THE Berlin GROUP

A EUROPEAN STANDARDS INITIATIVE

openFinance API Framework

Implementation Guidelines

Discovery Services

Version 1.2

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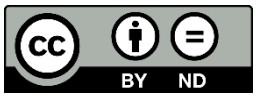

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1 Introduction

1.1 From Core XS2A Interface to openFinance API

With [PSD2] the European Union has published a directive on payment services in the internal market. Among others [PSD2] contains regulations on services to be operated by so called Third Party Payment Service Providers (TPP) on behalf of a Payment Service User (PSU). These services are

Payment Initiation Service (PIS) to be operated by a Payment Initiation Service Provider (PISP) TPP as defined by article 66 of [PSD2],

Account Information Service (AIS) to be operated by an Account Information Service Provider (AISP) TPP as defined by article 67 of [PSD2], and

- Confirmation on the Availability of Funds Service (FCS) to be used by a Payment Instrument Issuing Service Provider (PIISP) TPP as defined by article 65 of [PSD2].

To implement these services (subject to PSU consent) a TPP needs to access the account of the PSU. The account is managed by another PSP called the Account Servicing Payment Service Provider (ASPSP). To support the TPP in accessing the accounts managed by an ASPSP, each ASPSP has to provide an "access to account interface" (XS2A interface). Such an interface has been defined in the Berlin Group NextGenPSD2 XS2A Framework.

This XS2A Framework is now extended to extended services and developed into a Version 2 API family. This interface is addressed in the following as **openFinance API**. This openFinance API differs from the XS2A interface in several dimensions:

- The extended services might not rely anymore solely on PSD2.
- Other important regulatory frameworks which apply are e.g. GDPR.
- The openFinance API can address different types of **API Clients** as access clients, e.g. TPPs regulated by an NCA according to PSD2, or corporates not regulated by an NCA.
- The extended services might require contracts between the access client and the ASPSP.
- While the client identification at the openFinance API can still be based on eIDAS certificates, they do not need to be necessarily PSD2 compliant eIDAS certificates.
- The extended services might require e.g. the direct involvement of the access client's bank for KYC processes.

Note: The notions of API Client and ASPSP are used because of the technical standardisation perspective of the openFinance API. These terms are analogous to "asset broker" and "asset holder" resp. in the work of the ERPB on a SEPA API access scheme.

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Note: In implementations, the API services of several ASPSPs might be provided on an aggregation platform. Such platforms will be addressed in the openFinance API Framework as "API provider".

The following account access methods are covered by this framework:

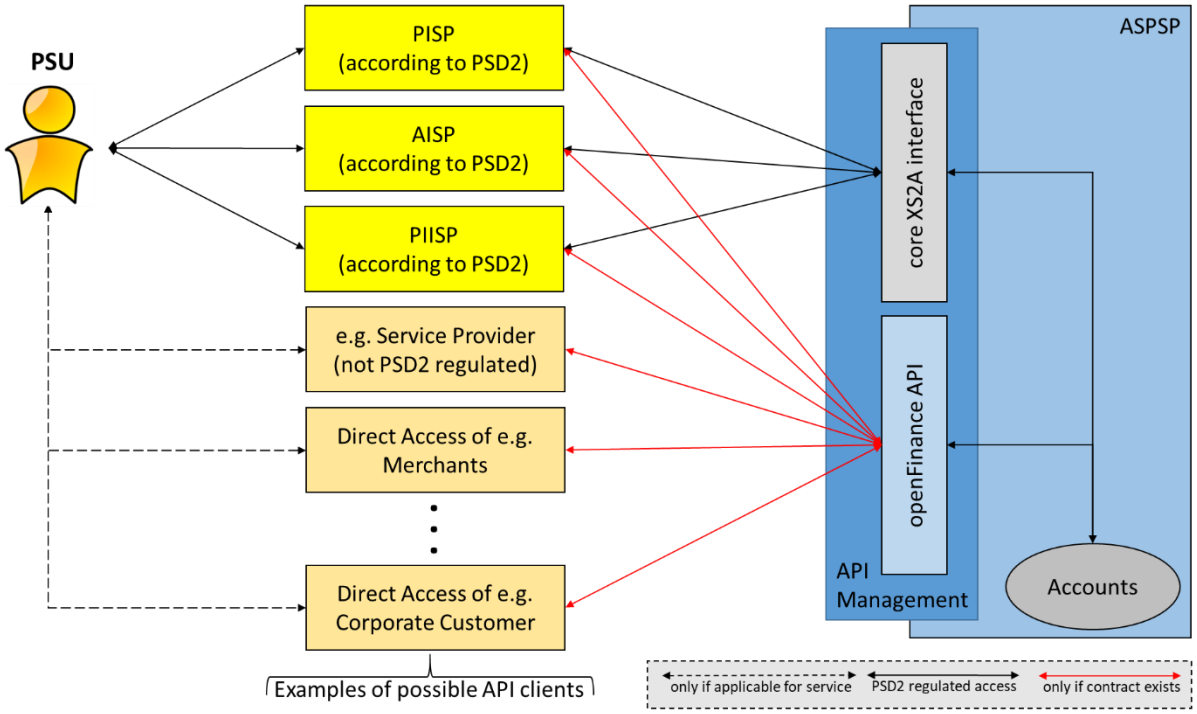

Figure 1: Core XS2A interface and openFinance API

1.2 Discovery Services

The openFinance API Framework is offering several options in the generic framework e.g. for several SCA approaches supported as well as a certain room for implementation for service specific attribute values e.g. for supported timelines for reservation of funds or supported codes in payments to be submitted. Both types of options cannot be standardised on openFinance API Framework level, since this would be too restrictive either to meet implementation requirements of ASPSP within their communities or to meet requirements from upcoming API Access Schemes or bilaterally contracted partners.

On the other hand, Open API Files are not really sufficient to express the related choices in a compact way, if a multitude of ASPSP or API Providers have the need to clearly document their implemented APIs. For this reason, the openFinance API Framework is standardising APIs for implementation parameters chosen by an ASPSP to offer implementation details to the API Clients in a compact and machine readable way. The aim is to reduce written documentation to a minimum and to allow API Clients to (semi-)automatically instantiate an API Client which is able to consume the related API.

Discovery services are needed on several levels and on several items to make openFinance APIs work.

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The following questions will be managed by the addressed services:

- Directory Service:

  Who is participating to a certain scheme? Where do I find the premium or compliance APIs of an ASPSP? Where do I get information about related API instances? Where do I get contact data e.g. for business or API related questions?

- API Instance Service:

  How long is an addressed API instance valid? How are migration phases defined from one API instance to another? Where do I find the related API parameter configuration? Where do I get contact data e.g. for business or API related questions? Where do I get information about planned downtimes?

- ASPSP Parameter Service:

  Which services are covered by a given API instance? Which parameters are provided to the API Client to fully and automatically understand the openFinance API function? The addressed parameters might be either business related information like the maximum supported period for a required reservation of funds or technical information like implemented SCA approaches.

- Contact Data Service:

  Whom to contact via email, phone or other channels for e.g. business or functionality related questions.

- Downtime Planning Service:

  When is the next downtime planned for the addressed API?

All services can be implemented independently of each other.

The idea in the following is to separate directory and ASPSP level: The directory should not deal with details, but provide all links needed for retrieve detailed information. The ASPSP then can manage all configuration items locally within its systems. The directory could be managed by an independent directory service provider (e.g. providing informations how to find compliance PSD2 endpoints) or by an API Access Scheme. This is not relevant for the service standardisation as such.

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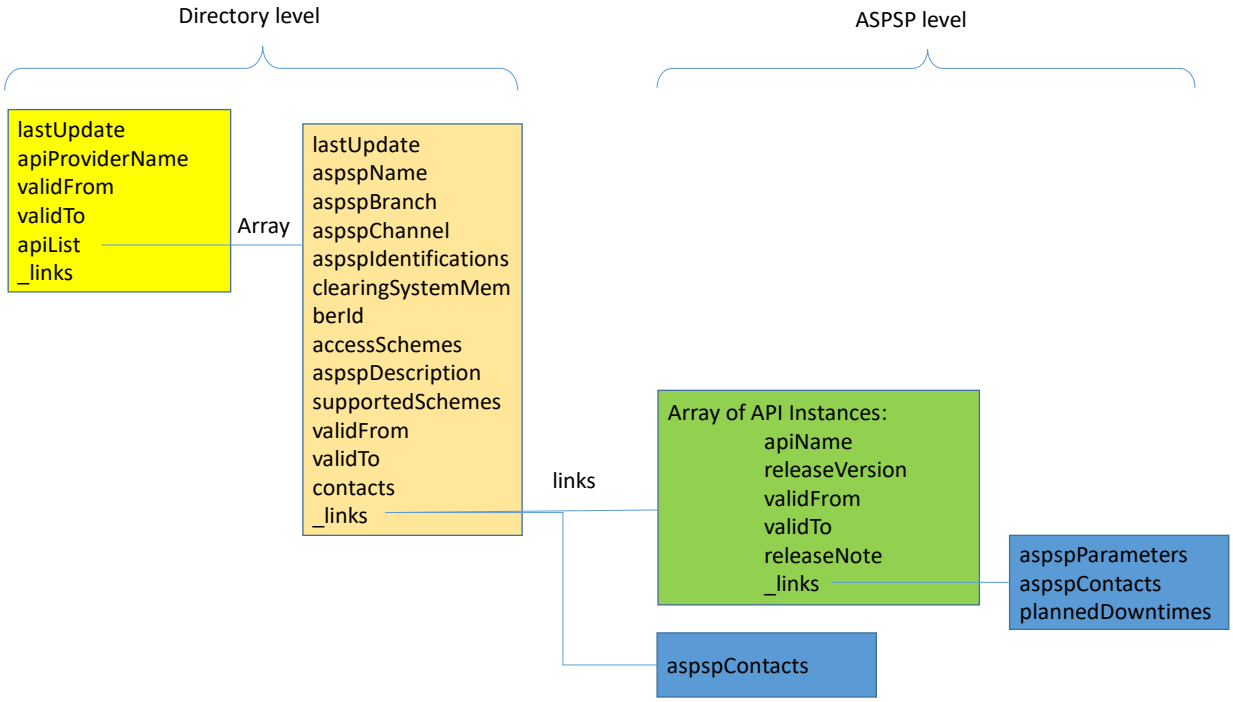
The following figure shows the data structure in an overview:



In addition to discovery services on directory or ASPSP level, there are also potential discovery services related to user or corporate data. Software clients addressing the ASPSP API might need to get user or corporate related data e.g. in the case of direct access services. Since these services will provide personal data, a related consent process might be needed e.g. to share this information with TPPs.

- User Parameter Service:

  For which use cases is the PSU entitled to sign on a provided account? Do the PSU need co-signers? Is the PSU entitled to initiate certain transaction types? What are the global limits applicable to the user or limits for specific use cases?

- IBAN Check Service:

  Has the PSU payment authorisation rights on the related account?

- Corporate Parameter Service: This service is needed for the direct access topics for corporates. Will be added in a later version.

1.3 Document Structure

After having defined application layer items around discovery services in Section 2, ASPSP directory services are specified in Section 3. Then, several discovery services on ASPSP implementations and operations are described from Section 4 till Section 7.

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User and corporate data related discovery services are covered in Section 8 till Section 10.

All of these services make use of complex data types as defined in [oFA DD].

1.4 Document History

Version	Date	Changes
0.3	2024-01-10	Review after consultation.
1.0	2024-02-15	First public version
1.1	2025-01-24	New services to be covered by Discovery Services for ASPSP parameters. Several minor errata covered and clarifications added. Details are documented in Section 12.1.
1.2	2026-03-19	Parameters for the new service for Standing Orders are presented via the API. A detailed change log is included in 12.2

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2 Application Layer: Guiding Principles

2.1 API Access Methods

In the following the API access methods of the openFinance discovery services are presented in an overview. The following categories of services are defined:

- aspsp information services: information service about the ASPSP's APIs, the repspective supported parameters and planned downtimes and contact information of the ASPSP (Service Type: ASPSP-IS).
- user-parameters: general access to user parameter information services (Service Type: USP-IS) and access to the iban-checks services (service Type: USP-IBCK).
- corporate-parameters: access to the account parameter services for a dedicated account (Service Type: CORP-IS).

From a standardisation point of view, these services are optional, since not mandatory to grant access via an API. Nevertheless, such services could be mandated e.g. by related API access schemes.

Endpoint	Method	Condition	Description
/aspsp-apis	GET	Optional	This service provides a list with all available different ASPSP APIs contained in a directory. It comes with search functions via query parameters. The directory could be hosted either by a separate directory service or e.g. by an API provider or a banking group. See Section 3
/api-instances	GET	Optional	This service provides information about instances of a dedicated API. It is foreseen to offer migration related information, but no further details. This service is normally hosted by the ASPSP itself. See Section 4
/aspsp-parameters	GET	Optional	This service provides detailed parameters of the ASPSP openFinance API. The ASPSP parameters include e.g. the service endpoints, SCA methods and detailed service properties. This service is normally hosted by the ASPSP itself. See Section 5
/aspsp-contacts	GET	Optional	This service provides contact details of different type: business contacts (relevant only in case of premium APIs), operational contacts as well as technical contacts. This service is normally hosted by the ASPSP itself. See Section 6

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Endpoint	Method	Condition	Description
/api-planned-downtimes	GET	Optional	This service provides information about downtimes planned for the addressed APIs. See Section 7
/user-parameters	GET	Optional	This service provides a list of user parameter resources and all corresponding user-specific parameters of the ASPSP API related to an addressed group of users The user parameters include e.g. the account permissions, signing rights, user credentials, limits and products. Depending on the use case, this service mandates a consent provided by a PSU to access the data. This service addresses all users covered by the related consent or the authentication via sealing mechanisms in a direct access approach. In a corporate case, this will yield to a list of parameters for all relevant users. See Section 8.2 ff
/user-parameters/{userParameterId}	GET	Optional	This service provides all user-specific parameters of the ASPSP API for an addressed user. The user parameters include e.g. the account permissions, signing rights, user credentials, limits and products. Depending on the use case, this service mandates a consent provided by the PSU to access the data. See Section 8.5 ff
/iban-checks	GET	Optional	This service provides a dedicated view on the user-parameters for signing rights of a dedicated PSU only. It is designed to provide such information via TPPs. This service mandates a consent provided by the PSU to access this data. See Section 9
/corporate-parameters	GET	Optional	This endpoint provides the corporate parameters and a list of all users belonging to the selected company. This service is not detailed yet. See Section 10

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3 ASPSP Directory Service

3.1 Read Directory Request

Call

`GET /v2/aspsp-apis`

Retrieves the list of ASPSP APIs listed in the addressed directory service.

Query Parameters

Attribute	Type	Condition	Description
aspspName	Max35Text	Optional	ASPSP name. The following wild cards are supported. • "*" meaning *0…n* characters • "?" meaning exactly one character
aspspIdentification	Max35Text	Optional	Might contain a BIC. The following wild cards are supported. • "*" meaning *0…n* characters • "?" meaning exactly one character
clearingSystem MemberId	Max35Text	Optional	ASPSP's clearing system member identification: The following wild cards are supported. • "*" meaning *0…n* characters • "?" meaning exactly one character Shall be ignored, if not supported by the API Provider.
accessScheme	Max35Text	Optional	Shall contain a scheme identifier. Wild cards are not supported.
validToAvailable	Boolean	Optional	If true, all entries which contain a validTo attribute are returned. If false, all entries which contain no validTo attribute are returned.

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Request Header

Attribute	Type	Condition	Description
X-Request-ID	UUID	Mandatory	ID of the request, unique to the call, as determined by the initiating party.

Request Body

No specific query parameters.

3.2 Read Directory Response

Response Code

HTTP Response Code equals 200.

Response Header

Attribute	Type	Condition	Description
X-Request-ID	UUID	Mandatory	ID of the related request, unique to the call, as determined by the initiating party.
Content-Type	String	Mandatory	application/json

Response Body

Attribute	Type	Condition	Description
lastUpdate	ISODateTime	Mandatory	Last Update
apiDirectoryProviderName	Max70Text	Mandatory	Name of the Directory Provider: • Single Bank/ASPSP • Bank Group • API Provider • API Access Scheme • Directory Service
validFrom	ISODate	Optional	Date from which this directory is valid.
validTo	ISODate	Optional	Date until this directory is valid.

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Attribute	Type	Condition	Description
apiList	Array of ASPSP API Access	Mandatory	Details per API with the following elements: • ASPSP name, branch and channel • Link to operational data, • Link to a List of API Instances
_links	Links	Optional	A list of hyperlinks to be recognised by the TPP. **Remark:** All links can be relative or full links, to be decided by the provider of the directory services. The following valid values for links are supported: - successorDirectory indicates a directory where the addressed directory is migrated to.

3.3 Example

Example

Request:

```
GET https://api.directory.com/v2/aspsp-apis
X-Request-ID:           99391c7e-ad88-49ec-a2ad-99ddcb1f7756
Date:                   Sun, 06 Aug 2019 15:04:37 GMT
```

Response:

```
HTTP/1.x 200 Ok
X-Request-ID: 99391c7e-ad88-49ec-a2ad-99ddcb1f7721
Date: Sun, 06 Aug 2019 15:04:38 GMT
Content-Type: application/json
{
  "lastUpdate": "2019-03-05T15:30:35.035Z",
  "apiDirectoryProviderName": "Directory Provider Name",
  "apiList":
   [{
     "lastUpdate": ""2019-03-05T15:30:35.035Z",
     "aspspName": "Testbank ",
     "aspspBranch": "Testbank Germany",
     "aspspChannel": "Corporates",
```

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```
      "aspspIdentifications: ["GERBADEXXX"],
      "aspspDescription": "Testbank Germany for Corporate Clients",
      "_links":
             {"apiInstances":
              {"href": "https://api.testbank.com/DE/v2/aspsp-api-
instances"},
              "aspspContacts":
               {"href": "https://api.testbank.com/DE/v2/aspsp-contacts"},
             }
     },
     {
      "aspspName": "Testbank",
      "aspspBranch": "Testbank France",
      "aspspChannel": "Retail",
      "aspspIdentifications": ["GERBAFR123"],
      "aspspDescription": "Testbank France for Retail Clients",
      "
      "
      "_links": {
                 "apiInstances": {"href":
"https://api.testbank.com/FR/v2/aspsp-api-instances"},
                 "aspspContacts": {"href":
"https://api.testb.com/FR/v2/corporate-parameters"}
    }
   ]
}
```


Remark: As shown in the example, ASPSPs are normally identified via BICFI. In some communities, also the clearing system member id is relevant as identification instrument, which is not shown in the example.

Remark: Please note that the validFrom and validTo attributes are relevant e.g. in case of directory migration and are not used here.

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4 API Instance Service

4.1 API Instances Request

Call

```
GET /v2/aspsp-api-instances
```

This server provides information on several instances of a dedicated API, e.g. for migration reasons. Retrieves links to several instances related to an ASPSP/ ASPSP branch/ ASPSP channel.

Query Parameters

No specific query parameters.

Request Header

Attribute	Type	Condition	Description
X-Request-ID	UUID	Mandatory	ID of the request, unique to the call, as determined by the initiating party.

Request Body

No specific query parameters.

4.2 API Instances Response

Response Code

HTTP Response Code equals 200.

Response Header

Attribute	Type	Condition	Description
X-Request-ID	UUID	Mandatory	ID of the request, unique to the call, as determined by the initiating party.
Content-Type	String	Mandatory	application/json

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Response Body

Attribute	Type	Condition	Description
lastUpdate	ISODateTime	Mandatory	Last Update
aspspName	Max70Text	Mandatory	Name ASPSP:
aspspIdentifications	Array of BICFI	Mandatory	
clearingSystemMemberId	Clearing System Member Identfication	Optional	This attribute is sometimes needed to identify ASPSPs in certain communities and application context.
aspspBranch	Max70Text	Optional	Branch or Division in case of multiple APIs per ASPSP which relate to different branches/divisions
aspspChannel	Max70Text	Optional	Online Channel in case of multiple APIs per ASPSP Online Channel, e.g. "small corporates" or "retail".
apiInstances	Array of API Instance Parameters	Mandatory	

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5 ASPSP Parameter Service

5.1 Approach

This server provides parameters for a dedicated openFinance API implementation by an ASPSP. Parameters are grouped in

- general service independent parameters,
- API security and authorisation related parameters and
- service parameters per supported service.

Some parameters are optional, indicating that the related attribute might be supported in the related report, depending on the usage of the API. For testing reasons, more parameters might be needed in the API than for documentation of the API on an ASPSP web site.

5.2 ASPSP Parameter Request

Call

```
GET /v2/aspsp-parameters
```

Retrieves configuration parameters of a dedicated API provided by an ASPSP.

Query Parameters

No specific query parameters.

Request Header

Attribute	Type	Condition	Description
X-Request-ID	UUID	Mandatory	ID of the request, unique to the call, as determined by the initiating party.

Request Body

No specific query parameters.

5.3 ASPSP Parameter Response

Response Code

HTTP Response Code equals 200.

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Response Header

Attribute	Type	Condition	Description
X-Request-ID	UUID	Mandatory	ID of the request, unique to the call, as determined by the initiating party.
Content-Type	String	Mandatory	application/json

Response Body

Attribute	Type	Condition	Description
lastUpdate	ISODateTime	Mandatory	Last Update
aspspName	Max70Text	Optional	Name ASPSP:
aspspIdentifications	Array of BICFI	Optional	
clearingSystemMemberId	Clearing System Member Identification	Optional	
aspspBranch	Max70Text	Optional	Branch or Division in case of multiple APIs per ASPSP which relate to different branches/divisions
aspspChannel	Max70Text	Optional	Online Channel in case of multiple APIs per ASPSP Online Channel, e.g. "small corporates" or "retail".
version	Max35Text	Optional	Version of the aspspParameters as provided by the ASPSP.
apiSecurity	Parameters API Security	Mandatory	
paymentServices	Array of Parameters Payment Service	Conditional	Shall be supported if the related API is supporting payment initiation services.
mandateServices	Array of Parameters Mandate Serivce	Conditional	Shall be supported if the related API is supporting mandate services for direct debits.

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Attribute	Type	Condition	Description
accountInformation Services	Array of Parameters Account Information Service	Conditional	Shall be supported if the related API is supporting account information services.
consentServices	Array of Parameters Consent Service	Conditional	Shall be supported if the related API is supporting consent services.
fundsConfirmation Service	Parameters Funds Confirmation Service	Conditional	Shall be supported if the consent mechanism for onboarding of a TPP for the funds-confirmation is supported.
rtpServices	Array of Parameters RTP Service	Conditional	Shall be supported if the related API is supporting rtp services.
documentServices	Array of Parameters Document Service	Conditional	Shall be supported if the related API is supporting postal document services.
vopServices	Array of Parameters VOP Service	Conditional	Shall be supported if the related API is supporting verification of party services.
pushAisServices	Array of Parameters Push AIS Service	Conditional	Shall be supported if the related API is supporting push account information services.
signingBasket Service	Parameters Signing Basket Service	Conditional	Shall be supported if the related API is supporting a signing basket function.
standingOrdersServices	Array of Parameters Standing Orders Service	Conditional	Shall be supported if the related API is supporting standing orders.
_links	Links	Optional	The following links could be provided here by the ASPSP

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Attribute	Type	Condition	Description
			• onboardings (a link to commercially onboard to the related API, cp. oFA Adm])

5.4 Example

Might be added as soon as an openAPI file is available.

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6 ASPSP Contact Data Service

6.1 ASPSP Contact Data Request

Call

```
GET /v2/aspsp-contacts
```

Retrieves contact data related to an ASPSP/ ASPSP branch/ ASPSP channel.

Query Parameters

No specific query parameters.

Request Header

Attribute	Type	Condition	Description
X-Request-ID	UUID	Mandatory	ID of the request, unique to the call, as determined by the initiating party.

Request Body

No specific query parameters.

6.2 ASPSP Contact Data Response

Response Code

HTTP Response Code equals 200.

Response Header

Attribute	Type	Condition	Description
X-Request-ID	UUID	Mandatory	ID of the request, unique to the call, as determined by the initiating party.

Response Body

Attribute	Type	Condition	Description
lastUpdate	ISODateTime	Mandatory	Last Update
aspspName	Max70Text	Optional	Name ASPSP:

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Attribute	Type	Condition	Description
aspspBranch	Max70Text	Optional	Branch or Division in case of multiple APIs per ASPSP which relate to different branches/divisions
aspspChannel	Max70Text	Optional	Online Channel in case of multiple APIs per ASPSP Online Channel, e.g. "small corporates" or "retail".
contacts	Array of Contact	Mandatory	

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7 API Downtime Data Service

7.1 API Downtime Data Request

Call

`GET /v2/api-planned-downtimes`

Retrieves downtime data related to an API instance.

Query Parameters

No specific query parameters.

Request Header

Attribute	Type	Condition	Description
X-Request-ID	UUID	Mandatory	ID of the request, unique to the call, as determined by the initiating party.

Request Body

No specific query parameters.

7.2 API Downtime Data Response

Response Code

HTTP Response Code equals 200.

Response Header

Attribute	Type	Condition	Description
X-Request-ID	UUID	Mandatory	ID of the request, unique to the call, as determined by the initiating party.
Content-Type	String	Mandatory	application/json

Response Body

Attribute	Type	Condition	Description
lastUpdate	ISODateTime	Mandatory	Last Update

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Attribute	Type	Condition	Description
aspspName	Max70Text	Optional	Name ASPSP:
aspspBranch	Max70Text	Optional	Branch or Division in case of multiple APIs per ASPSP which relate to different branches/divisions
aspspChannel	Max70Text	Optional	Online Channel in case of multiple APIs per ASPSP Online Channel, e.g. "small corporates" or "retail".
plannedDowntimes	Array of FromToDate	Mandatory	Downtimes scheduled for the addressed API. An empty array is provided, if no downtime is currently scheduled.

Example for response body:

{ "plannedDowntimes": [
{"fromDateTime": "2025-06-01T22:00:00.000Z",
"toDateTime": "2025-06-02T08:00:00.000Z"},
{"fromDateTime": "2026-09-01T22:00:00.000Z",
"toDateTime": "2026-09-02T22:00:00.000Z"}
]
}

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8 User Parameter Service

8.1 Approach

This service is not a service in its own right but is used in integration via other openFinance API services. This service can be used either in a TPP based scenario with a related consent of the PSU as an integrated identification service (about the addressed PSU) or in direct access scenarios to exchange PSU related information for the API client software. The latter today typically is supported via so-called "user parameter files" in file transfer protocols.

In a TPP related scenario, the PSU is addressed implicitly via the consent resource.

In a direct access related scenario, the PSU is addressed e.g. via a consent resource, a certificate or a bearer token. Details will be determined in the implementation guidelines making use of this service.

The service is offered for a dedicated PSU as well as for a group of PSU indicated by consent, certificate or bearer token.

Note: The approach to offer PSU parameters as a dedicated resource will allow user management functions via the /user-parameters endpoint later.

8.2 User Group Parameter Request

Call

```
GET /v2/user-parameters
```

Retrieves user specific parameters like user identification data, limits, signing rights, etc. for a group of users. This service is important e.g. in a corporate context, where the API Client could read the user parameters for all employees in one call.

Query Parameters

No specific query parameters.

Request Header

Attribute	Type	Condition	Description
X-Request-ID	UUID	Mandatory	ID of the request, unique to the call, as determined by the initiating party.
PSU-IP-Address	String	Conditional	The forwarded IP Address header field consists of the corresponding HTTP request IP Address field between PSU and TPP. It shall be contained if and only if this request was actively initiated by the PSU.
Consent-ID	String	Conditional	Depending on the use case, an explicit consent to retrieve the related user parameter was mandated via the Establish Consent on

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Attribute	Type	Condition	Description
			User Parameters process first. The actual conditions will be clarified later.
Authorization	String	Conditional	Is contained only, if an OAuth2 based authentication was performed in a pre-step or an OAuth2 based SCA was performed in the related consent authorisation.

Request Body

No specific query parameters.

8.3 User Group Parameter Response

Response Code

HTTP Response Code equals 200.

Response Header

Attribute	Type	Condition	Description
X-Request-ID	UUID	Mandatory	ID of the request, unique to the call, as determined by the initiating party.
Content-Type	String	Mandatory	application/json

Response Body

Attribute	Type	Condition	Description
lastUpdate	ISODateTime	Mandatory	Last Update
userParameters	Array of User Parameter	Mandatory	

8.4 Example

The following example describes the response for a group of only one retail customer, where limits are set only globally.

```
HTTP/1.x 200 Ok
X-Request-ID: 99391c7e-ad88-49ec-a2ad-99ddcb1f7741
Date: Sun, 07 Jan 2024 15:04:38 GMT
```

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```
Content-Type: application/json
{
  "lastUpdate": "2023-03-05T15:30:35.035Z",
  "userParameters": [
    {"userParameterId": "99391c7e-ad88-49ec-a2ad-88abcd1f7700"
     "userData": {
      "psu-id": "1234test",
      "psuName": "Max Mustermann",
      "psuAddress": {
        "streetName": "Musterstraße",
        "buildingNumber": "42",
        "postcode": "12345",
        "townName": "Musterstadt",
        "country": "DE"}
      "privateId": {
        "birthdate": "2001-01-01",
        "cityOfBirth": "Musterstadt",
        "countryOfBirth": "DE",
        "others": [
            {"identification": "Y123456789",
             "schemeNameCode": "NIDN",
             "issuer": "Musterstadt"
            }
        ]
      },
      "SCA-Methods": ["PUSH_OTP"],
      "limits": [
        {"limitType": "daily",
         "limitAmount": {"currency": "EUR", "amount": "1000"}
        }
      ]
     },
     "accessAndAuthorisations": [
      {"account": {
            "IBAN": "DE12 34567891234567",
            "currency": "EUR",
            "typeCode": "CACC"
       },
       "accountInformations": ["ais", "trustedBeneficiaries", "orders",
"ownerName", "psuName", "psuLeanIdentification", "userParameters",
"ibanChecks"],
       "paymentAuthorisations": [
            {"product": "sepa-credit-transfers",
             "signingClass": "singleSigning"
            },
            {"product": "cross-border-transfers",
             "signingClass": "firstSigning",
             "limits": [
                  {"limitType": "daily",
```


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```
                    "limitAmount": {"currency": "EUR", "amount": "500"}],
        "paymentCancellations": [
             {"product": "sepa-credit-transfers",
              "signingClass": "singleSigning"
             },
             {"product": "cross-border-transfers",
              "signingClass": "singleSigning"
             }
         ]
       }
      ]
     }
    ]
}
```

8.5 User Parameter Request

Call

```
GET /v2/user-parameters/{userParameterId}
```

Retrieves user specific parameters like user identification data, limits, signing rights, etc. for dedicated user. The resource identification userParameterId results from a related consent process or from a User Group Parameter Request.

Path Parameters

Attribute	Type	Description
userParameterId	String	Resource identification of the corresponding user parameter object.

Query Parameters

No specific query parameters.

Request Header

Attribute	Type	Condition	Description
X-Request-ID	UUID	Mandatory	ID of the request, unique to the call, as determined by the initiating party.
PSU-IP-Address	String	Conditional	The forwarded IP Address header field consists of the corresponding HTTP request IP Address field between PSU and TPP. It

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Attribute	Type	Condition	Description
			shall be contained if and only if this request was actively initiated by the PSU.
Consent-ID	String	Conditional	Depending on the use case, an explicit consent to retrieve the related user parameter was mandated via the Establish Consent on User Parameters process first. The actual conditions will be clarified later.
Authorization	String	Conditional	Is contained only, if an OAuth2 based authentication was performed in a pre-step or an OAuth2 based SCA was performed in the related consent authorisation.

Request Body

No specific query parameters.

8.6 User Parameter Response

Response Code

HTTP Response Code equals 200.

Response Header

Attribute	Type	Condition	Description
X-Request-ID	UUID	Mandatory	ID of the request, unique to the call, as determined by the initiating party.

Response Body

Attribute	Type	Condition	Description
lastUpdate	ISODateTime	Mandatory	Last Update
userData	PSU Data	Mandatory	
accessAndAuthorisations	Array of Account Access and Authorisation Rights	Mandatory	

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8.7 Example

The following example describes the response only for a retail customer, where limits are set only globally.

```
HTTP/1.x 200 Ok
X-Request-ID: 99391c7e-ad88-49ec-a2ad-99ddcb1f7741
Date: Sun, 07 Jan 2024 15:04:38 GMT
Content-Type: application/json
{
  "lastUpdate": "2023-03-05T15:30:35.035Z",
  "userData": {
      "psu-id": "1234test",
      "psuName": "Max Mustermann",
      "psuAddress": {
        "streetName": "Musterstraße",
        "buildingNumber": "42",
        "postcode": "12345",
        "townName": "Musterstadt",
        "country": "DE"}
      "privateId": {
        "birthdate": "2001-01-01",
        "cityOfBirth": "Musterstadt",
        "countryOfBirth": "DE",
        "others": [
            {"identification": "Y123456789",
             "schemeNameCode": "NIDN",
             "issuer": "Musterstadt"
            }
        ]
      },
      "SCA-Methods": ["PUSH_OTP"],
      "limits": [
        {"limitType": "daily",
         "limitAmount": {"currency": "EUR", "amount": "1000"}
        }
      ]
  },
  "accessAndAuthorisations": [
      {"account": {
            "IBAN": "DE12 34567891234567",
            "currency": "EUR",
            "typeCode": "CACC"
       },
       "accountInformations": ["ais", "trustedBeneficiaries", "orders",
"ownerName", "psuName", "psuLeanIdentification", "userParameters",
"ibanChecks"],
       "paymentAuthorisations": [
            {"product": "sepa-credit-transfers",
             "signingClass": "singleSigning"
```


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```
            },
            {"product": "cross-border-transfers",
             "signingClass": "firstSigning",
             "limits": [
                  {"limitType": "daily",
                   "limitAmount": {"currency": "EUR", "amount": "500"}],
       "paymentCancellations": [
            {"product": "sepa-credit-transfers",
             "signingClass": "singleSigning"
            },
            {"product": "cross-border-transfers",
             "signingClass": "singleSigning"
            }
        ]
      }
  ]
}
```


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9 IBAN Check Service

9.1 Approach

A very restricted user paramenter service is the IBAN check service. This service will only allow to retrieve the access rights of a PSU which has granted the related consent to the API Client. This is offered separately from the more general user parameter service, since it is planned to be offered in a TPP based scenario only.

The related PSU is addressed via the addressed consent resource.

9.2 IBAN Check Request

Call

```
GET /v2/iban-checks
```

Query Parameters

No specific query parameters.

Request Header

Attribute	Type	Condition	Description
X-Request-ID	UUID	Mandatory	ID of the request, unique to the call, as determined by the initiating party.
Consent-ID	String	Mandatory	Resulting from the "Establish Consent on User Parameter" performed via this API before.
Authorization	String	Conditional	Is contained only, if an OAuth2 based authentication was performed in a pre-step or an OAuth2 based SCA was performed in the related consent authorisation.

The accounts agreed within the related consent process defined in [oFA-CO] will be recognized during processing the addressed IBAN check service.

9.3 IBAN Check Response

Response Code

HTTP Response Code equals 200.

Request Body

No specific query parameters.

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Response Header

Attribute	Type	Condition	Description
X-Request-ID	UUID	Mandatory	ID of the request, unique to the call, as determined by the initiating party.
Content-Type	String	Mandatory	application/json

Response Body

Attribute	Type	Condition	Description
accessAndAuthorisations	Array of Account Access and Authorisation Rights1	Mandatory	The access rights of the addressed PSU on addressed accounts.

9.4 Example

The following example describes the response only. This service comes typically without any limit information.

```
HTTP/1.x 200 Ok
X-Request-ID: 99391c7e-ad88-49ec-a2ad-99ddcb1f7743
Date: Sun, 07 Jan 2024 15:04:42 GMT
Content-Type: application/json
{
  "accessAndAuthorisations": [
      {"account": {
            "IBAN": "DE12 34567891234567",
            "currency": "EUR",
        },
       "accountInformations": ["ais", "trustedBeneficiaries", "orders",
"ownerName", "psuName", "psuLeanIdentification", "userParameters",
"ibanChecks"],
       "paymentAuthorisations": [
            {"product": "sepa-credit-transfers",
             "signingClass": "singleSigning"
            },
            {"product": "instant-sepa-credit-transfers",
             "signingClass": "singleSigning"
            },
            {"product": "cross-border-transfers",
             "signingClass": "firstSigning"
            }
```


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```
            ]
         }
   ]
}
```


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10 Corporate Parameter Service

10.1 Approach

This service is delivering corporate related data. It will be further standardised in the context of direct access use case standardization and added in detail in a later version of this document.

10.2 Corporate List Request

Call

```
GET /v2/corporate-parameters
```

Query Parameters

Filter: registeredUserOnly=true/false. This will be detailed in a future version of the document.

Request Header

Attribute	Type	Condition	Description
X-Request-ID	UUID	Mandatory	ID of the request, unique to the call, as determined by the initiating party.
PSU-IP-Address	String	Mandatory	The forwarded IP Address header field consists of the corresponding HTTP request IP Address field between PSU and TPP. If not available, the TPP shall use the IP Address used by the TPP when submitting this request.

Request Body

No specific query parameters.

10.3 Corporate Parameter Response

Response Code

HTTP Response Code equals 200.

Response Header

Attribute	Type	Condition	Description
X-Request-ID	UUID	Mandatory	ID of the request, unique to the call, as determined by the initiating party.

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Attribute	Type	Condition	Description
Content-Type	String	Mandatory	application/json

Response Body

Attribute	Type	Condition	Description

This will be detailed later.

10.4 Example

To be defined later.

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11 References

11.1 Normative References

[EBA-FR] Final Report, Draft Regulatory Technical Standards, amending Commission Delegated Regulation (EU) 2018/389 supplementing Directive (EU) 2015/2366 of the European Parliament and of the Council with regard to regulatory technical standards for strong customer authentication and common and secure open standards of communication, published 5 April 2022

[EBA-OP2] Opinion of the European Banking Authority on obstacles under Article 32(3) of the RTS on SCA and CSC, EBA/OP/2020/10, published 4 June 2020

[EBA-RTS] Commission Delegated Regulation (EU) 2018/389 of 27 November 2017 supplementing Directive 2015/2366 of the European Parliament and of the Council with regard to Regulatory Technical Standards for Strong Customer Authentication and Common and Secure Open Standards of Communication, C(2017) 7782 final, published 13 March 2018

[eIDAS] Regulation (EU) No 910/2014 of the European Parliament and of the Council on Electronic Identification and Trust Services for Electronic Transactions in the Internal Market, 23 July 2014, published 28 August 2014

[PSD2] Directive (EU) 2015/2366 of the European Parliament and of the Council on payment services in the internal market, published 23 December 2015

[oFA DD] openFinance API Framework, Data Dictionary, Version 2.4, 31 March 2026

[oFA PFSM] openFinance API Framework, Protocol Functions and Security Measures, Version 2.4, 31 March 2026

[oFA DomDef] openFinance API Framework, Domestic AIS/PIS definitions, current version

11.2 Informative References

[oFA-CO] openFinance API Framework, Consent API, Implementation Guidelines, Version 2.2, 31 October 2025

[oFA Adm] openFinance API Framework, Admin Services, Implementation Guidelines, Version 1.1,09 September 2024

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12 Annex A: Change Log

12.1 Changes from Version 1.0 to 1.1

Section	Change	Reason
2.1	The endpoint /aspsp-downtimes has been changed to /api-downtimes in the API Access Methods overview.	Inconsistency with the specification in Section 7
5.3	New attributes for parameters related to Mandate Serivces, Document Services and VOP Services have been added.	New services available in the openFinance API Framework
7	The endpoint /api-downtimes has been re-named to /api-planned-downtimes	More accuracy in the endpoint name
7.2	Daty type FromToDateTime renamed to FromToDate	Erratum
7.2	Example added	Clarification
8.5	Path Parameter added	Erratum
10.2	Head line changed, Clarification added that details on corporate parameters will be added in a later phase	Clarification

12.2 Changes from Version 1.1 to 1.2

Section	Change	Reason
2.1	Adapted the introduction of discovery services in the framework to include all categories of information services available at the API	Clarification
5.3	Standing Orders parameter services are included in the response	Inclusion of Extended Standing Order Services to the framework
11	Updated References	Editorial

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