTP/1.1 204 No Content
x-fapi-interaction-id: 93bac548-d2de-4546-b106-880a5018460d
```



# 1.4 Funds Confirmation

The Funds Confirmation resource is used by an CBPII to request to confirm funds are available.

# a. Funds Confirmation - Request

# **Data Dictionary**

Name	n	Definition
ConsentId	11	Unique identification as assigned by the ASPSP to uniquely identify the funds confirmation consent resource.
reference	11	Unique reference, as assigned by the CBPII, to unambiguously refer to the request related to the payment transaction.
instructedAmount	11	Amount of money to be confirmed as available funds in the debtor account. Contains an Amount and a Currency.
amount	11	A number of monetary units specified in an active currency where the unit of currency is explicit and compliant with ISO 4217.
currency	11	A code allocated to a currency by a Maintenance Agency under an international identification scheme, as Codes for the representation of currencies and funds.

# **b.** Funds Confirmation - Response

Name	n	Definition
FundsConfirmationId	11	Unique identification as assigned by the ASPSP to uniquely identify the funds confirmation resource.
ConsentId	11	Unique identification as assigned by the ASPSP to uniquely identify the funds confirmation consent resource.
creationDateTime	11	Date and time at which the resource was created. ex: 2017-05-02T00:00:00+00:00
fundsAvailable	11	Flag to indicate the result of a confirmation of funds check.
reference	11	Unique reference, as assigned by the CBPII, to unambiguously refer to the request related to the payment transaction.
instructedAmount	11	Amount of money to be confirmed as available funds in the debtor account. Contains an Amount and a Currency.
amount	11	A number of monetary units specified in an active currency where the unit of currency is explicit and compliant with ISO 4217.
currency	11	A code allocated to a currency by a Maintenance Agency under an international identification scheme, as Codes for the representation of currencies and funds.
charges	0n	Set of elements used to provide details of a charge for the payment initiation.
description	01	Charges description



Name	n	Definition
chargeBearer	11	Charge Bearer code, indicates which entity bears the charge for the transaction. set to DEBT for Debtor. [DEBT, CRED, SHAR, SLEV]
type	11	Charge type, in a coded form. E.g., [Charge.Fee   Charge.Tax]
amount	11	Amount of money to be moved as associated with the charge type.
amount	11	A number of monetary units specified in an active currency where the unit of currency is explicit and compliant with ISO 4217.
currency	11	A code allocated to a currency by a Maintenance Agency under an international identification scheme, as Codes for the representation of currencies and funds.

# c. Endpoints

# POST /funds-confirmation – Example

```
POST /funds-confirmation HTTP/1.1
Content-Type: application/json
Authorization: Bearer 1t1satruthun1v3rs4lly
Accept: application/json; charset=utf-8
x-fapi-interaction-id: hook5i13-ntIg-4th3-rP41-3ro535touch3
x-api-key: bb9a6cee-8739-4cce-a501-80cf2f4457fc

{
    "ConsentId": "88379",
    "reference": "Purchase01/TopUp01",
    "instructedAmount": {
        "amount": "51000.00",
        "currency": "IDR"
    }
}
```



```
HTTP/1.1 201 Created
Content-Type: application/json
x-fapi-interaction-id: hook5i13-ntIg-4th3-rP41-3ro535touch3

{
    "FundsConfirmationId": "123456",
    "ConsentId": "88379",
    "creationDateTime": "2017-05-02T00:00:00+00:00",
    "fundsAvailable": true,
    "reference": "Purchase01/TopUp01",
    "instructedAmount": {
        "amount": "51000.00",
        "currency": "IDR"
    },
    "chargeSarer": "DEBT",
        "type": "Charge.Fee",
        "amount": {
            "amount": "1500.00",
            "currency": "IDR"
        }
     }
     ],
     __links": {
        "self": "../funds-confirmations/123456"
    }
}
```

# **GET** /funds-confirmation/{FundsConfirmationId} – Example

```
GET /funds-confirmation/123456 HTTP/1.1
Content-Type: application/json
Authorization: Bearer 1t1satruthun1v3rs4lly
Accept: application/json; charset=utf-8
x-fapi-interaction-id: hook5i13-ntIg-4th3-rP41-3ro535touch3
x-api-key: bb9a6cee-8739-4cce-a501-80cf2f4457fc
```



```
HTTP/1.1 200 OK
Content-Type: application/json
x-fapi-interaction-id: hook5i13-ntIg-4th3-rP41-3ro535touch3

{
    "FundsConfirmationId": "123456",
    "ConsentId": "88379",
    "creationDateTime": "2017-05-02T00:00:00+00:00",
    "fundsAvailable": true,
    "reference": "Purchase01/TopUp01",
    "instructedAmount": {
        "amount": "51000.00",
        "currency": "IDR"
    },
    "chargeBearer": "DEBT",
        "type": "Charge.Fee",
        "amount": {
        "amount": "1500.00",
        "currency": "IDR"
     }
    }
    }
    ],
    "_links": {"self": "../funds-confirmations/123456"}
}
```

# POST /funds-confirmation/setLimit - Example

## Request

```
POST /funds-confirmation/setLimit HTTP/1.1
Content-Type: application/json
Authorization: Bearer 1t1satruthun1v3rs4lly
Accept: application/json; charset=utf-8
x-fapi-interaction-id: hook5i13-ntIg-4th3-rP41-3ro535touch3
x-api-key: bb9a6cee-8739-4cce-a501-80cf2f4457fc

{
    "ConsentId": "88379",
    "amount": {
        "amount": "1200000.00",
         "currency": "IDR"
    }
}
```

```
HTTP/1.1 200 OK
Content-Type: application/json
x-fapi-interaction-id: hook5i13-ntIg-4th3-rP41-3ro535touch3

{
    "ConsentId": "88379",
    "amount": {
        "amount": "1200000.00",
        "currency": "IDR"
    },
    "_links": {"self": "../funds-confirmations-consents/88379"}
}
```



## 2 Account and Transaction API Profile

## **Overview**

The Account and Transaction API Profile describes the flows and common functionality for the Accounts and Transaction API, which allows an Account Information Service Provider ('AISP') to:

- Register an intent to retrieve account information by creating an "account access consent". This registers the data "permissions", expiration and historical period allowed for transactions / statements - that the customer (PSU) has consented to provide to the AISP; and
- Subsequently, retrieve account and transaction data.

## 2.1 Consent Authorisation

The AISP **must** create an **account-access-consent** resource through a **POST** operation. This resource indicates the *consent* that the AISP claims it has been given by the PSU to retrieve account and transaction information. At this stage, the consent is not yet authorised as the ASPSP has not yet verified this claim with the PSU.

The ASPSP responds with a ConsentId. This is the intent-id that is used when initiating the authorization code grant (as described in the **Consent Framework**).

As part of the consent authorization flow:

- The ASPSP authenticates the PSU.
- The ASPSP plays back the consent (registered by the AISP) back to the PSU to get consent authorisation. The PSU may accept or reject the consent in its entirety.
- The ASPSP presents the PSU with a list of accounts to which the consent will apply.

Once these steps are complete, the consent is considered to have been authorised by the PSU.

A call to GET /accounts will always be the first call once an AISP has a valid access token, this allow ASPSP updating the consent status from "AwaitingAuthorisation" to be "Authorised".

An AISP will be given the full list of accounts (the AccountId(s)) that the PSU has authorised the AISP to access



# 2.2 API Endpoints

Name	Method	Grant type	Scope	Idempotent	Message Signing
/account-access-consents	POST	client credentials	accounts	No	No
/account-access-consents/{ConsentId}	GET	client credentials	accounts	No	No
,	DELETE	client credentials	accounts	No	No
/accounts	GET	authorization code	accounts	No	No
/balances	GET	authorization code	accounts	No	No
/transactions	GET	authorization code	accounts	No	No
/statements	GET	authorization code	accounts	No	No
/accounts/{AccountId}	GET	authorization code	accounts	No	No
/accounts/{AccountId}/balances	GET	authorization code	accounts	No	No
/accounts/{AccountId}/transactions	GET	authorization code	accounts	No	No
/accounts/{AccountId}/statements	GET	authorization code	accounts	No	No



# 2.3 Accounts Access Consent

The Account Access Consents API is used by an AISP to request an ASPSP to create a new account-access-consent resource, retrieve the status of account-access-consent resource and delete the account-access-consent resource.

## a. Account Access Consents - Request

# **Data Dictionary**

Name	n	Definition
permissions	0n	Specifies the account access data types. This is a list of the data clusters being consented by the PSU, and requested for authorisation with the ASPSP. E.g., ReadPAN, ReadAccountsDetail etc. Not used at this moment.
expirationDateTime	01	Specified date and time the funds confirmation authorisation will expire. If this is not populated, the authorisation will be open ended. ex:2017-05-02T00:00:00+00:00

# b. Account Access Consents - Response

Name	N	Definition
ConsentId	11	Unique identification as assigned to identify the funds confirmation consent resource.
creationDateTime	11	Date and time at which the resource was created. ex: 2017-05-02T00:00+00:00
status	11	Specifies the status of consent resource in code form.
statusUpdateDateTime	11	Date and time at which the resource status was updated. ex: 2017-05-02T00:00:00+00:00
permissions	0n	Specifies the account access data types. This is a list of the data clusters being consented by the PSU, and requested for authorisation with the ASPSP. E.g., ReadPAN, ReadAccountsDetail etc. Not used at this moment.
expirationDateTime	01	Specified date and time the funds confirmation authorisation will expire. If this is not populated, the authorisation will be open ended. ex:2017-05-02T00:00:00+00:00



#### c. Consents Endpoints

#### POST /account-access-consents - Example

#### Request

```
POST /account-access-consents HTTP/1.1
Authorization: Bearer 2YotnFZFEjr1zCsicMWpAA
x-api-key: bb9a6cee-8739-4cce-a501-80cf2f4457fc
x-fapi-auth-date: Sun, 10 Sep 2017 19:43:31 GMT
x-fapi-customer-ip-address: 104.25.212.99
x-fapi-interaction-id: 93bac548-d2de-4546-b106-880a5018460d
Content-Type: application/json
Accept: application/json

{
    "expirationDateTime": "2017-05-02T00:00:00+00:00"
}
```

#### Response

```
HTTP/1.1 201 Created
x-fapi-interaction-id: 93bac548-d2de-4546-b106-880a5018460d
Content-Type: application/json

{
    "ConsentId": "urn-alphabank-intent-88379",
    "status": "AwaitingAuthorisation",
    "statusUpdateDateTime": "2017-05-02T00:00:00+00:00",
    "creationDateTime": "2017-05-02T00:00:00+00:00",
    "expirationDateTime": "2017-08-02T00:00:00+00:00"
    "_links": {
        "self": "../account-access-consents/urn-alphabank-intent-88379"
    }
}
```

## GET /account-access-consents/{ConsentId} - Example

```
GET /account-access-consents/urn-alphabank-intent-88379 HTTP/1.1
Authorization: Bearer 2YotnFZFEjr1zCsicMWpAA
x-api-key: bb9a6cee-8739-4cce-a501-80cf2f4457fc
x-fapi-auth-date: Sun, 10 Sep 2017 19:43:31 GMT
x-fapi-customer-ip-address: 104.25.212.99
x-fapi-interaction-id: 93bac548-d2de-4546-b106-880a5018460d
Accept: application/json
```



```
HTTP/1.1 200 OK
x-fapi-interaction-id: 93bac548-d2de-4546-b106-880a5018460d
Content-Type: application/json

{
    "ConsentId": "urn-alphabank-intent-88379",
    "status": "AwaitingAuthorisation",
    "statusUpdateDateTime": "2017-05-02T00:00:00+00:00",
    "creationDateTime": "2017-05-02T00:00:00+00:00",
    "expirationDateTime": "2017-08-02T00:00:00+00:00"
    "_links": {
        "self": "../account-access-consents/urn-alphabank-intent-88379"
    }
}
```

## DELETE /account-access-consents/{ConsentId} - Example

#### Request

```
DELETE /account-access-consents/urn-alphabank-intent-88379 HTTP/1.1
Authorization: Bearer 2YotnFZFEjr1zCsicMWpAA
x-api-key: bb9a6cee-8739-4cce-a501-80cf2f4457fc
x-fapi-auth-date: Sun, 10 Sep 2017 19:43:31 GMT
x-fapi-customer-ip-address: 104.25.212.99
x-fapi-interaction-id: 93bac548-d2de-4546-b106-880a5018460d
Accept: application/json
```

```
HTTP/1.1 204 No Content
x-fapi-interaction-id: 93bac548-d2de-4546-b106-880a5018460d
```



# 2.4 Accounts

The accounts resource is used by an AISP to retrieve full list of accounts and account information that the PSU has authorised to access.

First Step The first step for an AISP after an account-request is authorised - is to call the GET /accounts endpoint.

## a. Accounts - Request

# **Data Dictionary**

Name	N	Definition
accountld	11	A unique and immutable identifier used to identify the account resource. This identifier has no meaning to the account owner.

# b. Accounts - Response

Name	N	Definition
account	0n	Unambiguous identification of the account to which credit and debit entries are made.
accountld	11	A unique and immutable identifier used to identify the account resource. This identifier has no meaning to the account owner.
status	01	Specifies the status of account resource in code form.
statusUpdateDateTime	01	Date and time at which the resource status was updated.
currency	01	Identification of the currency in which the account is held. Usage: Currency should only be used in case one and the same account number covers several currencies and the initiating party needs to identify which currency needs to be used for settlement on the account.
accountType	01	Specifies the type of account (personal or business).
accountSubType	01	Specifies the sub type of account (product family group).
description	01	Specifies the description of the account type.
nickname	01	The nickname of the account, assigned by the account owner in order to provide an additional means of identification of the account.
openingDate	01	Date on which the account and related basic services are effectively operational for the account owner.
maturityDate	01	Maturity date for the account.
switchStatus	01	The switch status for the account.
account	01	Provides the details to identify an account.



Name	N	Definition
schemeName	11	Name of the identification scheme, in a coded form as published in an external list.
identification	11	Identification assigned by an institution to identify an account. This identification is known by the account owner.
name	01	The account name is the name or names of the account owner(s) represented at an account level, as displayed by the ASPSP's online channels. Note, the account name is not the product name or the nickname of the account.
secondaryIdentification	01	This is secondary identification of the account, as assigned by the account servicing institution. This can be used by building societies to additionally identify accounts with a roll number (in addition to a sort code and account number combination).
servicer	01	Party that manages the account on behalf of the account owner, that is manages the registration and booking of entries on the account, calculates balances on the account and provides information about the account.
schemeName	11	Name of the identification scheme, in a coded form as published in an external list.
identification	11	Unique and unambiguous identification of the servicing institution.

# c. Endpoints

# **GET /accounts – Bulk Example**

# Request

GET /accounts HTTP/1.1

Authorization: Bearer Az90SAOJklae

x-api-key: bb9a6cee-8739-4cce-a501-80cf2f4457fc x-fapi-auth-date: Sun, 10 Sep 2017 19:43:31 GMT x-fapi-customer-ip-address: 104.25.212.99 x-fapi-interaction-id: 93bac548-d2de-4546-b106-880a5018460d

Accept: application/json



```
HTTP/1.1 200 OK
x-fapi-interaction-id: 93bac548-d2de-4546-b106-880a5018460d
Content-Type: application/json
```

```
"account": [
      "accountId": "22289",
     "status": "Enabled",
      "statusUpdateDateTime": "2019-01-01T06:06:06+00:00",
      "currency": "IDR",
"accountType": "Personal",
      "accountSubType": "CurrentAccount",
"description": "reg cust",
      "nickname": "Bills"
     "openingDate": "01-05-2002",
"maturityDate": "01-05-2002",
"switchStatus": "none",
      "account": [
             "schemeName": "PAN",
             "identification": "80200110203345",
             "name": "Mr Kevin",
             "secondaryIdentification": "00021"
      ],
"servicer": {
          "schemeName": "PAN",
         "identification": "662534323"
      "accountId": "31820",
      "status": "Enabled",
      "statusUpdateDateTime": "2018-01-01T06:06:06+00:00",
      "currency": "IDR",
      "accountType": "Personal",
"accountSubType": "CurrentAccount",
      "nickname": "Household",
      "account": [
            "schemeName": "PAN",
            "identification": "80200110203348",
            "name": "Mr Kevin"
```

## GET /accounts/{AccountId} - Specific Example

```
GET /accounts/22289 HTTP/1.1
Authorization: Bearer Az90SAOJklae
x-api-key: bb9a6cee-8739-4cce-a501-80cf2f4457fc
x-fapi-auth-date: Sun, 10 Sep 2017 19:43:31 GMT
x-fapi-customer-ip-address: 104.25.212.99
x-fapi-interaction-id: 93bac548-d2de-4546-b106-880a5018460d
Accept: application/json
```



```
HTTP/1.1 200 OK
x-fapi-interaction-id: 93bac548-d2de-4546-b106-880a5018460d
Content-Type: application/json
```



# 2.5 Balances

The balances resource is used by an AISP to retrieve in bulk or single account balance information for a specific AccountId for that the PSU has authorised to access.

# a. Balances - Request

# **Data Dictionary**

Name	N	Definition
accountld	11	A unique and immutable identifier used to identify the account resource. This identifier has no meaning to the account owner.

# b. Balances - Response

Name	N	Definition
balance	1n	Set of elements used to define the balance details.
accountld	11	A unique and immutable identifier used to identify the account resource. This identifier has no meaning to the account owner.
creditDebitIndicator	11	Indicates whether the balance is a credit or a debit balance. Usage: A zero balance is considered to be a credit balance.
type	11	Balance type, in a coded form.
dateTime	11	Indicates the date (and time) of the balance.
amount	11	Amount of money of the cash balance.
amount	11	A number of monetary units specified in an active currency where the unit of currency is explicit and compliant with ISO 4217.
currency	11	A code allocated to a currency by a Maintenance Agency under an international identification scheme,
creditLine	0n	Set of elements used to provide details on the credit line.
included	11	Indicates whether or not the credit line is included in the balance of the account. Usage: If not present, credit line is not included in the balance amount of the account.
type	01	Limit type, in a coded form.
amount	01	Amount of money of the credit line.
amount	11	A number of monetary units specified in an active currency where the unit of currency is explicit and compliant with ISO 4217.
currency	11	A code allocated to a currency by a Maintenance Agency under an international identification scheme,.



## c. Endpoints

# **GET /balances – Bulk Example**

#### Request

```
GET /balances HTTP/1.1
Authorization: Bearer Az90SAOJklae
x-api-key: bb9a6cee-8739-4cce-a501-80cf2f4457fc
x-fapi-auth-date: Sun, 10 Sep 2017 19:43:31 GMT
x-fapi-customer-ip-address: 104.25.212.99
x-fapi-interaction-id: 93bac548-d2de-4546-b106-880a5018460d
Accept: application/json
```

```
HTTP/1.1 200 OK
x-fapi-interaction-id: 93bac548-d2de-4546-b106-880a5018460d
Content-Type: application/json
```

```
"balance": [
        "accountId": "22289",
        "amount": {
    "amount": "1230.00",
    "currency": "IDR"
        },
"creditDebitIndicator": "Credit",
image: lable".
        "type": "InterimAvailable",
"dateTime": "2017-04-05T10:43:07+00:00",
"creditLine": [
                 "included": true,
                 "amount": {
    "amount": "1000.00",
                     "currency": "IDR"
                 },
"type": "Temporary"
        "accountId": "31820",
        "amount": {
    "amount": "57.36",
            "currency": "IDR"
        },
"creditDebitIndicator": "Debit",
"credimBooked",
        "dateTime": "2017-05-02T14:22:09+00:00"
],
"_links": {
      "self": "../balances/"
```



## **GET /accounts/{AccountId}/balances – Specific Example**

#### Request

```
GET /accounts/22289/balances HTTP/1.1
Authorization: Bearer Az90SAOJklae
x-api-key: bb9a6cee-8739-4cce-a501-80cf2f4457fc
x-fapi-auth-date: Sun, 10 Sep 2017 19:43:31 GMT
x-fapi-customer-ip-address: 104.25.212.99
x-fapi-interaction-id: 93bac548-d2de-4546-b106-880a5018460d
Accept: application/json
```

```
HTTP/1.1 200 OK
x-fapi-interaction-id: 93bac548-d2de-4546-b106-880a5018460d
Content-Type: application/json
    "balance": [
           "accountId": "22289",
           "amount": {
    "amount": "1230.00",
    "currency": "IDR"
           "type": "InterimAvailable",
"dateTime": "2017-04-05T10:43:07+00:00",
"creditLine": [
                   "included": true,
                   "amount": {
    "amount": "1000.00",
    "currency": "IDR"
                   },
"type": "Temporary"
                   "included": false, // overdraft
                   "amount": {
    "amount": "500.00",
    "currency": "IDR"
                   },
"type": "Pre-Agreed"
      links": {
         "self": "../accounts/22289/balances/"
```



# 2.6 Transactions

The transactions resource is used by an AISP to retrieve the transactions for a specific Account(d or to retrieve the transactions in bulk for account(s) that the PSU has authorised to access.

## Filtering

Limited support for filtering in URL query string is provided on the **transactions** resource.

Name	Occurrence	Definition
fromBookingDateTime	01	Specifies start date and time for filtering of the Transaction records on the Transaction/BookingDateTime field. Ex: 2015-01-01T00:00:00
toBookingDateTime	01	Specifies end date and time for filtering of the Transaction records on the Transaction/BookingDateTime field. Ex: 2022-01-01T15:35:00

The ASPSP must treat the following as valid input:

- Non-working days (e.g. a Sunday or a Bank holiday) or any other days on which no transactions are recorded.
- Dates that fall outside the range for which transaction information is provided through APIs.
- Dates that fall outside the range for which a consent authorisation is available.
- Timezone may be included in the filter request, but must be ignored by the ASPSP.

In the above situations, the ASPSP must return data for the remaining valid period specified by the filter

## a. Transactions - Request

Name	N	Definition
accountld	11	A unique and immutable identifier used to identify the account resource. This identifier has no meaning to the account owner.



# b. Transactions - Response

Name	N	Definition
transaction	0n	Provides further details on an entry in the report.
accountld	11	A unique and immutable identifier used to identify the account resource. This identifier has no meaning to the account owner.
transactionId	01	Unique identifier for the transaction within an servicing institution. This identifier is both unique and immutable.
transactionReference	01	Unique reference for the transaction. This reference is optionally populated, and may as an example be the FPID in the Faster Payments context.
statementReference	0n	Unique reference for the statement. This reference may be optionally populated if available.
creditDebitIndicator	11	Indicates whether the transaction is a credit or a debit entry.
status	11	Status of a transaction entry on the books of the account servicer.
transactionMutability	01	Specifies the Mutability of the Transaction record.
bookingDateTime	11	Date and time when a transaction entry is posted to an account on the account servicer's books. Usage: Booking date is the expected booking date, unless the status is booked, in which case it is the actual booking date.
valueDateTime	01	Date and time at which assets become available to the account owner in case of a credit entry, or cease to be available to the account owner in case of a debit transaction entry. Usage: If transaction entry status is pending and value date is present, then the value date refers to an expected/requested value date. For transaction entries subject to availability/float and for which availability information is provided, the value date must not be used. In this case the availability component identifies the number of availability days.
transactionInformation	01	Further details of the transaction. This is the transaction narrative, which is unstructured text.
addressLine	01	Information that locates and identifies a specific address for a transaction entry, that is presented in free format text.
amount	11	Amount of money in the cash transaction entry.
amount	11	A number of monetary units specified in an active currency where the unit of currency is explicit and compliant with ISO 4217.
Currency	11	A code allocated to a currency by a Maintenance Agency under an international identification scheme, as Codes for the representation of currencies and funds.
chargeAmount	01	Transaction charges to be paid by the charge bearer.



Name	N	Definition
amount	11	A number of monetary units specified in an active currency where the unit of currency is explicit and compliant with ISO 4217.
currency	11	A code allocated to a currency by a Maintenance Agency under an international identification scheme, as Codes for the representation of currencies and funds.
currencyExchange	01	Set of elements used to provide details on the currency exchange.
sourceCurrency	11	Currency from which an amount is to be converted in a currency conversion.
targetCurrency	01	Currency into which an amount is to be converted in a currency conversion.
unitCurrency	01	Currency in which the rate of exchange is expressed in a currency exchange. In the example 1IDR = xxxCUR, the unit currency is IDR.
exchangeRate	11	Factor used to convert an amount from one currency into another. This reflects the price at which one currency was bought with another currency. Usage: ExchangeRate expresses the ratio between UnitCurrency and QuotedCurrency (ExchangeRate = UnitCurrency/QuotedCurrency).
contractIdentification	01	Unique identification to unambiguously identify the foreign exchange contract.
quotationDate	01	Date and time at which an exchange rate is quoted.
instructedAmount	01	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.
amount	11	A number of monetary units specified in an active currency where the unit of currency is explicit and compliant with ISO 4217.
currency	11	A code allocated to a currency by a Maintenance Agency under an international identification scheme, as Codes for the representation of currencies and funds.
bankTransactionCode	01	Set of elements used to fully identify the type of underlying transaction resulting in an entry.
code	11	Specifies the family within a domain.
subCode	11	Specifies the sub-product family within a specific family.
proprietaryBankTransactionCode	01	Set of elements to fully identify a proprietary bank transaction code.
code	11	Proprietary bank transaction code to identify the underlying transaction.
issuer	01	Identification of the issuer of the proprietary bank transaction code.
balance	01	Set of elements used to define the balance as a numerical representation of the net increases and decreases in an account after a transaction entry is applied to the account.



Name	N	Definition
creditDebitIndicator	11	Indicates whether the balance is a credit or a debit balance. Usage: A zero balance is considered to be a credit balance.
type	11	Balance type, in a coded form.
amount	11	Amount of money of the cash balance after a transaction entry is applied to the account
amount	11	A number of monetary units specified in an active currency where the unit of currency is explicit and compliant with ISO 4217.
currency	11	A code allocated to a currency by a Maintenance Agency under an international identification scheme, as Codes for the representation of currencies and funds.
merchantDetails	01	Details of the merchant involved in the transaction.
merchantName	01	Name by which the merchant is known.
merchantCategoryCode	01	Category code conform to ISO 18245, related to the type of services or goods the merchant provides for the transaction.
creditorAgent	01	Financial institution servicing an account for the creditor.
schemeName	01	Name of the identification scheme, in a coded form as published in an external list.
identification	01	Unique and unambiguous identification of a financial institution or a branch of a financial institution.
name	01	Name by which an agent is known and which is usually used to identify that agent.
addressType	01	Identifies the nature of the postal address.
townName	01	Name of a built-up area, with defined boundaries, and a local government.
addressLine	07	Information that locates and identifies a specific address, as defined by postal services, presented in free format text.
creditorAccount	01	Unambiguous identification of the account of the creditor, in the case of a debit transaction.
schemeName	01	Name of the identification scheme, in a coded form as published in an external list.
Identification	01	Identification assigned by an institution to identify an account. This identification is known by the account owner.
name	01	The account name is the name or names of the account owner(s) represented at an account level, as displayed by the ASPSP's online channels. Note, the account name is not the product name or the nickname of the account.
secondaryIdentification	01	This is secondary identification of the account, as assigned by the account servicing institution. This can be used by building societies to additionally identify



Name	N	Definition
		accounts with a roll number (in addition to a sort code and account number combination).
debtorAgent	01	Financial institution servicing an account for the debtor.
schemeName	01	Name of the identification scheme, in a coded form as published in an external list.
identification	01	Unique and unambiguous identification of a financial institution or a branch of a financial institution.
name	01	Name by which an agent is known and which is usually used to identify that agent.
addressType	01	Identifies the nature of the postal address.
townName	01	Name of a built-up area, with defined boundaries, and a local government.
addressLine	07	Information that locates and identifies a specific address, as defined by postal services, presented in free format text.
debtorAccount	01	Unambiguous identification of the account of the debtor, in the case of a credit transaction.
schemeName	01	Name of the identification scheme, in a coded form as published in an external list.
identification	01	Identification assigned by an institution to identify an account. This identification is known by the account owner.
name	01	The account name is the name or names of the account owner(s) represented at an account level, as displayed by the ASPSP's online channels. Note, the account name is not the product name or the nickname of the account.
secondaryIdentification	01	This is secondary identification of the account, as assigned by the account servicing institution. This can be used by building societies to additionally identify accounts with a roll number (in addition to a sort code and account number combination).
cardInstrument	01	Set of elements to describe the card instrument used in the transaction.
cardSchemeName	11	Name of the card scheme.
authorisationType	01	The card authorisation type.
name	01	Name of the cardholder using the card instrument.
identification	01	Identification assigned by an institution to identify the card instrument used in the transaction. This identification is known by the account owner, and may be masked.
supplementaryData	01	Additional information that can not be captured in the structured fields and/or any other specific block. Type object.



# c. Endpoints

## **GET /transactions – Bulk Example**

#### Request

GET /transactions HTTP/1.1

Authorization: Bearer Az90SAOJklae

x-api-key: bb9a6cee-8739-4cce-a501-80cf2f4457fc

x-fapi-customer-ip-address: 104.25.212.99 x-fapi-interaction-id: 93bac548-d2de-4546-b106-880a5018460d

Accept: application/json

## Response

HTTP/1.1 200 OK

x-fapi-interaction-id: 93bac548-d2de-4546-b106-880a5018460d Content-Type: application/json



```
"transaction": [
     "accountId": "22289",
     "transactionId": "123",
      "transactionReference": "Ref 123",
     "amount": {
    "amount": "10.00",
        "currency": "IDR"
     },
"creditDebitIndicator": "Credit",
"status": "Booked",
"bookingDateTime": "2017-04-05T10:43:07+00:00",
"valueDateTime": "2017-04-05T10:45:22+00:00",
"instruction": "Cash from Aubrey",
      "bankTransactionCode": {
         "code": "ReceivedCreditTransfer",
        "subCode": "DomesticCreditTransfer"
     },
"proprietaryBankTransactionCode": {
   "code": "Transfer", "issuer": "AlphaBank"
     "amount": {
    "amount": "230.00",
           "currency": "IDR"
        },
"creditDebitIndicator": "Credit",
        "type": "InterimBooked"
     "accountId": "31820",
     "transactionId": "567",
"transactionReference": "Ref 124",
     "amount": {
        "amount": "100.00",
        "currency": "IDR"
     },
"creditDebitIndicator": "Debit",
     "status": "Booked",
"bookingDateTime": "2017-05-02T14:22:09+00:00",
"valueDateTime": "2017-05-02T14:22:09+00:00",
"transactionInformation": "Paid the gas bill",
      "addressLine": "Coventry",
      "bankTransactionCode": {
        "code": "IssuedCreditTransfer",
"subCode": "AutomaticTransfer"
     },
"proprietaryBankTransactionCode": {
    "code": "DirectDebit", "issuer": "AlphaBank"
    "type": "InterimBooked"
 ,
_links": {
   "self": "../transactions/"
 _meta": {
   "totalPages": 10,
  "firstAvailableDateTime": "2017-05-03T00:00:00+00:00",
"lastAvailableDateTime": "2012-12-03T00:00:00+00:00"
```



## **GET /accounts/{AccountId}/transactions – Specific Example**

#### Request

```
GET /accounts/22289/transactions HTTP/1.1
Authorization: Bearer Az90SA0Jklae
x-api-key: bb9a6cee-8739-4cce-a501-80cf2f4457fc
x-fapi-auth-date: Sun, 10 Sep 2017 19:43:31 GMT
x-fapi-customer-ip-address: 104.25.212.99
x-fapi-interaction-id: 93bac548-d2de-4546-b106-880a5018460d
Accept: application/json
```

```
HTTP/1.1 200 OK
x-fapi-interaction-id: 93bac548-d2de-4546-b106-880a5018460d
Content-Type: application/json
    "transaction": [
         "accountId": "22289",
"transactionId": "123",
         "transactionReference": "Ref 1",
         "amount": {
    "amount": "100000.00",
           "currency": "IDR"
         },
"creditDebitIndicator": "Credit",
         "status": "Booked",
"bookingDateTime": "2017-04-05T10:43:07+00:00",
"valueDateTime": "2017-04-05T10:45:22+00:00",
         "transactionInformation": "Cash from Aubrey"
         "bankTransactionCode": {
           "code": "ReceivedCreditTransfer",
           "subCode": "DomesticCreditTransfer"
         },
"proprietaryBankTransactionCode": {
    "    "    "Transfer",
            "issuer": "AlphaBank"
        "amount": "230000.00",
              "currency": "IDR"
           },
"creditDebitIndicator": "Credit",
           "type": "InterimBooked"
       links": {
       "self": "../accounts/22289/transactions/"
      _meta": {
      "totalPages": 4,
"firstAvailableDateTime": "2017-05-03T00:00:00+00:00",
       "lastAvailableDateTime": "2022-12-03T00:00:00+00:00"
```



# 2.7 Statements

The statements resource is used by an AISP to retrieve the

- statements information
- statement information for a StatementId in json and non-json(file) format.
- transactions for a selected StatementId

for a specific account identified by Accountld or retrieve statement information for all accounts that the PSU has consented to.

#### **Filtering**

Limited support for filtering URL query string is provided on the **statements** resource.

Name	Occurrence	Definition
fromStatementDateTime	01	Specifies start date and time for filtering of the Statements on the Statement/StartDateTime field. If this is not populated, the start date will be open ended. Ex: 2015-01-01T00:00:00
fromStatementDateTime	01	Specifies end date and time for filtering of the Statements on the Statement/StartDateTime field. If this is not populated, the end date will be open ended. Ex: 2015-01-01T00:00:00

The ASPSP must treat the following as valid input:

- Non-working days (e.g. a Sunday or a Bank holiday) or any other days on which no transactions are recorded.
- Dates that fall outside the range for which transaction information is provided through APIs.
- Dates that fall outside the range for which a consent authorisation is available.
- Timezone may be included in the filter request, but must be ignored by the ASPSP.

In the above situations, the ASPSP must return data for the remaining valid period specified by the filter

#### d. Statements - Request

Name	N	Definition
accountld	11	A unique and immutable identifier used to identify the account resource. This identifier has no meaning to the account owner.



# e. Statements - Response

Name	N	Definition
statement	0n	Provides further details on a statement resource.
accountld	11	A unique and immutable identifier used to identify the account resource. This identifier has no meaning to the account owner.
statementId	01	Unique identifier for the statement resource within an servicing institution. This identifier is both unique and immutable.
statementReference	01	Unique reference for the statement. This reference may be optionally populated if available.
type	11	Statement type, in a coded form.
startDateTime	11	Date and time at which the statement period starts.
endDateTime	11	Date and time at which the statement period ends.
creationDateTime	11	Date and time at which the resource was created.
statementDescription	0n	Other descriptions that may be available for the statement resource.
statementBenefit	0n	Set of elements used to provide details of a benefit or reward amount for the statement resource.
type	11	Benefit type, in a coded form.
amount	11	Amount of money associated with the statement benefit type.
amount	11	A number of monetary units specified in an active currency where the unit of currency is explicit and compliant with ISO 4217.
currency	11	A code allocated to a currency by a Maintenance Agency under an international identification scheme, as Codes for the representation of currencies and funds.
statementFee	0n	Set of elements used to provide details of a fee for the statement resource.
description	01	Description that may be available for the statement fee.
creditDebitIndicator	11	Indicates whether the amount is a credit or a debit. Usage: A zero amount is considered to be a credit amount.
type	11	Fee type, in a coded form.
rate	01	Rate charged for Statement Fee (where it is charged in terms of a rate rather than an amount)
rateType	01	Description that may be available for the statement fee rate type.
frequency	01	How frequently the fee is applied to the Account.
amount	11	Amount of money associated with the statement fee type.



Name	N	Definition
amount	11	A number of monetary units specified in an active currency where the unit of currency is explicit and compliant with ISO 4217.
currency	11	A code allocated to a currency by a Maintenance Agency under an international identification scheme, as Codes for the representation of currencies and funds.
statementInterest	0n	Set of elements used to provide details of a generic interest amount related to the statement resource.
description	01	Description that may be available for the statement interest.
creditDebitIndicator	11	Indicates whether the amount is a credit or a debit. Usage: A zero amount is considered to be a credit amount.
type	11	Interest amount type, in a coded form.
rate	01	Rate for Statement Interest (where it is applicable in terms of a rate rather than an amount)
rateType	01	Description that may be available for the statement Interest rate type.
frequency	01	How frequently the Interest Rate is applied to the Account.
amount	11	Amount of money associated with the statement interest amount type.
amount	11	A number of monetary units specified in an active currency where the unit of currency is explicit and compliant with ISO 4217.
currency	11	A code allocated to a currency by a Maintenance Agency under an international identification scheme, as Codes for the representation of currencies and funds.
statementAmount	0n	Set of elements used to provide details of a generic amount for the statement resource.
creditDebitIndicator	11	Indicates whether the amount is a credit or a debit. Usage: A zero amount is considered to be a credit amount.
type	11	Amount type, in a coded form.
amount	11	Amount of money associated with the amount type.
amount	11	A number of monetary units specified in an active currency where the unit of currency is explicit and compliant with ISO 4217.
currency	11	A code allocated to a currency by a Maintenance Agency under an international identification scheme, as Codes for the representation of currencies and funds.
statementDateTime	0n	Set of elements used to provide details of a generic date time for the statement resource.
dateTime	11	Date and time associated with the date time type.
type	11	Date time type, in a coded form.
statementRate	0n	Set of elements used to provide details of a generic rate related to the statement resource.



Name	N	Definition
rate	11	Rate associated with the statement rate type.
type	11	Statement rate type, in a coded form.
statementValue	0n	Set of elements used to provide details of a generic number value related to the statement resource.
value	11	Value associated with the statement value type.
type	11	Statement value type, in a coded form.

# f. Endpoints

# **GET /statements – Bulk Example**

## Request

```
GET /statements HTTP/1.1
Authorization: Bearer Az90SAOJklae
x-api-key: bb9a6cee-8739-4cce-a501-80cf2f4457fc
x-fapi-auth-date: Sun, 10 Sep 2017 19:43:31 GMT
x-fapi-customer-ip-address: 104.25.212.99
x-fapi-interaction-id: 93bac548-d2de-4546-b106-880a5018460d
Accept: application/json
```

```
HTTP/1.1 200 OK
x-fapi-interaction-id: 93bac548-d2de-4546-b106-880a5018460d
Content-Type: application/json
```



```
"statement": [
   "accountId": "22289",
"statementId": "8sfhke-sifhkeuf-97813",
    "statementReference": "002",
    "type": "RegularPeriodic",
   "startDateTime": "2017-08-01T00:00:00+00:00",
"endDateTime": "2017-08-31T23:59:59+00:00", "creationDateTime": "2017-09-01T00:00:00+00:00",
"statementDescription": ["August 2017 Statement", "One Free Uber Ride"],
        "amount": {
    "amount": "400.00", "Currency": "IDR"
        },
"creditDebitIndicator": "Credit",
"creditDebitIndicator": "Credit",
        "type": "ClosingBalance"
        "amount": {
    "amount": "600.00", "Currency": "IDR"
        },
"creditDebitIndicator": "Credit",
"ClesingBalance"
        "type": "PreviousClosingBalance"
    "accountId": "22289",
   "accountId": "22289",
"statementId": "34hj24u-324h33-31i3p4",
"statementReference": "003",
"type": "RegularPeriodic",
"startDateTime": "2017-09-01T00:00:00+00:00",
"endDateTime": "2017-09-30T23:59:59+00:00", "creationDateTime": "2017-10-01T00:00:00+00:00",
"statementDescription": ["September 2017 Statement"],
    "statementAmount": [
        "amount": {
    "amount": "200.00", "currency": "IDR"
        "type": "ClosingBalance"
        "amount": {
    "amount": "400.00", "currency": "IDR"
        },
"creditDebitIndicator": "Credit",
"creditDebitIndicator": "Credit",
        "type": "PreviousClosingBalance"
    "accountId": "32389",
    "statementId": "9034ee-4ewa4e-342er6",
    "statementReference": "002",
    "type": "RegularPeriodic"
    "startDateTime": "2017-09-01T00:00:00+00:00",
"endDateTime": "2017-09-30T23:59:59+00:00", "creationDateTime": "2017-10-01T00:00:00+00:00",
    "statementAmount": [
        "amount": {
    "amount": "2700.00", "currency": "IDR"
        },
"creditDebitIndicator": "Credit",
        "type": "ClosingBalance"
        "amount": {
    "amount": "4060.00", "currency": "IDR"
        "type": "PreviousClosingBalance'
 ,"_links": {"self": "../statements/"},
"_meta": {"totalPages": 1}
```



# **GET /accounts/{AccountId}/statements - Specific Example**

## Request

GET /accounts/22289/statements HTTP/1.1

Authorization: Bearer Az90SAOJklae

x-api-key: bb9a6cee-8739-4cce-a501-80cf2f4457fc x-fapi-auth-date: Sun, 10 Sep 2017 19:43:31 GMT

x-fapi-customer-ip-address: 104.25.212.99 x-fapi-interaction-id: 93bac548-d2de-4546-b106-880a5018460d

Accept: application/json



```
HTTP/1.1 200 OK
x-fapi-interaction-id: 93bac548-d2de-4546-b106-880a5018460d
Content-Type: application/json
```

```
"statement": [
    "accountId": "22289",
"statementId": "8sfhke-sifhkeuf-97813",
    "statementReference": "002",
    "type": "RegularPeriodic",
"startDateTime": "2017-08-01T00:00:00+00:00",
"endDateTime": "2017-08-31T23:59:59+00:00",
"creationDateTime": "2017-09-01T00:00:00+00:00",
"startEmentDescription": ["August 2017 Statement", "One Free Uber Ride"],
    "statementAmount": [
         "amount": {
    "amount": "400000.00",
              "currency": "IDR"
         },
"creditDebitIndicator": "Credit",
         "type": "ClosingBalance"
         "amount": {
    "amount": "600000.00",
             "currency": "IDR"
         "type": "PreviousClosingBalance"
    "cccountId": "22289",
"statementId": "34hj24u-324h33-31i3p4",
    "statementReference": "003",
"type": "RegularPeriodic",
"startDateTime": "2017-09-01T00:00:00+00:00",
"endDateTime": "2017-09-30T23:59:59+00:00",
    "creationDateTime": "2017-10-01T00:00:00+00:00",
"statementDescription": ["September 2017 Statement"],
    "statementAmount": [
        "amount": {
    "amount": "200000.00",
    "currency": "IDR"
         "type": "PreviousClosingBalance"
         "amount": {
    "amount": "400000.00",
             "currency": "IDR'
         },
"creditDebitIndicator": "Credit",
"creditDebitIndicator": "Credit",
         "type": "PreviousClosingBalance"
}],
"_links": {
    "self": "../accounts/22289/statements/"
 _meta": {
   "totalPages": 1
```



# 2.8 API Endpoints (next release)

Name	Method	Grant type	Scope	Idempotent	Message Signing
/accounts/{AccountId}/beneficiaries	GET	authorization code	accounts	No	No
/beneficiaries	GET	authorization code	accounts	No	No
/accounts/{AccountId}/direct-debits	GET	authorization code	accounts	No	No
/direct-debits	GET	authorization code	accounts	No	No
/accounts/{AccountId}/standing-orders	GET	authorization code	accounts	No	No
/standing-orders	GET	authorization code	accounts	No	No
/accounts/{AccountId}/scheduled-payments	GET	authorization code	accounts	No	No
/scheduled-payments	GET	authorization code	accounts	No	No



## 3 Payment Initiation API Profile

#### **Overview**

The Payment Initiation API Profile describes the flows and common functionality for the Payment Initiation API, which allows a Payment Initiation Service Provider ('PISP') to:

- Register an intent to stage a payment-order consent.
- Optionally confirm available funds for a payment-order
  - Domestic immediate, international immediate and international scheduled (immediate debit) payments only.
- Subsequently submit the payment-order for processing.
- Optionally retrieve the status of a payment-order **consent** or payment-order **resource**.

Once the domestic-payment-consent has been authorised by the PSU, the PISP can proceed to submitting the domestic-payment for processing.

#### 3.1 Consent Authorisation

The PISP **must** begin a payment-order request by creating a **payment-order-consent** resource through a **POST** operation. These resources indicate the *consent* that the PISP claims it has been given by the PSU. At this stage, the consent is not yet authorised as the ASPSP has not yet verified this claim with the PSU.

The ASPSP responds with a ConsentId. This is the intent-id that is used when initiating the authorization code grant (as described in the **Consent Framework**).

As part of the authorization code grant:

- The ASPSP authenticates the PSU.
- The ASPSP plays back the consent (registered by the PISP) back to the PSU to get consent authorisation. The PSU may accept or reject the consent in its entirety (but not selectively).
- If the consent did not indicate a debtor account the ASPSP presents the PSU with a list of accounts from which the PSU may select one.

Once these steps are complete, the consent is considered to have been authorised by the PSU.

A call to GET /payment-consent/{ConsentId} will always be the first call once an PISP has a valid access token, this allow ASPSP updating the consent status from "AwaitingAuthorisation" to be "Authorised".

#### **Consent Revocation**

A PSU cannot revoke a payment-order consent once it has been authorized.

#### **Changes to Selected Account**

For a payment-order consent, the selected debtor account cannot be changed once the consent has been authorized.

**Risk Scoring**, performing risk scoring on the payments initiated via the Payment API **could** be performed per ASPSP specific.



### 3.2 Re-Authentication with x-factor Header

Once the payment-consent has been authorised by the PSU, the PISP can proceed to submitting the **/payment** for processing by making a POST request to the payments endpoint.

To re-ensure the intent of the action, ASPSP may require additional SCA identification in form of OTP or TOTP when the consent status already "Consumed".

This intent for user re-authentication is addressed by additional header named: x-factor.

Header	Notes	Request Method				
Parameters		POST	GET	DELETE	PUT	
x-factor	One time password or Time-based One Time Password for payment intent re-authentication.  The value may be delivered in forms of SMS or push notification to ASPSP <i>authorization device</i> .	0	Do not use	Do not use	Do not use	



# 4 Domestic Payment Profile

# 4.1 API Endpoints

Name	Method	Grant type	Scope	Idempotent	Message Signing
/domestic-payment-consents	POST	client credentials	payments	Yes	Requ signed Resp signed
/domestic-payment-consents/{ConsentId}	GET	client credentials	payments	No	Resp signed
/domestic-payment-consents/{ConsentId}/funds-confirmation	GET	authorization code	payments	No	Resp signed
/domestic-payments	POST	authorization code	payments	Yes	Requ signed Resp signed
/domestic-payments/{DomesticPaymentId}	GET	client credentials	payments	No	Resp signed
/domestic- payments/{DomesticPaymentId}/payment-details	GET	client credentials	payments	No	Resp signed

# 4.2 Local Instrument

LocalInstrument	Instrument Description
SNAP.BalanceTransfer	Local instrument instruction for Balance Transfer
SNAP.MoneyTransfer	Local instrument instruction for Money Transfer
SNAP.FPS	Local instrument instruction for Fast Payment System, ex: BI FAST
SNAP.VA	Local instrument instruction for Virtual Account
SNAP.CreditTransfer	Local instrument instruction for Credit Transfer
SNAP.SWIFT	Local instrument instruction for SWIFT



# **4.3 Domestic Payments Consent**

The Domestic Payments Consent resource is used by a PISP to register an intent to initiate a Domestic Payment.

## a. Domestic Payments Consents - Request

Name	N	Definition
ReadRefundAccount	01	Specifies to share the refund account details with PISP. value: Yes   No
Initiation	01	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 for a single domestic payment.
instructionIdentification	11	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.
endToEndIdentification	11	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. The Faster Payments Scheme can only access 31 characters for the endToEndIdentification field.
localInstrument	01	User community specific instrument. This is a free-text field. Usage: This element is used to specify a local instrument, local clearing option and/or further qualify the service or service level. Refers to Local Instrument.
instructedAmount	11	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.
amount	11	A number of monetary units specified in an active currency where the unit of currency is explicit and compliant with ISO 4217.
currency	11	A code allocated to a currency by a Maintenance Agency under an international identification scheme, as Codes for the representation of currencies and funds.
debtorAccount	01	Unambiguous identification of the account of the debtor to which a debit entry will be made as a result of the transaction.
schemeName	11	Name of the identification scheme, in a coded form as published in an external list.
identification	11	Identification assigned by an institution to identify an account. This identification is known by the account owner.
name	01	The account name is the name or names of the account owner(s) represented at an account level, as displayed by the ASPSP's online channels. Note, the account name is not the product name or the nickname of the account.
secondaryldentification	01	This is secondary identification of the account, as assigned by the account servicing institution. This can be used by building societies to additionally identify accounts with a roll number (in addition to a sort code and account number combination).



Name	N	Definition
creditorAccount	11	Unambiguous identification of the account of the creditor to which a credit entry will be posted as a result of the payment transaction.
schemeName	11	Name of the identification scheme, in a coded form as published in an external list.
identification	11	Identification assigned by an institution to identify an account. This identification is known by the account owner.
name	11	The account name is the name or names of the account owner(s) represented at an account level. Note, the account name is not the product name or the nickname of the account. OB: ASPSPs may carry out name validation for Confirmation of Payee, but it is not mandatory.
secondaryIdentification	01	This is secondary identification of the account, as assigned by the account servicing institution. This can be used by building societies to additionally identify accounts with a roll number (in addition to a sort code and account number combination).
chargeBearer	01	Charge Bearer code, indicates which entity bears the charge for the transaction. set to DEBT for Debtor. [DEBT, CRED, SHAR, SLEV]
creditorAgent	01	Financial institution servicing an account for the creditor.\nmust at least have either of the pairs provided: Scheme Name and Identification or Name and Postal Address.
schemeName	01	Name of the identification scheme, in a coded form as published in an external list.
identification	01	Unique and unambiguous identification of a financial institution or a branch of a financial institution.
name	01	Name by which an agent is known and which is usually used to identify that agent.
postalAddress	01	Information that locates and identifies a specific address, as defined by postal services.
purpose	01	Specifies the external purpose code in the format of character string with a maximum length of 4 characters. External code sets can be downloaded from <a href="https://www.iso20022.org">www.iso20022.org</a> . Ex: 01=Investment, 02=Transfer of Wealth, 03=Purchase, 99=Others (for various purposes)
extendedPurposes	0n	Specifies the purpose of the payment. Free text 140ch.
expectedExecutionDateTime	01	Expected execution date and time for the payment resource. ex: 2022-06-05T15:15:13+00:00
remittanceInformation	01	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.
unstructured	01	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.
reference	01	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. The Faster Payments Scheme can only accept 18 characters for the ReferenceInformation field.
supplementaryData	01	Additional information that cannot be captured in the structured fields and/or any other specific block. Type object.



Name	N	Definition
Risk	01	The Risk section is sent by the initiating party to the ASPSP. It is used to specify additional details for risk scoring for Payments.
merchantCustomerIdentification	01	The unique customer identifier of the PSU with the merchant.
paymentPurposeCode	01	Category code, related to the type of services or goods that corresponds to the underlying purpose of the payment that conforms to Purpose Code in ISO 20022 Payment Messaging List.
beneficiaryAccountType	01	To be provided if the AccountType is known.
contractPresentInidicator	01	Indicates if Payee has a contractual relationship with the PISP. [true false]

# b. Domestic Payment Consent - ResponseData Dictionary

Name	N	Definition
ConsentId	11	Unique identification as assigned to identify the funds confirmation consent resource.
creationDateTime	11	Date and time at which the resource was created. ex: 2017-05-02T00:00+00:00
status	11	Specifies the status of consent resource in code form.
statusUpdateDateTime	11	Date and time at which the resource status was updated.
ReadRefundAccount	01	Specifies to share the refund account details with PISP. Yes No
cutOffDateTime	01	Specified cut-off date and time for the payment consent.
expectedExecutionDateTime	01	Expected execution date and time for the payment resource.
expectedSettlementDateTime	01	Expected settlement date and time for the payment resource.
charges	0n	Set of elements used to provide details of a charge for the payment initiation.
description	0.1	Charges description
chargeBearer	11	Charge Bearer code, indicates which entity bears the charge for the transaction. set to DEBT for Debtor. [DEBT, CRED, SHAR, SLEV]
type	11	Charge type, in a coded form. E.g., [Charge.Fee   Charge.Tax]
amount	11	Amount of money to be moved as associated with the charge type.
amount	11	A number of monetary units specified in an active currency where the unit of currency is explicit and compliant with ISO 4217.



Name	N	Definition
currency	11	A code allocated to a currency by a Maintenance Agency under an international identification scheme, as Codes for the representation of currencies and funds.
Initiation **	11	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 for a single domestic payment.  Refers to: Domestic Payment Consent - Request
Debtor	01	Set of elements used to identify a person or an organisation. Only included in the response if `Req ReadRefundAccount` is set to `Yes` in the consent.
schemeName	01	Name of the identification scheme, in a coded form as published in an external list.
identification	01	Identification assigned by an institution to identify an account. This identification is known by the account owner.
name	01	The account name is the name or names of the account owner(s) represented at an account level, as displayed by the ASPSP's online channels. Note, the account name is not the product name or the nickname of the account.
secondaryIdentification	01	This is secondary identification of the account, as assigned by the account servicing institution. This can be used by building societies to additionally identify accounts with a roll number (in addition to a sort code and account number combination).
Risk **	01	The Risk section is sent by the initiating party to the ASPSP. It is used to specify additional details for risk scoring for Payments.  Refers to: Domestic Payment Consent - Request

# c. Payment Consent Confirmation of Funds

Name	N	Definition
ConsentId	11	Unique identification as assigned to identify the payment consents confirmation of funds resource.
fundsAvailableResult	01	Result of a funds availability check.
fundsAvailableDateTime	11	Date and time at which the funds availability check was generated. Ex: 2017-04-05T10:43:07+00:00
fundsAvailable	11	Flag to indicate the availability of funds given the Amount in the consent request, [true false].
supplementaryData	01	Additional information that cannot be captured in the structured fields and/or any other specific block. Type object.



#### d. Consents Endpoints

#### POST /domestic-payment-consents - Example

#### Request

```
POST /domestic-payment-consents HTTP/1.1
Authorization: Bearer 2YotnFZFEjr1zCsicMWpAA
x-api-key: bb9a6cee-8739-4cce-a501-80cf2f4457fc
x-idempotency-key: FRESCO.21302.GFX.20
x-jws-signature:
TGlmZSdzIGEgam91cm5leSBub3QgYSBkZXN0aW5hdGlvbiA=..T2ggZ29vZCBldmVuaW5nIG1yIHR5bGVyIGdvaW5nIG
Rvd24gPw=
x-fapi-auth-date: Sun, 10 Sep 2017 19:43:31 GMT
x-fapi-customer-ip-address: 104.25.212.99
x-fapi-interaction-id: 93bac548-d2de-4546-b106-880a5018460d
Content-Type: application/json
Accept: application/json
```

```
"ReadRefundAccount": "Yes",
"Initiation": {
  "instructionIdentification": "ACME412",
  "endToEndIdentification": "FRESCO.21302.GFX.20",
  "instructedAmount": {
    "amount": "2100000.00",
"currency": "IDR"
 },
"creditorAccount": {
    ". "Sor!
    "schemeName": "SortCodeAccountNumber",
    "identification": "08080021325698",
    "name": "ACME Inc",
"secondaryIdentification": "0002"
 "reference": "FRESCO-101",
    "unstructured": "Internal ops code 5120101"
},
"Risk": {
  "paymentPurposeCode": "EPAY",
  "beneficiaryAccountType": "Business",
  "merchantCustomerIdentification": "053598653254"
```



```
HTTP/1.1 201 Created
x-jws-signature: V2hhdCB3ZSBnb3QgaGVyZQ0K..aXMgZmFpbHVyZSB0byBjb21tdW5pY2F0ZQ0K
x-fapi-interaction-id: 93bac548-d2de-4546-b106-880a5018460d
Content-Type: application/json
```

```
"ConsentId": "58923",
"status": "AwaitingAuthorisation",
"creationDateTime": "2017-06-05T15:15:13+00:00",
"statusUpdateDateTime": "2017-06-05T15:15:13+00:00", "ReadRefundAccount": "Yes",
"Initiation": {
   "instructionIdentification": "ACME412",
   "endToEndIdentification": "FRESCO.21302.GFX.20",
  "instructedAmount": {
   "amount": "2100000.00",
   "currency": "IDR"
  },
"creditorAccount": {
   "schemeName": "SortCodeAccountNumber",
   "identification": "08080021325698",
   "" "ACME Inc",
   " "2002"
     "name": "ACME Inc",
"secondaryIdentification": "0002"
  "reference": "FRESCO-101",
"unstructured": "Internal ops code 5120101"
},
"Risk": {
   "paymentPurposeCode": "EPAY",
  "beneficiaryAccountType": "Business",
"merchantCustomerIdentification": "053598653254"
 _links": {
    "self": "../domestic-payment-consents/58923"
```



#### GET /domestic-payment-consents/{ConsentId} - Example

#### Request

```
GET /domestic-payment-consents/58923 HTTP/1.1
Authorization: Bearer Jhingapulaav
x-api-key: bb9a6cee-8739-4cce-a501-80cf2f4457fc
x-fapi-auth-date: Sun, 10 Sep 2017 19:43:31 GMT
x-fapi-customer-ip-address: 104.25.212.99
x-fapi-interaction-id: 93bac548-d2de-4546-b106-880a5018460d
Accept: application/json
```

```
HTTP/1.1 200 OK
x-jws-signature: V2hhdCB3ZSBnb3QgaGVyZQ0K..aXMgZmFpbHVyZSB0byBjb21tdW5pY2F0ZQ0K
x-fapi-interaction-id: 93bac548-d2de-4546-b106-880a5018460d
Content-Type: application/json
```

```
"ConsentId": "58923",
"status": "Authorised"
"creationDateTime": "2017-06-05T15:15:13+00:00",
"statusUpdateDateTime": "2017-06-05T15:15:22+00:00",
"ReadRefundAccount": "Yes",
"Initiation": {
  "instructionIdentification": "ACME412",
  "endToEndIdentification": "FRESCO.21302.GFX.20",
  "instructedAmount": {
    "amount": "2100000.00",
"currency": "IDR"
  "schemeName": "SortCodeAccountNumber",
    "identification": "08080021325698",
    "name": "ACME Inc",
    "secondaryIdentification": "0002"
  "reference": "FRESCO-101",
    "unstructured": "Internal ops code 5120101"
},
"Debtor": {
   "name": "D Jones"
},
"Risk": {
  "paymentPurposeCode": "EPAY",
  "beneficiaryAccountType": "Business",
  "merchantCustomerIdentification": "053598653254"
},
"_links": {
    "self": "../domestic-payment-consents/58923"
```



#### **GET** /domestic-payment-consents/{ConsentId}/funds-confirmation – Example

The API endpoint allows the PISP to ask an ASPSP to confirm funds on a **domestic-payment-consent** resource.

- An ASPSP can only respond to a funds confirmation request if the domestic-paymentconsent resource has an "Authorised" status. If the status is not "Authorised", an ASPSP must respond with a 400 (Bad Request) and a Resource.InvalidConsentStatus error code.
- Confirmation of funds requests do not affect the status of the domestic-paymentconsent resource.

#### Request

```
GET /domestic-payment-consents/58923/funds-confirmation HTTP/1.1
Authorization: Bearer Jhingapulaav
x-api-key: bb9a6cee-8739-4cce-a501-80cf2f4457fc
x-fapi-auth-date: Sun, 10 Sep 2017 19:43:31 GMT
x-fapi-customer-ip-address: 104.25.212.99
x-fapi-interaction-id: 93bac548-d2de-4546-b106-880a5018460d
Accept: application/json
```

```
HTTP/1.1 200 OK
x-fapi-interaction-id: 93bac548-d2de-4546-b106-880a5018460d
```

```
{
    "ConsentId": "58923",
    "fundsAvailableResult": {
        "fundsAvailableDateTime": "2017-06-05T15:15:13+00:00",
        "fundsAvailable": "true"
    }
    "supplementaryData": {},
    "_links": {
        "self": "../domestic-payment-consents/58923"
    }
}
```



## 4.4 Domestic Payment

The Domestic Payments resource is used by a PISP to initiate a Domestic Payment.

Once the domestic-payment-consent has been authorised by the PSU, the PISP can proceed to submitting the domestic-payment for processing:

- This is done by making a POST request to the **domestic-payments** endpoint.
- This request is an instruction to the ASPSP to begin the domestic single immediate payment journey. The domestic payment must be submitted immediately, however, there are some scenarios where the domestic payment may not be executed immediately (e.g., busy periods at the ASPSP).
- The PISP must ensure that the Initiation and Risk sections of the domestic-payment match the corresponding Initiation and Risk sections of the domestic-payment-consent resource. If the two do not match, the ASPSP must not process the request and must respond with a 400 (Bad Request).
- Any operations on the domestic-payment resource will not result in a status change for the domestic-payment resource.

#### **GET Payment Status**

The domestic-payment resource must have one of the following PaymentStatusCode code-set enumerations:

Status
Pending
Rejected
AcceptedSettlementInProcess
AcceptedSettlementCompleted
AcceptedWithoutPosting
AcceptedCreditSettlementCompleted

#### a. Domestic Payment - Request

Name	N	Definition
ConsentId	11	Unique identification as assigned by the ASPSP to uniquely identify the consent resource.
Initiation	11	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 for a single domestic payment.
instructionIdentification	11	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



Name	N	Definition
		instructing party and the instructed party to refer to the individual instruction. It can be included in several messages related to the instruction.
endToEndIdentification	11	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. The Faster Payments Scheme can only access 31 characters for the endToEndIdentification field.
localInstrument	01	User community specific instrument. This is a free-text field. Usage: This element is used to specify a local instrument, local clearing option and/or further qualify the service or service level. Refers to Local Instrument.
instructedAmount	11	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.
amount	11	A number of monetary units specified in an active currency where the unit of currency is explicit and compliant with ISO 4217.
currency	11	A code allocated to a currency by a Maintenance Agency under an international identification scheme, as Codes for the representation of currencies and funds.
debtorAccount	01	Unambiguous identification of the account of the debtor to which a debit entry will be made as a result of the transaction.
schemeName	11	Name of the identification scheme, in a coded form as published in an external list.
identification	11	Identification assigned by an institution to identify an account. This identification is known by the account owner.
name	01	The account name is the name or names of the account owner(s) represented at an account level, as displayed by the ASPSP's online channels. Note, the account name is not the product name or the nickname of the account.
secondaryIdentification	01	This is secondary identification of the account, as assigned by the account servicing institution. This can be used by building societies to additionally identify accounts with a roll number (in addition to a sort code and account number combination).
creditorAccount	11	Unambiguous identification of the account of the creditor to which a credit entry will be posted as a result of the payment transaction.
schemeName	11	Name of the identification scheme, in a coded form as published in an external list.
identification	11	Identification assigned by an institution to identify an account. This identification is known by the account owner.
name	11	The account name is the name or names of the account owner(s) represented at an account level. Note, the account name is not the product name or the nickname of the account. OB: ASPSPs may carry out name validation for Confirmation of Payee, but it is not mandatory.
secondaryIdentification	01	This is secondary identification of the account, as assigned by the account servicing institution. This can be used by building societies to additionally identify accounts with a roll number (in addition to a sort code and account number combination).
chargeBearer	01	Charge Bearer code, indicates which entity bears the charge for the transaction. set to DEBT for Debtor. [DEBT, CRED, SHAR, SLEV]



Name	N	Definition
creditorAgent	01	Financial institution servicing an account for the creditor.\nmust at least have either of the pairs provided: Scheme Name and Identification or Name and Postal Address.
schemeName	01	Name of the identification scheme, in a coded form as published in an external list.
identification	01	Unique and unambiguous identification of a financial institution or a branch of a financial institution.
name	01	Name by which an agent is known and which is usually used to identify that agent.
postalAddress	01	Information that locates and identifies a specific address, as defined by postal services.
purpose	01	Specifies the external purpose code in the format of character string with a maximum length of 4 characters. External code sets can be downloaded from www.iso20022.org. Ex: 01=Investment, 02=Transfer of Wealth, 03=Purchase, 99=Others (for various purposes)
extendedPurposes	0n	Specifies the purpose of the payment. Free text 140ch.
expectedExecutionDateTime	01	Expected execution date and time for the payment resource. ex: 2022-06-05T15:13+00:00
remittanceInformation	01	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.
unstructured	01	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.
reference	01	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. The Faster Payments Scheme can only accept 18 characters for the ReferenceInformation field.
supplementaryData	01	Additional information that cannot be captured in the structured fields and/or any other specific block. Type object.
Risk	01	The Risk section is sent by the initiating party to the ASPSP. It is used to specify additional details for risk scoring for Payments.
merchantCustomerIdentification	01	The unique customer identifier of the PSU with the merchant.
paymentPurposeCode	01	Category code, related to the type of services or goods that corresponds to the underlying purpose of the payment that conforms to Purpose Code in ISO 20022 Payment Messaging List.
beneficiaryAccountType	01	To be provided if the AccountType is known.
contractPresentInidicator	01	Indicates if Payee has a contractual relationship with the PISP. [true false]



## b. Domestic Payment - Response

Name	N	Definition
DomesticPaymentId	11	Unique identification as assigned by the ASPSP to uniquely identify the domestic payment resource.
ConsentId	11	Unique identification as assigned to identify the funds confirmation consent resource.
creationDateTime	11	Date and time at which the resource was created. ex: 2017-05-02T00:00+00:00
status	11	Specifies the status of consent resource in code form. Refers to GET Payment Status
statusUpdateDateTime	11	Date and time at which the resource status was updated. ex: 2017-05-02T00:00+00:00
expectedExecutionDateTime	01	Expected execution date and time for the payment resource.
expectedSettlementDateTime	01	Expected settlement date and time for the payment resource.
refund	01	Unambiguous identification of the refund account to which a refund will be made as a result of the transaction.
account	11	Set of elements used to identify a person or an organisation.
schemeName	11	Name of the identification scheme, in a coded form as published in an external list.
identification	11	Identification assigned by an institution to identify an account. This identification is known by the account owner.
name	01	The account name is the name or names of the account owner(s) represented at an account level, as displayed by the ASPSP's online channels. Note, the account name is not the product name or the nickname of the account.
secondaryIdentification	01	This is secondary identification of the account, as assigned by the account servicing institution. This can be used by building societies to additionally identify accounts with a roll number (in addition to a sort code and account number combination).
charges	0n	Set of elements used to provide details of a charge for the payment initiation.
description	01	Charges description
chargeBearer	11	Charge Bearer code, indicates which entity bears the charge for the transaction. set to DEBT for Debtor. [DEBT, CRED, SHAR, SLEV]
type	11	Charge type, in a coded form. E.g., [Charge.Fee   Charge.Tax]
amount	11	Amount of money to be moved as number of charges
amount	11	A number of monetary units specified in an active currency where the unit of currency is explicit and compliant with ISO 4217.



Name	N	Definition
currency	11	A code allocated to a currency by a Maintenance Agency under an international identification scheme, as Codes for the representation of currencies and funds.
Initiation **	11	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 for a single domestic payment.  Refers to: Domestic Payment - Request
Debtor	01	Set of elements used to identify a person or an organisation. Only included in the response if `Req ReadRefundAccount` is set to `Yes` in the consent.
schemeName	01	Name of the identification scheme, in a coded form as published in an external list.
identification	01	Identification assigned by an institution to identify an account. This identification is known by the account owner.
name	01	The account name is the name or names of the account owner(s) represented at an account level, as displayed by the ASPSP's online channels. Note, the account name is not the product name or the nickname of the account.
secondaryIdentification	01	This is secondary identification of the account, as assigned by the account servicing institution. This can be used by building societies to additionally identify accounts with a roll number (in addition to a sort code and account number combination).

## c. Endpoints

#### **POST /domestic-payments – Example**

#### Request

POST /domestic-payments HTTP/1.1
Authorization: Bearer Jhingapulaav
x-api-key: bb9a6cee-8739-4cce-a501-80cf2f4457fc
x-factor: 772534
x-idempotency-key: FRESNO.1317.GFX.22
x-jws-signature:
TGlmZSdzIGEgam91cm5leSBub3QgYSBkZXN0aW5hdGlvbiA=..T2ggZ29vZCBldmVuaW5nIG1yIHR5bGVyIGdvaW5nIG
Rvd24gPw==
x-fapi-auth-date: Sun, 10 Sep 2017 19:43:31 GMT
x-fapi-customer-ip-address: 104.25.212.99
x-fapi-interaction-id: 93bac548-d2de-4546-b106-880a5018460d
Content-Type: application/json
Accept: application/json



```
"ConsentId": "58923",
   "Initiation": "ACME412",
   "endToEndIdentification": "FRESCO.21302.GFX.20",
   "instructedAmount": {
        "amount": "2100000.00",
        "currency": "IDR"
    },
   "creditorAccount": {
        "schemeName": "SortCodeAccountNumber",
        "identification": "88080021325698",
        "name": "ACME Inc",
        "secondaryIdentification": "0002"
    },
   "remittanceInformation": {
        "reference": "FRESCO-101",
        "unstructured": "Internal ops code 5120101"
    }
},
   "Risk": {
        "paymentPurposeCode": "EPAY",
        "beneficiaryAccountType": "Business",
        "merchantCustomerIdentification": "053598653254"
}
```

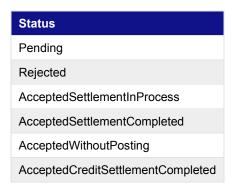


```
HTTP/1.1 201 Created
x-jws-signature: V2hhdCB3ZSBnb3QgaGVyZQ0K..aXMgZmFpbHVyZSB0byBjb21tdW5pY2F0ZQ0K
x-fapi-interaction-id: 93bac548-d2de-4546-b106-880a5018460d
Content-Type: application/json
    "DomesticPaymentId": "58923-001",
    "ConsentId": "58923",
"status": "AcceptedSettlementInProcess",
    "creationDateTime": "2017-06-05T15:15:22+00:00",
    "statusUpdateDateTime": "2017-06-05T15:15:13+00:00",
    "refund": {
    "account": {
        "schemeName": "SortCodeAccountNumber",
        "identification": "08080021325677",
"name": "NTPC Inc"
     Initiation": {
      "instructionIdentification": "ACME412",
      "endToEndIdentification": "FRESCO.21302.GFX.20",
      "instructedAmount": {
        "amount": "2100000.00",
        "currency": "IDR"
      "identification": "08080021325698", "name": "ACME Inc",
         "secondaryIdentification": "0002"
      },
"remittanceInformation": {
    "_ "EPESCO-101
         "reference": "FRESCO-101",
         "unstructured": "Internal ops code 5120101"
     _links": {
    "self": "../domestic-payments/58923-001"
```

## GET /domestic-payments/{DomesticPaymentId} - Example

#### **Status**

The domestic-payment resource must have one of the following PaymentStatusCode code-set enumerations:





#### Request

```
GET /domestic-payments/58923-001 HTTP/1.1
Authorization: Bearer 2YotnFZFEjr1zCsicMWpAA
x-api-key: bb9a6cee-8739-4cce-a501-80cf2f4457fc
x-fapi-auth-date: Sun, 10 Sep 2017 19:43:31 GMT
x-fapi-customer-ip-address: 104.25.212.99
x-fapi-interaction-id: 93bac548-d2de-4546-b106-880a5018460d
Accept: application/json
```

```
HTTP/1.1 200 OK
x-jws-signature: V2hhdCB3ZSBnb3QgaGVyZQ0K..aXMgZmFpbHVyZSB0byBjb21tdW5pY2F0ZQ0K
x-fapi-interaction-id: 93bac548-d2de-4546-b106-880a5018460d
Content-Type: application/json
```

```
"DomesticPaymentId": "58923-001",
"ConsentId": "58923",
"status": "AcceptedSettlementInProcess",
"creationDateTime": "2017-06-05T15:15:22+00:00",
"statusUpdateDateTime": "2017-06-05T15:15:22+00:00",
"Initiation": {
  "instructionIdentification": "ACME412",
  "endToEndIdentification": "FRESCO.21302.GFX.20",
  "instructedAmount": {
   "amount": "2100000.00",
   "currency": "IDR"
  "name": "ACME Inc",
    "secondaryIdentification": "0002"
  },
"remittanceInformation": {
    " "EDESCO-101
     "reference": "FRESCO-101",
    "unstructured": "Internal ops code 5120101"
"Debtor": {
    "name": "D Jones"
},
"_links": {
    "self": "../domestic-payments/58923-001"
```



#### GET /domestic-payments/{DomesticPaymentId}/payment-details - Example

A PISP can retrieve the Details of the underlying payment transaction via this endpoint. This resource allows ASPSPs to return richer list of Payment Statuses, and if available payment scheme related statuses.

#### **Status**

The domestic-payment - payment-details must have one of the following PaymentStatusCode code-set enumerations:

Status
Accepted
AcceptedCancellationRequest
AcceptedTechnicalValidation
AcceptedCustomerProfile
AcceptedFundsChecked
AcceptedWithChange
Pending
Rejected
AcceptedSettlementInProcess
AcceptedSettlementCompleted
AcceptedWithoutPosting
AcceptedCreditSettlementCompleted
Cancelled
NoCancellationProcess
PartiallyAcceptedCancellationRequest
PartiallyAcceptedTechnicalCorrect
PaymentCancelled
PendingCancellationRequest
Received
RejectedCancellationRequest

#### Request

```
GET /domestic-payments/58923-001/payment-details HTTP/1.1
Authorization: Bearer 2YotnFZFEjr1zCsicMWpAA
x-api-key: bb9a6cee-8739-4cce-a501-80cf2f4457fc
x-fapi-auth-date: Sun, 10 Sep 2017 19:43:31 GMT
x-fapi-customer-ip-address: 104.25.212.99
x-fapi-interaction-id: 93bac548-d2de-4546-b106-880a5018460d
Accept: application/json
```



```
HTTP/1.1 200 OK
x-jws-signature: V2hhdCB3ZSBnb3QgaGVyZQ0K..aXMgZmFpbHVyZSB0byBjb21tdW5pY2F0ZQ0K
x-fapi-interaction-id: 93bac548-d2de-4546-b106-880a5018460d
Content-Type: application/json
```