THE *Berlin* GROUP

A EUROPEAN STANDARDS INITIATIVE

PSD2 Compliant
XS2A Interface

NextGenPSD2 XS2A Framework

Implementation Guidelines

Extended Services

List of Trusted Beneficiaries Service

Version 1.0

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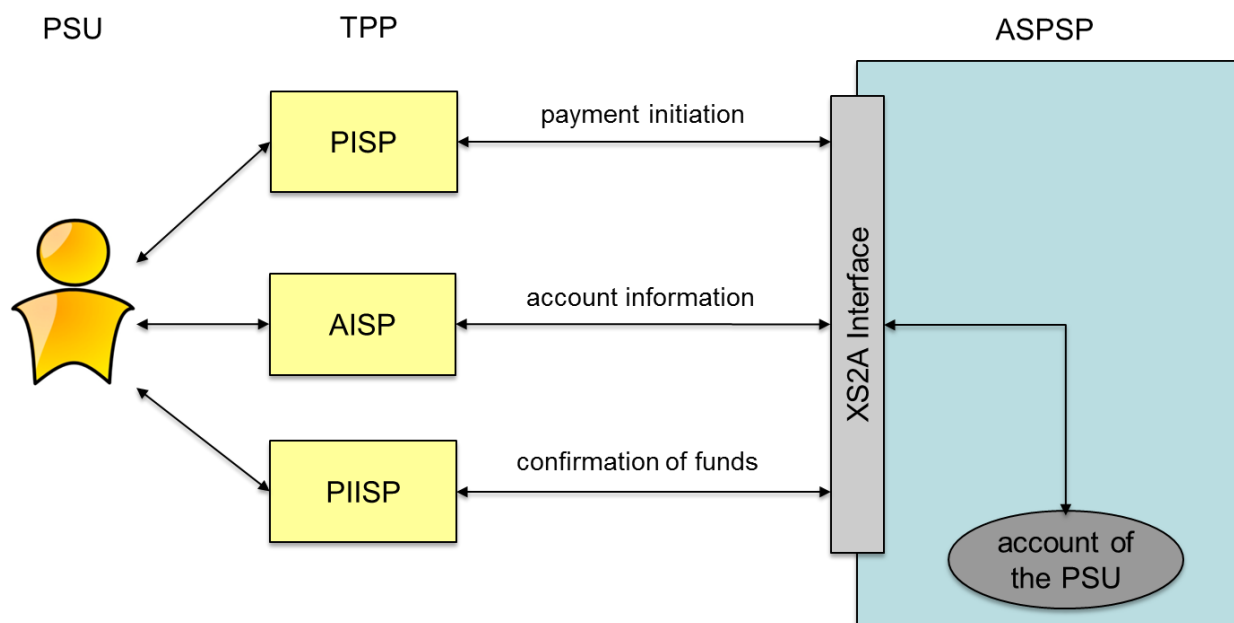**Contents**

1 Introduction

1.1 Background

With [PSD2] the European Union has published a new directive on payment services in the internal market. Member States had to adopt this directive into their national law until 13th of January 2018.

Among others [PSD2] contains regulations of new services to be operated by so called Third Party Payment Service Providers (TPP) on behalf of a Payment Service User (PSU). These new 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 of the Availability of Funds service to be used by Payment Instrument Issuing Service Provider (PIISP) TPP as defined by article 65 of [PSD2].

For operating the new services a TPP needs to access the account of the PSU which is usually managed by another PSP called the Account Servicing Payment Service Provider (ASPSP). As shown in the following figure, an ASPSP has to provide an interface (called "PSD2 compliant Access to Account Interface" or short "XS2A Interface") to its systems to be used by a TPP for necessary accesses regulated by [PSD2]:
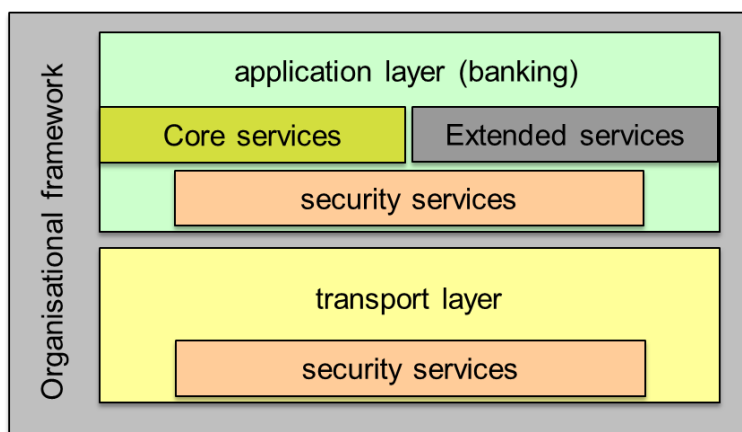
1.2 XS2A Interface Specification

This document is an extension of the NextGenPSD2 XS2A Specification which defines a standard for an XS2A Interface and by this reaching interoperability of the interfaces of ASPSPs at least for the core services defined by [PSD2].

The core XS2A Interface is designed as a B2B interface between a TPP server and the ASPSP server. The core NextGenPSD2 XS2A Specification as defined in [XS2A-IG] is a pure client-server protocol, assuming the TPP server being the client, i.e. all API calls are initiated by the TPP. The Interoperability Framework defines operational rules, requirements on the data model and a process description in [XS2A-OR].

This document defines Additional Account Information Services for the NextGenPSD2 XS2A Interface. The additional account information standardised in this version of the service addresses the provision of the TPP with the list of trusted beneficiaries (noted as "List of Trusted Beneficiaries Service"), where "trusted beneficiaries" are referencing to the definitions within [EBA-RTS]. Please note further that the provision of this additional information might depend on rules and conditions within the ASPSP and/or on an explicit consent of the PSU submitted to the ASPSP.

This document details the standard in defining messages and detailed data structures for these extended services of the XS2A Interface. For the specification the two layers shown in the following figure are distinguished:

The definition of additional account information has only an impact on the application layer. This specification makes no assumption whether agreements are needed between TPPs and ASPSPs to support this feature or parts of this feature.

2 Character Sets and Notations

For definition on character Sets and Notations as well as for request and response notations refer to Chapter 2 of [XS2A-IG].

3 Transport Layer

For details on the transport Layer, please refer to Chapter 3 in [XS2A-IG].

4 Application Layer: Guiding Principles

4.1 Additional Error Information

No additional error information is provided for this simple service extension.

4.2 HTTP Response Codes

No additional HTTP Response Codes are supported.

4.3 API Access Methods

The following new access method is defined by this service:

Endpoints/Resources	Method	Condition	Description
trusted-beneficiaries	GET	Optional	Reads a list of trusted beneficiaries. These lists might be defined per PSU or per account. Section 5.3.1

5 List of Trusted Beneficiaries Service

The following rules and requirements for the support of this service apply.

- An ASPSP may deliver the List of Trusted Beneficiaries Service without any extension to the consent model as defined in [XS2A-IG].

or

- An ASPSP may require an explicit consent extension by the PSU to deliver the List of Trusted Beneficiaries Service in addition to other account information data.

The extension of the consent model is only applying to the Detailed Consent Model. The Global Consent Model always covers the consent on trusted beneficiary lists, if the service is offered as part of the PSD2 compliance core implementation by the ASPSP.

5.1 Consent Extension

The existing account access model will be extended as follows, refer Section 14.16 "Account Access Data Type" of [XS2A-IG], extensions are marked as revision marks to fulfil above mentioned requirements in scenarios where an explicit consent of the PSU is needed:

Attribute	Type	Condition	Description
accounts	Array of Account Reference	Optional	Is asking for detailed account information. If the array is empty, the TPP is asking for an accessible account list. This may be restricted in a PSU/ASPSP authorization dialogue. If the array is empty, also the arrays for balances, additionalInformation sub attributes or transactions shall be empty, if used.
balances	Array of Account Reference	Optional	Is asking for balances of the addressed accounts. If the array is empty in the request, the TPP is asking for the balances of all accessible account lists. This may be restricted in a PSU/ASPSP authorization dialogue. If the array is empty, also the arrays for accounts, additionalInformation sub attributes or transactions shall be empty, if used.
transactions	Array of Account Reference	Optional	Is asking for transactions of the addressed accounts. If the array is empty in the request, the TPP is asking for the transactions of all accessible accounts. This may be restricted in a PSU/ASPSP authorization dialogue. If the array is empty, also the arrays for accounts, additionalInformation sub

Attribute	Type	Condition	Description
			attributes or balances shall be empty, if used.
additional Information	Additional Information Access	Optional if supported by API provider	Is asking for additional information as added within this structured object. The usage of this data element requires at least one of the entries "accounts", "transactions" or "balances" also to be contained in the object. If detailed accounts are referenced, it is required in addition that any account addressed within the additionalInformation attribute is also addressed by at least one of the attributes "accounts", "transactions" or "balances".
availableAccounts	String	Optional if supported by API provider	The values "allAccounts" and "allAccountsWithOwnerName" are admitted. The support of the "allAccountsWithOwnerName" value by the ASPSP is optional.
availableAccounts WithBalance	String	Optional, if supported by API provider	The values "allAccounts" and "allAccountsWithOwnerName" are admitted. The support of the "allAccountsWithOwnerName" value by the ASPSP is optional.
allPsd2	String	Optional if supported by API provider	The values "allAccounts" and "allAccountsWithOwnerName" are admitted. The support of the "allAccountsWithOwnerName" value by the ASPSP is optional.

Note: The allPSD2 or availableAccounts tags do not support a dedicated entry of lists of trusted beneficiaries. The allPSD2 is covering the potential offer of a list of trusted beneficiaries, availableAccounts will give access to an overview of accounts but not to such detail as the list of beneficiaries.

Remark for Future: In future, this might be changed for the allPSD2 tag in a context where added values might be offered via the API and additional consents might be needed.

Remark: If the TPP is using

- the additional information with the "ownerName" or "trustedBeneficiaries" entry or

- the entry "allAccountsWithOwnerName" within the global consent model or

- the entry "allAccountsWithOwnerName" within the consent request for the list of available payment accounts

and if the ASPSP is not supporting the related consent extension, then the ASPSP should ignore the corresponding entries.

Addendum to Section 4.17 Additional Information Access Type

Extension to the data model are shown with revision marks:

Attribute	Type	Condition	Description
ownerName	Array of Account Reference	Optional	Is asking for account owner name of the accounts referenced within. If the array is empty in the request, the TPP is asking for the account owner name of all accessible accounts. This may be restricted in a PSU/ASPSP authorization dialogue. If the array is empty, also the arrays for accounts, balances or transactions shall be empty, if used. The ASPSP will indicate in the consent resource after a successful authorisation, whether the ownerName consent can be accepted by providing the accounts on which the ownerName will be delivered. This array can be empty.
trustedBeneficiaries	Array of Account Reference	Optional if supported by API provider	Is asking for the trusted beneficiaries related to the accounts referenced within and related to the PSU. If the array is empty in the request, the TPP is asking for the lists of trusted beneficiaries of all accessible accounts. This may be restricted in a PSU/ASPSP authorization dialogue by the PSU if also the account lists addressed by the tags "accounts", "balances" or "transactions" are empty. The ASPSP will indicate in the consent resource after a successful authorisation, whether the trustedBeneficiaries consent can be accepted by providing the accounts on which the list of trusted beneficiaries will be delivered. This array can be empty.

5.2 Examples for Account Owner Consent Handling

In the following, an example is given for a consent request where the list of trusted beneficiaries is specifically requested within version 1.3.6 of the XS2A specification and how the ASPSP will react in different scenarios regarding the consent model.

Example for Consent Request with dedicated request for a list of trusted beneficiaries

Request

```
POST https://api.testbank.com/v1/consents
Content-Type:           application/json
X-Request-ID:           99391c7e-ad88-49ec-a2ad-99ddcb1f7756
PSU-IP-Address:         192.168.8.78
PSU-User-Agent:          Mozilla/5.0 (Windows NT 10.0; WOW64; rv:54.0)
Gecko/20100101 Firefox/54.0
Date:                   Sun, 06 Aug 2017 15:05:37 GMT


{
  "access": {
      "balances": [
          { "iban": "DE40100100103307118608" },
          { "iban": "DE02100100109307118603",
            "currency": "USD"
          },
          { "iban": "DE67100100101306118605" }
        ],
      "transactions": [
          { "iban": "DE40100100103307118608" },
          { "maskedPan": "123456xxxxxx1234" }
        ],
       "additionalInformation" :
          {"trustedBeneficiaries": [{"iban": "DE40100100103307118608"}]
          }
    },
  "recurringIndicator": false,
  "validUntil": "2017-11-01",
  "frequencyPerDay": "1",
  "combinedServiceIndicator": false
}
```

Example for Consent Object (list of trusted beneficiaries supported without explicit consent extension)

Remark: In this case, the access attribute does not contain any information about additional information.

Request

GET https://api.testbank.com/v1/consents/qwer3456tzui7890
Response

```
HTTP/1.x 200 Ok
X-Request-ID:           99391c7e-ad88-49ec-a2ad-99ddcb1f7721
Date:                   Sun, 06 Aug 2017 15:05:47 GMT
Content-Type:           application/json

{
  "access":
      {"balances":
          [{"iban": "DE2310010010123456789"}],
      "transactions":
          [{"iban": "DE2310010010123456789"},
           {"maskedPan": "123456xxxxxx3457"}]
      },
 "recurringIndicator": false,
 "validUntil": "2017-11-01",
 "frequencyPerDay": "1",
 "combinedServiceIndicator": false
 "consentStatus": "valid",
 "_links": {"account": {"href": "/v1/accounts"}}
}
```

5.3 Data Structure

5.3.1 Trusted Beneficiaries Endpoint

New Section 6.6.6 GET List of Trusted Beneficiaries

Call

```
GET /v1/trusted-beneficiaries {query-parameters}
```

Reads the list of trusted beneficiaries related to the PSU who has given the (explicit) consent.

Path Parameters

Query Parameters

Attribute	Type	Condition	Description
account-id	String	Optional if supported by API provider	Reference to a dedicated account, which where a list of trusted beneficiaries might be restricted to. The reference is the corresponding URI resource identification of the /accounts endpoint. This parameter might only be used by the TPP if the ASPSP is supporting dedicated lists of trusted beneficiaries per PSU account.

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	Mandatory	
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 request body.

Response Code

HTTP Response Code equals 200.

Response Header

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

Response Body

A JSON response is defined as follows:

Attribute	Type	Condition	Description
trustedBeneficiaries	Array of Trusted Beneficiaries	Mandatory	JSON based account report. This report contains all trusted beneficiaries related to the PSU, to all accounts which are consented. This array may be empty.

Example

In this example, the ASPSP is supporting trusted beneficiaries lists dedicated per PSU account. The request is to deliver all trusted beneficiary entries for all accessible account. In the response, the entries will inform about the applicable PSU account.

Request

```
GET https://api.testbank.com/v1/trusted-beneficiaries
X-Request-ID:          99391c7e-ad88-49ec-a2ad-99ddcb1f7748
Date:                  Sun, 06 Aug 2017 15:05:54 GMT
```

Response

```
HTTP/1.x 200 Ok
X-Request-ID:          99391c7e-ad88-49ec-a2ad-99ddcb1f7748
Date:                  Sun, 06 Aug 2017 15:05:55 GMT
Content-Type:          application/json

{
  "trustedBeneficiaries":
    [{"trustedBeneficiaryId": "8822345-fr33-50df-qqqq",
```

```
     "debtorAccount": "DE23100100101234556789", /* This attribute will be
missing in a context, where an ASPSP is supporting only global trusted
beneficiary lists for the PSU */
     "creditorAccount": "FR7612345987650123456789014",
     "creditorName": "Merchant1Name"
     },{
     "trustedBeneficiaryId": "8822345-fr33-50df-qqqq",
     "debtorAccount": "DE23100100101234556789", /* This attribute will be
missing in a context, where an ASPSP is supporting only global trusted
beneficiary lists for the PSU */
     "creditorAccount": "FR7412345987650123456789012",
     "creditorName": "Merchant2Name"}
     ]
}
```

5.3.2 Extension to Section 7.5 GET SCA Status

The revision marks will show in the next table a new optional entry to the GET SCA Status Request:

Response Body

Attribute	Type	Condition	Description
scaStatus	SCA Status	Mandatory	This data element is containing information about the status of the SCA method applied.
trustedBeneficiary Flag	Boolean	Optional	Within this data element, the ASPSP might optionally communicate towards the TPP whether the creditor was part of the related trusted beneficiary list. This attribute is only contained in case of a final scaStatus.

Example

Request

```
GET https://api.testbank.com/v1/payments/sepa-credit-transfers/1234-wertiq-
983/authorisations/123auth456
Accept:              application/json
X-Request-ID:        99391c7e-ad88-49ec-a2ad-99ddcb1f7721
Date:                Sun, 06 Aug 2017 15:04:07 GMT
```

Response

```
HTTP/1.x 200 Ok
X-Request-ID:        99391c7e-ad88-49ec-a2ad-99ddcb1f7721
Date:                Sun, 06 Aug 2017 15:04:08 GMT
Content-Type:        application/json
```

```
{
  "scaStatus": "finalised",
  "trustedBeneficiaryFlag": false
}
```

5.3.3 New Section 14.x Trusted Beneficiary Type

Attribute	Type	Condition	Description
trustedBeneficiaryId	UUID	Mandatory	Resource identification of the list entry. **Remark for Future**: In future added value services these resource might be addressable directly by the TPP for change management.
debtorAccount	Account Reference	Optional	This is provided by the ASPSP if the trusted beneficiary entry is applicable to a dedicated account only.
creditorAccount	Account Reference	Mandatory	The creditor account as used in the trusted beneficiary list of the PSU.
creditorAgent	BICFI	Conditional	It is mandated where the information is mandated for related credit transfers. e.g. for non-SEPA payments.
creditorName	Max70Text	Mandatory	Name of the creditor as provided by the PSU.
creditorAlias	Max70Text	Optional	An alias for the creditor as defined by the PSU as an alias when displaying the list of trusted beneficiaries in online channels of the ASPSP.
creditorId	Max35Text	Optional	
creditorAddress	Address	Optional	

6 References

[XS2A-OR]   NextGenPSD2 XS2A Framework, Operational Rules, The Berlin Group Joint Initiative on a PSD2 Compliant XS2A Interface, version 1.3, published 21 Dec 2018

[XS2A-IG]   NextGenPSD2 XS2A Interoperability Framework, Implementation Guidelines, The Berlin Group Joint Initiative on a PSD2 Compliant XS2A Interface, version 1.3.6, 3 Feb 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