



# ***XS2A API Description***

*Version 1.2 as of 13.09.2019*

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# 1 General

The below API description follows the guidelines of the Berlin Group Standard and is supporting accounts for RZBAATWW.

Please use the following settings:

URL: <https://xs2atest.rbinternational.com>

Test accounts:

- AT123100001000975706
- AT563100001100975706

Test PSU IDs:

- TPptest1 (Single signature)
- TPptest2 (First signature)
- TPptest3 (Second signature)
- TPptest4 (No signature)

To meet the legal requirements of Article 34(1) and Article 35(1) of the RTS regarding secure communication we require the usage of QWACs only.

In case of any questions please feel free to contact RBI's Support Desk available Mo - Fr from 08.00 – 18.00 CET

[cashmanagementsupport@rsc.co.at](mailto:cashmanagementsupport@rsc.co.at)

## 2 Services Supported

Use Case	Service	Role	Format Support
Initiation of a single payment (SEPA Credit)	Payment initiation service	PISP	Yes, XML and JSON Format
Initiation of a multiple / bulk payment (SEPA Credit)	Payment initiation service	PISP	Yes, XML
Establish account information consent	Account information service	AISP	Yes, JSON
Get list of reachable accounts	Account information service	AISP	Yes, JSON
Get account details of the list of accessible accounts		AISP	Yes, JSON

Use Case	Service	Role	Format Support
	Account information service		
Get balances for a given account	Account information service	AISP	Yes, JSON
Get transaction information for a given account	Account information service	AISP	Yes, XML or SWIFT (depends on the banks application)

### 3 Strong Customer Authentication

Each transaction needs to be approved by the Payment Service User (PSU). This approval (consent) requires Strong Customer Authentication.

Following the decoupled approach, the TPP generates the transaction and the PSU must authenticate in a separate channel the transaction via a dedicated APP or application on a device.

## 4 Service Catalogue

### 4.1 Consents

```
POST /v1/consents
GET /v1/consents/{consentId}
GET /v1/consents/{consentId}/status
DELETE /v1/consents/{consentId}
GET /v1/consents/{consentId}/authorisations
GET /v1/consents/{consentId}/authorisations/{authorisationId}
```

### 4.2 Account Information

```
GET /v1/accounts
GET /v1/accounts/{accountId}
GET /v1/accounts/{accountId}/balances
GET /v1/accounts/{accountId}/transactions?date_from=""&date_to= ""
```

### 4.3 Payments

```
POST /v1/payments/{payment-product}
GET /v1/payments/{payment-product}/{paymentId}
GET /v1/payments/{payment-product}/{paymentId}/status
POST /v1/payments/{payment-product}/{paymentId}/authorisations
GET /v1/payments/{payment-product}/{paymentId}/authorisations
GET /v1/payments/{payment-product}/{paymentId}/authorisations/{authorisationId}
```

DELETE /v1/payments/{payment-product}/{paymentId}

POST /v1/bulk-payments/{payment-product}  
 GET /v1/bulk-payments/{payment-product}/{paymentId}  
 GET /v1/bulk-payments/{payment-product}/{paymentId}/status  
 POST /v1/bulk-payments/{payment-product}/{paymentId}/authorisations  
 GET /v1/bulk-payments/{payment-product}/{paymentId}/authorisations  
 GET /v1/bulk-payments/{payment-product}/{paymentId}/authorisations/{authorisationId}  
 DELETE /v1/bulk-payments/{payment-product}/{paymentId}

### 4.3.1 Payment types supported

payments/sepa-credit-transfers  
 payments/pain.001-sepa-credit-transfers  
 bulk-payments/pain.001-sepa-credit-transfers

## 5 API Description

### 5.1 Certificate Information

Attribute	Type	Condition	Description
TPP Registration Number	String	Mandatory	If missing, System will response with 400/ FORMAT_ERROR / TPP Message: missing field: XXXX MaxLength 50
TPP Name	String	Optional	Used inside the Consent management / Identification of the TPP but not mandatory
TPP Role	String	Mandatory	If missing, System will response with 400/ FORMAT_ERROR / TPP Message: missing field: XXXX MaxLength 50
TPP National Competent Authority	String	Conditional	MaxLength 100; Not used in V1
Certificate FingerPrint	String	Mandatory	If missing, System will response with 400/ FORMAT_ERROR / TPP Message: missing field: XXXX MaxLength 50

### 5.2 Payment initiation / Payment status

#### 5.2.1 Payment Information

As outlined above, the following payment products are supported:

Payment service: Single transfer /payments/

Payment product: sepa-credit-transfers

pain.001-sepa-credit-transfers

Payment service: Bulk transfer /bulk-payments/

Payment product: pain.001-sepa-credit-transfers

Generic error condition:

If the path / transaction cannot be referenced by the TPP or PSU the system will response with code 404 Not found

The payment initiation results – if successful – always in a response with

**HTTP-Response code:** 201 Created

***The response body for JSON and XML formatted payments are always in JSON!***

Sample:

POST /v1/payments/pain.001-sepa-credit-transfers

creates a payment initiation request for a single transaction based on the XML pain 001 scheme.

POST /v1/bulk-payments/pain.001-sepa-credit-transfers

creates a payment initiation request for more than one single transaction based on the XML pain 001 scheme.

Sample:

POST /v1/payments/sepa-credit-transfers/

Path                      payment service  
                                 payment product

Query Parameter no

### **Request Header**

Attribute	Type	Condition	Description
Content-Type	String	Mandatory	application/json or application/xml pending on the payment-product 415 / Unsupported Media Type in case of wrong or missing Content Type
X-Request-ID	UUID	Mandatory	If missing, System will response with 400/ FORMAT_ERROR / TPP Message missing field: XXXX
PSU-ID	String	Mandatory	Mandatory in this context If missing, System will response with 400/ FORMAT_ERROR / TPP Message missing field: XXXX 401/ PSU_CREDENTIALS_INVALID (in case of attribute defined, but the ID cannot be matched, or PSU is blocked) TPP Message: ID
PSU-ID-Type	String	Conditional	Type of the PSU-ID, needed in scenarios where PSUs have several PSU-IDs as access possibility.
PSU-Corporate-ID	String	Conditional	Might be mandated in the ASPSP's documentation. Only used in a corporate context. Not used in V1
PSU-Corporate-ID-Type	String	Conditional	Might be mandated in the ASPSP's documentation. Only used in a corporate context. Not used in V1
Authorization	String	Conditional	Not used in this context
TPP-Certificate	String	Conditional	A signature of the request by the TPP on application level. Not used in V1
Signature	String	Conditional	A signature of the request by the TPP on application level. Not used in V1
Digest	String	Conditional	Not used in V1
TPP-Redirect-Preferred	Boolean	Optional	Based on the implemented cases Default=false
TPP-Redirect-URI	String	Conditional	URI of the TPP. Mandatory if the attribute TPP-Redirect-Preferred is set to true If missing, System will response with 400/ FORMAT_ERROR / TPP Message missing field: XXXX
TPP-Nok-Redirect-URI	String	Optional	Redirect in case of error (not used at the moment)

TPP-Explicit-Authorisation-Preferred	Boolean	Optional	Start authorisation process separately (if signing basket is supported)  Default: false implicit authorisation is assumed (signing basket not supported)
--------------------------------------	---------	----------	---

Additional PSU related information

PSU-IP-Address	String	Mandatory	IP Address between PSU and TPP
PSU-Agent	String	Optional	For internal usage
PSU-Geo-Location	String	Optional	For internal usage

**Request Body**

Content data based on the Berlin Group Framework Implementation Guidelines format (minimum set of attributes required):

```
{
  "instructedAmount": {"currency": "EUR", "amount": ".50"},
  "debtorAccount": {"iban": "AT123100001000975706"},
  "creditorName": "Merchant123",
  "creditorAccount": {"iban": "AT123100001000975706"},
  "remittanceInformationUnstructured": "Ref Number Merchant"
}
```

**Response of the System**

Response code                      201 Created

**Response Header:**

Attribute	Type	Condition	Description
Location	String	Mandatory	Location of the created resource (if created) Link of the URL for retrieval of details "https://xs2atest.rbinternational.com/v1/payments/sepa-credit-transfers/XXXXXXX"



X-Request-ID	UUID	Mandatory	ID of the request, unique to the call, as determined by the initiating party (out of the request).
ASPSP-SCA-Approach	String	Conditional	"DECOUPLED"
Content-Type	String	Mandatory	application/json

## Response Body:

### decoupled approach:

```
{
  "transactionStatus": "RCVD",
  "paymentId": "XXXXXXX"
  "_links": {
    "self": { "href": "v1/payments/ sepa-credit-transfers/XXXXXXX"},
    "status": { "href": "v1/payments/ sepa-credit-transfers/XXXXXXX/status"}
    "scaStatus": { "href": "v1/payments/ sepa-credit-transfers/XXXXXXX/authorisations/123auth456"}
  }
  "psuMessage": "text" //:"Max512Text - Additional explaining text
                    // Default always English
                    // "The transaction with the ID XXXXX is ready for approval"
  "tppMessages": [ {
    "category": "ERROR", // INFO, ERROR or WARNING - string max 35
    "code": "XXXX_INVALID", // Message code – Mandatory - string max 35
    "path": "XXXXXX" //optional MaxText140
    "text": "XXXXXXX" //Additional explaining text, always English max. Text140
  }
}
```

The paymentId is the reference for the later retrieval of the status or of the content of a transaction. Based on the processing logic of the Communication Platform the paymentId is generated by a unique reference (inray-Id) concatenated with the EndToEndId; String: Max70Text and in case of bulks with the EndToEndId of the first transaction of the bulk.

The system always tries to generate the sca-endpoint implicit, i.e. the authorization resource is automatically created in case the PSU can authorize the transaction (see also chapter 5.6 Transaction Authorization for more details).

The TPP can retrieve the status of the signature, otherwise the scaStatus link will be not available.

### 5.2.2 *Pain.001 versus JSON*

It is expected that for the pain.001 compliant XML-variants the fields are filled in accordance to the rules scheme. The **PaymentInfId** as well as the single transaction ID **EndtoEndId should be filled**. This is crucial for the generation of the status messages based on the pain.002.001.03.

PaymentInfID - unique reference of the logical data file

```
.....  
<PmtInf>  
<PmtInfId>PAYMENT-PSD2-20180511-111111</PmtInfId>  
<PmtMtd>TRF</PmtMtd>  
<BtchBookg>>false</BtchBookg>  
<NbOfTxes>1</NbOfTxes>  
<CtrlSum>1.00</CtrlSum>
```

```
.....  
  
<CdtTrfTxInf>  
<PmtId>  
<EndToEndId>MYUNIQUEID</EndToEndId>  
</PmtId>
```

.....

Each SEPA-complaint payment order should contain always an EndtoEndId for each transaction. This ID is not mandatory in the Single Payment description of the Berlin Group Framework Implementation Guidelines, Chapter 10.1). The field will be auto generated by the System if it is not filled by the PSU resp. TPP.

In case of single transactions, the EndtoEndId is unique as well as the PaymentInfId if the content is converted into XML for processing at the backend.

### 5.2.3 *Restricted Validity of a transaction*

If a new resource is created (e.g. a payment is generated), the default validity of the resource is 120 minutes. Pending onto the implementation the validity may differ.

### 5.2.4 GET /v1/{payment-service}/{payment-product}/{paymentId}

Retrieve transaction information

Defined in the Berlin Group Implementation Guidelines guidelines 1.3, chapter 5.5

Path	{payment-service} - supported: /payments / bulk-payments/
Path	{payment-product}
Path	paymentId
Query Parameter	n.a.
Request Body	n.a.

GET /v1/{payment-service}/{payment-product}/{paymentId}

Sample:

GET /v1/payments/sepa-credit-transfers/1234-wertiq-983

#### Request Header

Attribute	Type	Condition	Description
Content-Type	String	Mandatory	application/json or application/xml pending on the payment-product 415 / Unsupported Media Type in case of wrong or missing Content Type
X-Request-ID	UUID	Mandatory	If missing, System will response with 400/ FORMAT_ERROR / TPP Message missing field: XXXX
PSU-ID	String	Mandatory	Mandatory in this context If missing, System will response with 400/ FORMAT_ERROR / TPP Message missing field: XXXX 401/ PSU_CREDENTIALS_INVALID (in case of attribute defined, but the ID cannot be matched or PSU is blocked) TPP Message: ID
PSU-ID-Type	String	Conditional	
PSU-Corporate-ID	String	Conditional	Not used in this context
PSU-Corporate-ID-Type	String	Conditional	Not used in this context
Authorization Bearer	String	Conditional	Not used in this context

TPP-Certificate	String	Conditional	A signature of the request by the TPP on application level. Not used in V1
Signature	String	Conditional	A signature of the request by the TPP on application level. Not used in V1
Digest	String	Conditional	Not used in V1
TPP-Redirect-Preferred	Boolean	Optional	Not used in this context
TPP-Redirect-URI	String	Conditional	Not used in this context
TPP-Nok-Redirect-URI	String	Optional	Not used in this context
TPP-Explicit-Authorisation-Preferred	Boolean	Optional	Not used in this context

Additional PSU related information (subject to further changes)

PSU-IP-Address	String	Mandatory	Not used in this context
PSU-Agent	String	Optional	Not used in this context
PSU-Geo-Location	String	Optional	Not used in this context

### **Response of the System**

Response code                      200 OK

### **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 (out of the request).
Content-Type	String	Mandatory	application/json or application/xml based on the payment-product

### **Response Body**

Payment content as defined by the JSON or XML schema (XML-document in ZIP-container)

No additional status information will be delivered, the XML-schema doesn't allow any extension

### **5.2.5 GET /v1/{payment-service}/{payment-product}/{paymentId}/status**

Retrieve the status of the transaction

Path	{payment-service} - supported: /payments / bulk-payments/
Path	{payment-product}
Path	paymentId
Query Parameter	n.a
Request Body	n.a.

GET /v1/{payment-service}/{payment-product}/{paymentId}/status

Sample:

GET /v1/payments/sepa-credit-transfers/1234-wertiq-983/status

Please refer to Chapter 5.4 of the Berlin Group Implementation Guidelines for further details.

#### **Request Header**

Attribute	Type	Condition	Description
Content-Type	String	Mandatory	application/json or application/xml pending on the payment-product 415 / Unsupported Media Type in case of wrong or missing Content Type
X-Request-ID	UUID	Mandatory	If missing, System will response with 400/ FORMAT_ERROR / TPP Message missing field: XXXX

PSU-ID	String	Mandatory	Mandatory in this context If missing, System will response with 400/ FORMAT_ERROR / TPP Message missing field: XXXX 401/ PSU_CREDENTIALS_INVALID (in case of attribute defined, but the ID cannot be matched or PSU is blocked) TPP Message: ID
PSU-ID-Type	String	Conditional	Not used in this context
PSU-Corporate-ID	String	Conditional	Not used in this context
PSU-Corporate-ID-Type	String	Conditional	Not used in this context
Authorization Bearer	String	Conditional	Not used in this context
TPP-Certificate	String	Conditional	A signature of the request by the TPP on application level. Not used in V1
Signature	String	Conditional	A signature of the request by the TPP on application level. Not used in V1
Digest	String	Conditional	Not used in V1
TPP-Redirect-Preferred	Boolean	Optional	Not used in this context
TPP-Redirect-URI	String	Conditional	Not used in this context
TPP-Nok-Redirect-URI	String	Optional	Not used in this context
TPP-Explicit-Authorisation-Preferred	Boolean	Optional	Not used in this context

Additional PSU related information (subject to further changes)

PSU-IP-Address	String	Mandatory	Not used in this context
PSU-Agent	String	Optional	Not used in this context
PSU-Geo-Location	String	Optional	Not used in this context

### **Response of the System**

Response code                      200 OK

### **Response Header:**

<b>Attribute</b>	<b>Type</b>	<b>Condition</b>	<b>Description</b>
X-Request-ID	UUID	Mandatory	ID of the request, unique to the call, as

			determined by the initiating party (out of the request).
Content-Type	String	Mandatory	application/json or application/xml based on the payment-product

### **Response body**

In case of JSON - based endpoint:

```
{
  "transactionStatus": "RCVD"
}
```

In case of XML based endpoint (delivered in a ZIP-Container):

```
<Document
xmlns="urn:iso:std:iso:20022:tech:xsd:pain.002.001.03">
  <CstmrPmtStsRpt>
    <GrpHdr>
      <MsgId>4572457256725689726906</MsgId>
      ...
    </Document>
```

The ZIP-File may contain 1..n XML-files based on the logic for delivery of update information.

## **5.2.6 Transaction Authorisation**

### **5.2.6.1 Overview**

With the version 1.3 of the Berlin Group specification the handling of the authorisation changed significantly. Now dedicated authorisation endpoints are defined alongside with the transaction itself. It is possible to proceed with a multilevel signature for

transactions. Please refer to the chapter 4.5 / chapter 7 of the implementation guidelines of the Berlin Group.

The actual version supports the multilevel authorisation of transactions via the TPP.

Valid status of a sub-resource:

received (i.e. created)

finalized (successful signature)

failed (authorisation was not successful)

### PSD2 - NextGenPSD2 XS2A Framework

#### Initiation of a payment – explicit authorisation

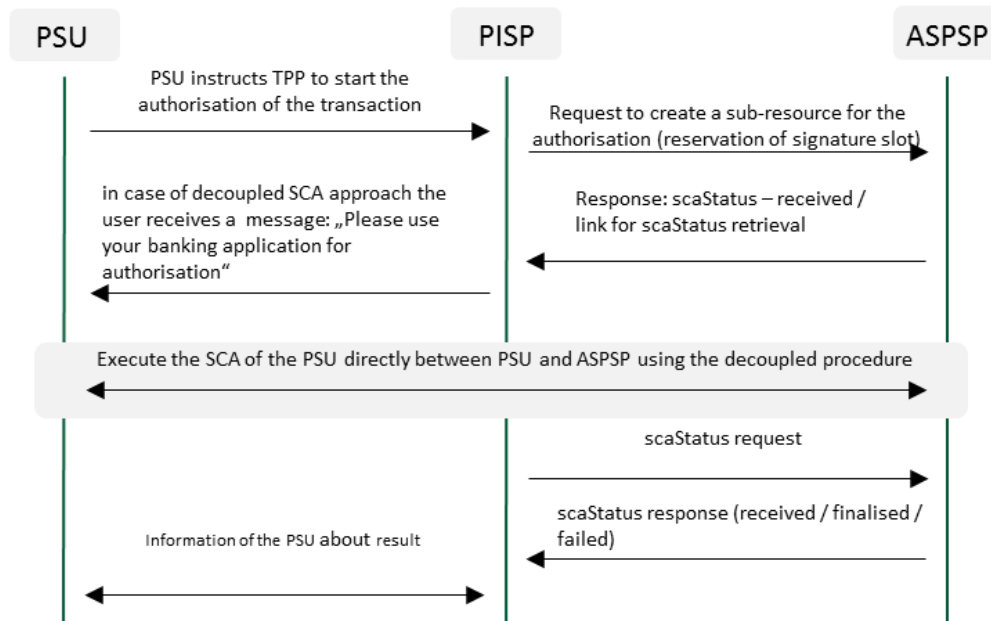


Diagram 5: Explicit Authorisation

In order to keep the workflow for a customer/ user as simple as possible the system will create the authorisation resources implicit during the initiation of the transaction at the first step as long as the user is allowed to authorize. It is the assumption that the user who initiates the transaction can also authorize the transaction. If one authorisation is not sufficient, further authorisations are defined explicitly. In such case it is necessary to send further authorization resources directly after initiation of the transaction.



**PSD2 - NextGenPSD2 XS2A Framework**  
**Initiation of a payment (implicit authorisation)**

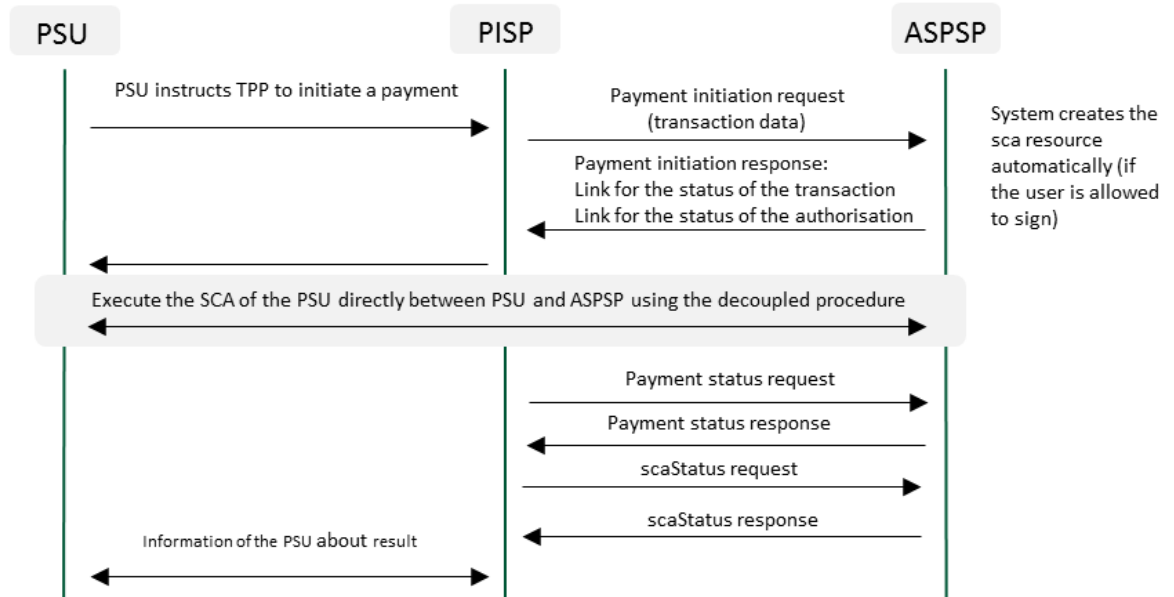


Diagram 6: Implicit Authorisation

Sample of the workflow:

**Case 1: User who creates the transaction is able to authorize the transaction, but requires an additional approval:**

Step 1:

The transaction is generated in the context of a certain user and could be signed directly after the creation of the transaction (based on the decoupled approach):

Request: POST /v1/payments/sepa-credit-transfers

Response:

Response body:

```
{
  "transactionStatus": "RCVD",
```

```

"paymentId": "1234-wertiq-983"
"_links": {
  "self": { "href" : "/v1/payments/sepa-credit-transfers/1234-wertiq-983"},
  "status": {"href" : "/v1/payments/sepa-credit-transfers/1234-wertiq-983/status"}
  "scaStatus": {"href": "/v1/payments/sepa-credit-transfers/1234-wertiq-983/authorisations/123auth456"}
}
}

```

The user can authorize the transaction and therefore the scaStatus link is enabled.

At the very beginning of the authorisation procedure the status will be "received", i.e. the authorisation process is started.

#### Step 2:

The next step will be the authentication and authorisation by the user. For the decoupled approach the user will use the online banking or app and authorise the transaction.

In case the authorisation of the user is sufficient, the transaction will be processed. The transaction status will change from "received" to "accepted" and the authorisation status will change from "received" to "finalised" (chapter 14.15 Berlin Group guidelines 1.3).

In case a further signature by another user is required, the status of the transaction is still "RCVD".

```
GET /v1/payments/sepa-credit-transfers/1234-wertiq-983/authorisations/123auth456
```

If the status of the authorisation resource is "failed", it is obvious, that also another user has to authorise the transaction.

In a next step the TPP has to generate explicitly an authorisation resource for the second user:

Request: POST /v1/payments/sepa-credit-transfers/1234-wertiq-983/authorisations  
(in the context of another user)

Result:

Body

```

{
  "scaStatus": "received",
  "psuMessage": " Dear customer, please login to your online banking.",
  "_links":{
    "self": { "href" : "/v1/payments/sepa-credit-transfers/1234-wertiq-983"}, //Link added

```

```
"status": {"href" : "/v1/payments/sepa-credit-transfers/1234-wertiq-983/status"}, //Link added
"scaStatus":{"href":"/v1/payments/sepa-credit-transfers/1234-wertig-983/authorisations/789auth021"}
    }
}
```

Please note, that the scaStatus (like a signature slot) is linked to the second user.  
This step might be repeated until the transaction is completely signed.

With the option

GET /{payment-service}/{payment-product}/{paymentId}/authorisations

the TPP can collect an array of created authorisation resources and may retrieve per authorisation resource the scaStatus.

Further Cases:

***User who initiated the transaction is not allowed to sign but another user is able to approve***

After creation of the transaction the system will generate a message for the TPP (Warning). The user is not allowed to authorise the transaction and the TPP may start the authorisation within another user-context or has to delete the transaction.

Cases to be defined

In order to create an authorisation resource the TPP has to apply the function

POST /v1/{payment-service}/{payment-product}/{paymentId}/authorisations, for the sample above:

POST /v1/payments/sepa-credit-transfers/1234-wertiq-983/authorisations

#### 5.2.6.2 POST /v1/{payment-service}/{payment-product}/{paymentId}/authorisations

Creates a new authorisation sub-resource.

Please refer to Chapter 5 and 7 of the Berlin Group Implementation Guidelines (V 1.3) for further details.

Path Parameter	payment-service
Path Parameter	payment-product
Path	paymentId
Query Parameter	no
Body	no

POST /v1/{payment-service}/{payment-product}/{paymentId}/authorisations

Sample:

POST /v1/payments/sepa-credit-transfers/1234-wertiq-983/authorisations

### Request Header

Attribute	Type	Condition	Description
Content-Type	String	Optional	application/json 415 / Unsupported Media Type in case of wrong or missing Content Type
X-Request-ID	UUID	Mandatory	If missing, System will response with 400/ FORMAT_ERROR / TPP Message missing field: XXXX
PSU-ID	String	Mandatory	Mandatory in this context If missing, System will response with 400/ FORMAT_ERROR / TPP Message missing field: XXXX 401/ PSU_CREDENTIALS_INVALID (in case of attribute defined, but the ID cannot be matched or PSU is blocked) TPP Message: ID
PSU-ID-Type	String	Conditional	Not used in this context
PSU-Corporate-ID	String	Conditional	Not used in this context
PSU-Corporate-ID-Type	String	Conditional	Not used in this context
Authorization Bearer	String	Conditional	Not used in this context
TPP-Certificate	String	Conditional	A signature of the request by the TPP on application level. Not used in V1
Signature	String	Conditional	A signature of the request by the TPP on application level. Not used in V1
Digest	String	Conditional	Not used in V1
TPP-Redirect-Preferred	Boolean	Optional	Based on the implemented cases

			Default=false
TPP-Redirect-URI	String	Conditional	URI of the TPP. Mandatory if the attribute TPP-Redirect-Preferred is set to true If missing, System will response with 400/ FORMAT_ERROR / TPP Message missing field: XXXX
TPP-Nok-Redirect-URI	String	Optional	Redirect in case of error (not used at the moment)
TPP-Explicit-Authorisation-Preferred	Boolean	Optional	Not used in this context (explicit creation of the authorisation assumed)

Additional PSU related information (subject to further changes)

PSU-IP-Address	String	Mandatory	Not used in this context
PSU-Agent	String	Optional	Not used in this context
PSU-Geo-Location	String	Optional	Not used in this context

### **Response of the System**

Response code                      201 CREATED

### **Response Header:**

<b>Attribute</b>	<b>Type</b>	<b>Condition</b>	<b>Description</b>
X-Request-ID	UUID	Mandatory	ID of the request, unique to the call, as determined by the initiating party (out of the request).
ASPSP-SCA-Approach	String	Conditional	"DECOUPLED"
Content Type	String	Mandatory	application/json

### **Body:**

### **Response Body:**

**decoupled approach:**

```
{
  "_links": {
    "delete": {"href": "/v1/payments/pain.001-sepa-credit-transfers/19020810400353_nonref"},
    "self": {"href": "/v1/payments/sepa-credit-transfers/1234-wertiq-983"},
    "status": {"href": "/v1/payments/sepa-credit-transfers/1234-wertiq-983/status"},
    "scaStatus": {"href": "/v1/payments/sepa-credit-transfers/1234-wertiq-983/authorisations/123auth456"}
  },
  "scaStatus": "received",
  "authorisationId": "123auth456"
}
```

**5.2.6.3 GET /v1/{payment-service}/{payment-product}/{paymentId}/authorisations**

Retrieves the ids of the already created authorisation sub-resources.

Please refer to Chapter 5 and 7 of the Berlin Group Implementation Guidelines (V 1.3) for further details.

Path Parameter	payment-service
Path Parameter	payment-product
Path	paymentId

Query Parameter	no
Body	no

GET /v1/{payment-service}/{payment-product}/{paymentId}/authorisations

Sample:

GET/v1/payments/sepa-credit-transfers/1234-wertiq-983/authorisations

**Request Header**

Attribute	Type	Condition	Description
X-Request-ID	UUID	Mandatory	If missing, System will response with

Content-Type	String	Optional	400/ FORMAT_ERROR / TPP Message missing field: XXXX application/json 415 / Unsupported Media Type in case of wrong or missing Content Type
PSU-ID	String	Mandatory	Mandatory in this context If missing, System will response with 400/ FORMAT_ERROR / TPP Message missing field: XXXX 401/ PSU_CREDENTIALS_INVALID (in case of attribute defined, but the ID cannot be matched, or PSU is blocked) TPP Message: ID
PSU-ID-Type	String	Conditional	Not used in this context
PSU-Corporate-ID	String	Conditional	Not used in this context
PSU-Corporate-ID-Type	String	Conditional	Not used in this context
Authorization Bearer	String	Conditional	Not used in this context
TPP-Certificate	String	Conditional	A signature of the request by the TPP on application level. Not used in V1
Signature	String	Conditional	A signature of the request by the TPP on application level. Not used in V1
Digest	String	Conditional	Not used in V1
TPP-Redirect-Preferred	Boolean	Optional	Not used in this context
TPP-Redirect-URI	String	Conditional	Not used in this context
TPP-Nok-Redirect-URI	String	Optional	Not used in this context
TPP-Explicit-Authorisation-Preferred	Boolean	Optional	Not used in this context

Additional PSU related information (subject to further changes)

PSU-IP-Address	String	Mandatory	Not used in this context
PSU-Agent	String	Optional	Not used in this context
PSU-Geo-Location	String	Optional	Not used in this context

### **No Request Body**

### **Response of the System: Array of authorisation Ids**

Response code                      200 OK

### **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 (out of the request).

### **Response Body:**

```
{
  "authorisationIds": ["123auth456", "789auth0023"]
}
```

Remark: In case no authorisationIds are available, the system will create a response body with an empty array

```
{
  "authorisationIds": []
}
```

#### 5.2.6.4 GET/v1/{payment-service}/{payment-product}/{paymentId}/authorisations/{authorisationId}

Checks the status of a single sub-resource

Path Parameter	payment-service
Path Parameter	payment-product
Path	paymentId
Path	authorisations
Query Parameter	n.a
Request Body	n.a.



GET /v1/{payment-service}/{payment-product}/{paymentId}/authorisations/{authorisationId}

Sample:

GET /v1/payments/sepa-credit-transfer/1234-wertiq-983/authorisations/123auth456

### **Request Header**

<b>Attribute</b>	<b>Type</b>	<b>Condition</b>	<b>Description</b>
X-Request-ID	UUID	Mandatory	If missing, System will response with 400/ FORMAT_ERROR / TPP Message missing field: XXXX
Content-Type	String	Optional	application/json 415 / Unsupported Media Type in case of wrong or missing Content Type
PSU-ID	String	Mandatory	Mandatory in this context If missing, System will response with 400/ FORMAT_ERROR / TPP Message missing field: XXXX 401/ PSU_CREDENTIALS_INVALID (in case of attribute defined, but the ID cannot be matched or PSU is blocked) TPP Message: ID
PSU-ID-Type	String	Conditional	Not used in this context
PSU-Corporate-ID	String	Conditional	Not used in this context
PSU-Corporate-ID-Type	String	Conditional	Not used in this context
Authorization Bearer	String	Conditional	Not used in this context
TPP-Certificate	String	Conditional	A signature of the request by the TPP on application level. Not used in V1
Signature	String	Conditional	A signature of the request by the TPP on application level. Not used in V1
Digest	String	Conditional	Not used in V1
TPP-Redirect-Preferred	Boolean	Optional	Not used in this context
TPP-Redirect-URI	String	Conditional	Not used in this context
TPP-Nok-Redirect-URI	String	Optional	Not used in this context
TPP-Explicit-Authorisation-Preferred	Boolean	Optional	Not used in this context

Additional PSU related information (subject to further changes)

PSU-IP-Address	String	Mandatory	Not used in this context
PSU-Agent	String	Optional	Not used in this context
PSU-Geo-Location	String	Optional	Not used in this context

### **Response of the System**

Response code	200 OK
Response code	401 Unauthorized (in case the sca resource doesn't exist)

### **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 (out of the request).

Response body

```
{
  "scaStatus": "finalised"
}
```

Error Condition:

If the path / transaction cannot be referenced by the TPP or PSU the system will response with

Response code 404 Not found

Category: "ERROR"

Message code: TPP\_NOT\_PERMITTED or  
PSU\_NOT\_PERMITTED

## **5.2.7 DELETE /v1/{payment-service}/{payment-product}/{paymentId}**

Deactivation of a transaction

The deactivation of the transaction doesn't require an authorisation. The originator of this request might be the user or the TPP.

Path Parameter	{payment-service} - supported: /payments / bulk-payments/
Path Parameter	{payment-product}
Path	paymentId
Query Parameter	n.a
Request Body	n.a.

Please refer to Chapter 5.6 of the Berlin Group Implementation Guidelines for further details.

Assumption: The user has not to authorize this function.

### **Request Header**

<b>Attribute</b>	<b>Type</b>	<b>Condition</b>	<b>Description</b>
Content-Type	String	Optional	application/json or application/xml 415 / Unsupported Media Type in case of wrong or missing Content Type
X-Request-ID	UUID	Mandatory	If missing, System will response with 400/ FORMAT_ERROR / TPP Message missing field: XXXX
PSU-ID	String	Mandatory	Mandatory in this context If missing, System will response with 400/ FORMAT_ERROR / TPP Message missing field: XXXX 401/ PSU_CREDENTIALS_INVALID (in case of attribute defined, but the ID cannot be matched or PSU is blocked) TPP Message: ID XXXX (Test cases to be defined )
PSU-ID-Type	String	Conditional	Not used in this context
PSU-Corporate-ID	String	Conditional	Not used in this context
PSU-Corporate-ID-Type	String	Conditional	Not used in this context
Authorization Bearer	String	Conditional	Not used in this context
TPP-Certificate	String	Conditional	A signature of the request by the TPP on application level. Not used in V1

Signature	String	Conditional	A signature of the request by the TPP on application level. Not used in V1
Digest	String	Conditional	Not used in V1
TPP-Redirect-Preferred	Boolean	Optional	Not used in this context
TPP-Redirect-URI	String	Conditional	Not used in this context
TPP-Nok-Redirect-URI	String	Optional	Not used in this context
TPP-Explicit-Authorisation-Preferred	Boolean	Optional	Not used in this context

Additional PSU related information (subject to further changes)

PSU-IP-Address	String	Mandatory	Not used in this context
PSU-Agent	String	Optional	Not used in this context
PSU-Geo-Location	String	Optional	Not used in this context

### **Response of the System**

Response code      204 OK  
Response Body      n.a.

Please note that no authorization is required for this service.

In case the TPP is not linked to the transaction (during the creation of the transaction), the TPP will receive a TPP Message:

Return code          401 Not found

```
"tppMessages":[ {
  "category":"ERROR", // INFO, ERROR or WARNING
  "code": "TPP_NOT_PERMITTED", // char 35max
  "text":"" //Additional explaining text, always English
// max. Text140
}]
```

In case the transaction is in a "wrong" status, but the TPP is linked to the transaction (during the

creation of the transaction), the TPP will receive a TPP Message:

Return code            401 Unauthorized

```
"tppMessages":[ {  
  "category":"ERROR", // INFO, ERROR or WARNING  
  "code": "INVALID_PAYMENT_STATUS", // char 35max  
  "text":"" //Additional explaining text, always English  
  // max. Text140  
}]
```

## 5.3 Consent Management

### 5.3.1 Management of the consent by the TPP

The online maintenance by a TPP is possible with the following services:

POST /v1/consents	creation of the consent
GET /v1/consents/{consentId}	content retrieval with details
GET /v1/consents/{consentId}/Status	
DELETE /v1/consents/{consentId}	

It is not permitted to modify an existing consent (service not defined by the Berlin Group).

With the version 1.3 of the specification the scaStatus and the transaction status (consentStatus) are completely separated.

During the generation of a consent the authorisation resource is generated implicitly.

Each user who has the permission to collect statement / pre-posted items for one or more accounts is allowed to create and authorize a consent.

The authorization takes place either with the signature mechanism which is in use also for transaction. If the user doesn't own any signature right and therefore do not hold a signature mechanism, the system accepts just a plain "release" button for authorization.

If the user who is linked to a consent has no permission rights for the collection of account information, the system will refuse the creation of the consent with Return code 401

It is possible to retrieve the authorisation resource with the endpoint

GET /v1/ consents/{consentId}/authorisations

It is possible to retrieve the scaStatus with the new endpoint

GET /v1/ consents/{consentId}/authorisations/{authorisationId}

### 5.3.2 Account information consent

#### 5.3.2.1 Option 1: consent request contains a set of accounts inside the body

POST /v1/consents/

Create Account Consent for defined accounts

Based on the Berlin Group Framework 1.3 Implementation Guidelines, Chapter 6.4.1.1.

#### Request Header

Attribute	Type	Condition	Description
X-Request-ID	UUID	Mandatory	If missing, System will response with 400/ FORMAT_ERROR / TPP Message missing field: XXXX
Content-Type	String	Mandatory	Value: application/json 415 / Unsupported Media Type in case of wrong or missing Content-Type
PSU-ID	String	Mandatory	Mandatory in this context If missing, System will response with 400/ FORMAT_ERROR / TPP Message missing field: XXXX 401/ PSU_CREDENTIALS_INVALID (in case of attribute defined, but the ID cannot be matched or PSU is blocked) TPP Message: ID
PSU-ID-Type	String	Conditional	Not used in this context
PSU-Corporate-ID	String	Conditional	Not used in this context
PSU-Corporate-ID-Type	String	Conditional	Not used in this context
Authorization Bearer	String	Conditional	Not used in this context

TPP-Certificate	String	Conditional	A signature of the request by the TPP on application level. Not used in V1
Signature	String	Conditional	A signature of the request by the TPP on application level. Not used in V1
Digest	String	Conditional	Not used in V1
TPP-Redirect-Preferred	Boolean	Optional	Based on the implemented cases Default=false
TPP-Redirect-URI	String	Conditional	URI of the TPP. Mandatory if the tppRedirectPreferred parameter is set to true If missing, System will response with 400/ FORMAT_ERROR / TPP Message missing field: XXXX
TPP-Nok-Redirect-URI	String	Optional	Not used in this context
TPP-Explicit-Authorisation-Preferred	Boolean	Optional	Not used in this context

Additional PSU related information (subject to further changes)

PSU-IP-Address	String	Mandatory	For the initiation expected
PSU-Agent	String	Optional	
PSU-Geo-Location	String	Optional	

### **Request Body**

<b>Attribute</b>	<b>Type</b>	<b>Condition</b>	<b>Description</b>
<b>access</b>	Account Access	Mandatory	If missing, System will response with 400/ FORMAT_ERROR / TPP Message missing field: XXXX If wrong attributes are used:
<b>recurringIndicator</b>	Boolean	Mandatory	If missing, System will response with 400/ FORMAT_ERROR / TPP Message missing field: XXXX
<b>validUntil</b>	ISODate	Mandatory	ISO format 2017-11-30 If defined with "9999-12-31" the max available time in relation to the actual date will be calculated based on the max number of days as stated in the RTS (90 days at the moment)

			<p>If missing, System will response with 400/ FORMAT_ERROR / TPP Message missing field: XXXX If the defined date exceed the max days as defined by default, the request will be rejected with a 401 / CONSENT_INVALID; TPP Message invalid date</p>
<b>frequencyPerDay</b>	Integer	Mandatory	<p>If missing, System will response with 400/ FORMAT_ERROR / TPP Message missing field: XXXX If the number will exceeds a threshold, the request will be rejected with a 401 / CONSENT_INVALID; TPP Message frequencyPerDay exceeds max value</p>
<b>combinedServiceIndicator</b>	Boolean	Mandatory /	<p>If missing, System will response with 400/ FORMAT_ERROR / TPP Message missing field: XXXX Only "False" supported, if the attribute is set "True" in the request, the request will be rejected with a 400 /SESSIONS_NOT_SUPPORTED; TPP Message combinedServiceIndicator not supported</p>

Account identifier and valid options:

Supported are the following account types / and bank identifier and combinations:

iban	IBAN
bban	local account number
bbank	local bank code / clearing codes
bic	BICFI SWIFT BIC code
pan	primary account number of a card
maskedPan	primary account number of a card masked

Options:

Either iban (mandatory), bic (optional), currency (optional)	or
bban and bbank (both mandatory), currency (optional)	or
pan (mandatory)	or
masked pan (mandatory)	



Valid examples:

```
{"iban": "AT123100001000975706", "currency": "EUR", "bic":
"ABNANL2A"}
```

```
{"bban": "1000975706", "currency": "EUR", "bbank": "37100000"}
```

**Body: example**

```
{
  "access":
  {"balances" :
    [{"iban": "AT123100001000975706"}],
    [{"iban": "AT123100001000975706",
      "currency": "USD"},
    [{"iban": "AT123100001000975706"}]],
  "transactions" :
    [{"iban": "AT123100001000975706"},
    {"maskedPan": "123456xxxxxxx1234"}]

  "accounts" :
    [{"iban": "AT123100001000975706"},
    {"maskedPan": "123456xxxxxxx1234"}]

}
"recurringIndicator": "true",
"validUntil": "2019-09-14",
"frequencyPerDay": "4"
"combinedServiceIndicator": "false"
}
```

**Response code** 201 Created**Response Header**

Attribute	Type	Condition	Description
Location	String	Mandatory	Location of the created resource (if created)

			Link of the URL for retrieval of details "https://xs2atest.rbinational.com/v1/consents/XXXXXXX"
X-Request-ID	UUID	Mandatory	ID of the request, unique to the call, as determined by the initiating party (out of the request.
ASPSP-SCA-Approach	String	Conditional at least one of the three options should be generated	"DECOUPLED"
Content-Type	String	Mandatory	application/json

**Response Body**

- consentStatus
- consentId
- links

### ***Decoupled approach***

```
{
  "consentStatus": "received",
  "consentId": "1234-wertig-983"
  "_links": {
    "self": { "href": "/v1/consents/1234-wertig-983"},
    "status": { "href": "/v1/consents/1234-wertig-983/status"},
    "delete": { "href": "/v1/consents/1234-wertig-983"},

    "scaStatus": { "href": "/v1/consents/1234-wertig-
      983/authorisations/123-auth-456"}
  }
}
```

#### 5.3.2.2 Option 2: consent request contains no accounts inside the body

POST /v1/consents (account information)

Create Account Consent for all accounts (Global consent for all accounts for all account information services)

Based on Berlin Group Framework 1.3 Implementation Guidelines, Chapter 6.4.1.2.

(tppRedirectPreferred is now part of the HTTP header)

Request Body

```
access specific option: { "access":  
    {"allPsd2": "allAccounts"}  
}  
  
recurringIndicator  
validUntil  
frequencyPerDay  
combinedServiceIndicator (default: false) – only supported
```

```
{ "access" :  
    { "allPsd2": "allAccounts" },  
    "recurringIndicator": "false",  
    "validUntil": "2019-09-14",  
    "frequencyPerDay": "1",  
    "combinedServiceIndicator": "false"  
}
```

allPsd2: All account related services – balances transactions, accounts are allowed for all accounts of the PSU (service wildcard – account wildcard).

### 5.3.2.3 Option 3: consent request on Account list without Indication of accounts

Only account access rights

POST /v1/consents (account information)

Create Account Consent for all accounts

Based on Berlin Group Framework 1.3 Implementation Guidelines Chapter 6.4.1.2.

tppRedirectPreferred is part of the header

Body recurringIndicator  
 validUntil  
 frequencyPerDay  
 combinedServiceIndicator (default: false) – only supported

```
{ "access":
  { "availableAccounts": "allAccounts" },
  "recurringIndicator": "false",
  "validUntil": "2019-06-14",
  "frequencyPerDay": "4",
  "combinedServiceIndicator": = "false"
}
```

With this consent the TPP is allowed to use the account service only (accounts with details).

Allowed Service: GET /v1/accounts/{query-parameters}  
 Result: List of accounts {Array of account details}  
 Query option: withBalance

5.3.2.4 GET /v1/consents/{consentId} - content retrieval with details

Details are based on the Berlin Group Framework 1.3 Implementation Guidelines, Chapter 6.4.

GET /v1/consents/1234-wertig-983

consentId	String	Mandatory	Mandatory in this context If missing, System will response with 400/ FORMAT_ERROR / TPP Message missing field: XXXX 400/ CONSENT_UNKNOWN
-----------	--------	-----------	--

Query Parameter n.a  
 Request Body n.a.

## Request Header

Attribute	Type	Condition	Description
X-Request-ID	UUID	Mandatory	If missing, System will response with 400/ FORMAT_ERROR / TPP Message missing field: XXXX
Content-Type	String	Mandatory	Value: application/json 415 / Unsupported Media Type in case of wrong or missing Content-Type
PSU-ID	String	Mandatory	Mandatory in this context If missing, System will response with 400/ FORMAT_ERROR / TPP Message missing field: XXXX 401/ PSU_CREDENTIALS_INVALID (in case of attribute defined, but the ID cannot be matched or PSU is blocked) TPP Message: ID
PSU-ID-Type	String	Conditional	Not used in this context
PSU-Corporate-ID	String	Conditional	Not used in this context
PSU-Corporate-ID-Type	String	Conditional	Not used in this context
Authorization Bearer	String	Conditional	Not used in this context
TPP-Certificate	String	Conditional	A signature of the request by the TPP on application level. Not used in V1
Signature	String	Conditional	A signature of the request by the TPP on application level. Not used in V1
Digest	String	Conditional	Not used in V1
TPP-Redirect-Preferred	Boolean	Conditional	Based on the implemented cases Default=false Not used in this context
TPP-Redirect-URI	String	Conditional	URI of the TPP. Mandatory if the tppRedirectPreferred parameter is set to true If missing, System will response with 400/ FORMAT_ERROR / TPP Message missing field: XXXX
TPP-Nok-Redirect-URI	String	Optional	Not used in this context
TPP-Explicit- Authorisation-Preferred	Boolean	Optional	Not used in this context

Additional PSU related information (subject to further changes)

PSU-IP-Address	String	Optional	Not used in this context
----------------	--------	----------	--------------------------

PSU-Agent	String	Optional	Not used in this context
PSU-Geo-Location	String	Optional	Not used in this context

### **Request Body**

No request body

### **Response of the System**

Response code                      200 OK

### **Response Header**

<b>Response Header Attribute</b>	<b>Type</b>	<b>Condition</b>	<b>Description</b>
X-Request-ID	UUID	Mandatory	ID of the request, unique to the call, as determined by the initiating party (out of the request).
Content-Type	String	Mandatory	application/json

### **Response Body**

<b>Attribute</b>	<b>Type</b>	<b>Condition</b>	<b>Description</b>
Access	Account Access	Mandatory	Follows standard
recurringIndicator	Boolean	Mandatory	Follows standard
validUntil	ISODate	Mandatory	Standard ISO format 2017-11-30
frequencyPerDay	Integer	Mandatory	Standard
lastActionDate	ISO Date	Mandatory	This date is containing the date of the last action on the consent object either through the XS2A interface or the PSU/ASPSP interface having an impact on the status
consentStatus	String	Mandatory	See description Status of the consent

**Body: Example**

```

{
  "access":
  {
    "balances" :
      [
        { "iban": "AT123100001000975706" },
        { "iban": "AT123100001000975706",
          "currency": "USD" },
        { "iban": "AT123100001000975706" } ],
    "transactions" :
      [ { "iban": "AT123100001000975706" } ]
  }
  "accounts" :
    [ { "iban": "AT123100001000975706" } ]
}
"recurringIndicator": "true",
"validUntil"      : "2019-09-14",
"frequencyPerDay" : "4",
"lastActionDate"  : "2019-09-10",
"consentStatus"   : "received",

"_links": {
  "self": { "href": "/v1/consents/1234-wertig-983"},
  "status": { "href": "/v1/consents/1234-wertig-983/status"},
  "delete": { "href": "/v1/consents/1234-wertig-983"},

  "scaStatus": { "href": "/v1/consents/1234-wertig-983/authorisations/1234auth567" }
}
}

```

5.3.2.5 GET /v1/consents/{consentId}/authorisations/{authorisationId}

Status support:	received	-	authorisation resource created
	Finalized	-	authorisation successfully completed
	Failed	-	signature was wrong



GET /v1/consents/1234-wertig-983/authorisations/1234auth567

Path Parameter	consents consentId
Query Parameter	no
Body	no

No Path Parameter checks defined

### **Request Header**

<b>Attribute</b>	<b>Type</b>	<b>Condition</b>	<b>Description</b>
X-Request-ID	UUID	Mandatory	If missing, System will response with 400/ FORMAT_ERROR / TPP Message missing field: XXXX
Content-Type	String	Mandatory	Value: application/json 415 / Unsupported Media Type in case of wrong or missing Content-Type
PSU-ID	String	Mandatory	Mandatory in this context If missing, System will response with 400/ FORMAT_ERROR / TPP Message missing field: XXXX 401/ PSU_CREDENTIALS_INVALID (in case of attribute defined, but the ID cannot be matched or PSU is blocked) TPP Message: ID
PSU-ID-Type	String	Conditional	Not used in this context
PSU-Corporate-ID	String	Conditional	Not used in this context
PSU-Corporate-ID-Type	String	Conditional	Not used in this context
Authorization Bearer	String	Conditional	Not used in this context
TPP-Certificate	String	Conditional	A signature of the request by the TPP on application level. Not used in V1
Signature	String	Conditional	A signature of the request by the TPP on application level. Not used in V1
Digest	String	Conditional	Not used in V1
TPP-Redirect-Preferred	Boolean	Optional	Not used in this context
TPP-Redirect-URI	String	Conditional	Not used in this context

TPP-Nok-Redirect-URI	String	Optional	Not used in this context
TPP-Explicit-Authorisation-Preferred	Boolean	Optional	Not used in this context

Additional PSU related information (subject to further changes)

PSU-IP-Address	String	Mandatory	Not used in this context
PSU-Agent	String	Optional	Not used in this context
PSU-Geo-Location	String	Optional	Not used in this context

### **Response of the System**

Response code                      200 OK

### **Response Header**

<b>Response Header Attribute</b>	<b>Type</b>	<b>Condition</b>	<b>Description</b>
X-Request-ID	UUID	Mandatory	ID of the request, unique to the call, as determined by the initiating party (out of the request).
Content-Type	String	Mandatory	application/json

### **Response Body**

<b>Attribute</b>	<b>Type</b>	<b>Condition</b>	<b>Description</b>
ScaStatus	String	Mandatory	Introduced with the Version 1.2

### **Response body**

{

    "scaStatus" = "finalised"



TPP-Certificate	String	Conditional	A signature of the request by the TPP on application level. Not used in V1
Signature	String	Conditional	A signature of the request by the TPP on application level. Not used in V1
Digest	String	Conditional	Not used in V1
TPP-Redirect-Preferred	Boolean	Optional	Not used in this context
TPP-Redirect-URI	String	Conditional	Not used in this context
TPP-Nok-Redirect-URI	String	Optional	Not used in this context
TPP-Explicit-Authorisation-Preferred	Boolean	Optional	Not used in this context

Additional PSU related information (subject to further changes)

PSU-IP-Address	String	Mandatory	Not used in this context
PSU-Agent	String	Optional	Not used in this context
PSU-Geo-Location	String	Optional	Not used in this context

### **Response of the System**

Response code                      200 OK

### **Response Header**

<b>Response Header Attribute</b>	<b>Type</b>	<b>Condition</b>	<b>Description</b>
X-Request-ID	UUID	Mandatory	ID of the request, unique to the call, as determined by the initiating party (out of the request).
Content-Type	String	Mandatory	application/json

### **Response Body**

<b>Attribute</b>	<b>Type</b>	<b>Condition</b>	<b>Description</b>
authorisationIds	String	Mandatory	Array of Ids, each Id defines a authorisation resource

**Response body**

```
{
  "authorisationIds" : ["123auth567"]
}
```

5.3.2.7 GET /v1/consents/{consentId}/Status

Details are based on the Berlin Group Framework 1.3 Implementation Guidelines, Chapter 6.4.2.

ConsentId	String	Mandatory	Mandatory in this context If missing, System will response with 400/ FORMAT_ERROR / TPP Message missing field: XXXX 400/ CONSENT_UNKNOWN
-----------	--------	-----------	--

Query Parameter                      n.a.

Request body                            n.a.

**Request Header**

Attribute	Type	Condition	Description
X-Request-ID	UUID	Mandatory	If missing, System will response with 400/ FORMAT_ERROR / TPP Message missing field: XXXX
Content-Type	String	Mandatory	Value: application/json 415 / Unsupported Media Type in case of wrong or missing Content-Type
PSU-ID	String	Mandatory	Mandatory in this context If missing, System will response with 400/ FORMAT_ERROR / TPP Message missing field: XXXX 401/ PSU_CREDENTIALS_INVALID (in case of attribute defined, but the ID cannot be matched, or PSU is blocked) TPP Message: ID
PSU-ID-Type	String	Conditional	Not used in this context

PSU-Corporate-ID	String	Conditional	Not used in this context
PSU-Corporate-ID-Type	String	Conditional	Not used in this context
Authorization Bearer	String	Conditional	Not used in this context
TPP-Certificate	String	Conditional	A signature of the request by the TPP on application level. Not used in V1
Signature	String	Conditional	A signature of the request by the TPP on application level. Not used in V1
Digest	String	Conditional	Not used in V1
TPP-Redirect-Preferred	Boolean	Conditional	Based on the implemented cases Default=false Not used in this context
TPP-Redirect-URI	String	Conditional	URI of the TPP. Mandatory if the tppRedirectPreferred parameter is set to true If missing, System will response with 400/ FORMAT_ERROR / TPP Message missing field: XXXX
TPP-Nok-Redirect-URI	String	Optional	Not used in this context
TPP-Explicit- Authorisation-Preferred	Boolean	Optional	Not used in this context

Additional PSU related information (subject to further changes)

PSU-IP-Address	String	Optional	Not used in this context
PSU-Agent	String	Optional	Not used in this context
PSU-Geo-Location	String	Optional	Not used in this context

### **Request Body**

No request body

### **Response of the System**

Response code                      200 OK

### **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 (out of the request).
Content-Type	String	Mandatory	application/json

**Response Body**

Attribute	Type	Condition	Description
consentStatus	String	Mandatory	Status of the consent

```
{
  "consentStatus" : "received"
}
```

5.3.2.8 DELETE /v1/consents/{consentId}

Details are based on the Berlin Group Framework 1.3 Implementation Guidelines, Chapter 6.5.

ConsentId	String	Mandatory	Mandatory in this context If missing, System will response with 400/ FORMAT_ERROR / TPP Message missing field: XXXX 400/ CONSENT_UNKNOWN 401/ CONSENT_INVALID 401/ CONSENT EXPIRED
-----------	--------	-----------	--

Query Parameter                    n.a.  
Request Body                        n.a.

**Request Header**

Attribute	Type	Condition	Description
X-Request-ID	UUID	Mandatory	If missing, System will response with 400/ FORMAT_ERROR / TPP Message missing field: XXXX

Content-Type	String	Mandatory	Value: application/json 415 / Unsupported Media Type in case of wrong or missing Content-Type
PSU-ID	String	Conditional	Not used in this context
PSU-ID-Type	String	Conditional	Not used in this context
PSU-Corporate-ID	String	Conditional	Not used in this context
PSU-Corporate-ID-Type	String	Conditional	Not used in this context
Authorization Bearer	String	Conditional	Not used in this context
TPP-Certificate	String	Conditional	A signature of the request by the TPP on application level. Not used in V1
Signature	String	Conditional	A signature of the request by the TPP on application level. Not used in V1
Digest	String	Conditional	Not used in V1
TPP-Redirect-Preferred	Boolean	Optional	Based on the implemented cases Default=false Not used in the context
TPP-Redirect-URI	String	Conditional	URI of the TPP. Mandatory if the tppRedirectPreferred parameter is set to true If missing, System will response with 400/ FORMAT_ERROR / TPP Message missing field: XXXX
TPP-Nok-Redirect-URI	String	Optional	Not used in this context
TPP-Explicit- Authorisation-Preferred	Boolean	Optional	Not used in this context

Additional PSU related information (subject to further changes)

PSU-IP-Address	String	Optional	Not used in this context
PSU-Agent	String	Optional	Not used in this context
PSU-Geo-Location	String	Optional	Not used in this context

### **Request Body**

No request body

### **Response of the System**

Response code                      204 No Content



Response Body n.a.

### **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 (out of the request).
Content-Type	String	Mandatory	Value: application/json

Remark: For this function it is not required to start an implicit or explicit authorisation.

## **5.3.3 Read account data**

### 5.3.3.1 Basic principles

- Account information/ Balances are defined in JSON.
- Account information will be formatted in UTF-8 (Standard for camt messages).
- Transactions follow one type of formatting rules, either TXT/SWIFT which is indicated by the following Content-Type:  
Content-Type : application/text  
and in case of camt-based account information :  
Content-Type : application/xml
- The TPP can indicate the priority of transaction information format using the Accept tag in the http header.  
Sample – The TPP creates the following Accept tag with a specified weight, highest priority is application text  
Accept: application/text; q=1.0, application/xml; q=0.8  
In the response the system indicates the real content type of the delivered information Content-Type = application/text. If the system is not able to offer the text-format the system will deliver the xml instead (fall-back).  
The system does not check the requested content type, so it will not answer with return code 415 in case of requested media types which are not supported by the System.
- It might happen that the account information service was switched at a certain time from TXT to camt XML. It depends on the time period of the request for historical information if the system offers either the XML or the TXT format. A mixture of both is

not supported. The system will respond with an error in case of a period which contains TXT as well as XML based account information.

- It is expected that the account information is related to current accounts. Specific account information like statements of security deposits which follow completely other formatting rules will be implemented on demand with another RestAPI and/or should indicate it the account form and account attributes.

### 5.3.3.2 Get /v1/accounts {query-parameters}

Related to the consentID

Request Header: Consent-ID mandatory

Result: List of accounts {Array of account details}

Option: withBalance

See the Berlin Group Framework 1.3 Implementation Guidelines, Chapter 6.6.1 for further details.

Result: Account list with account details as available

Optional: with or without balances

Query Parameter                      withBalance / type. Boolean (last booking balance)

withBalance Option:                  If for an account no balance is available, the account information is                      will be still forwarded, the balance will be empty

Error handling

404 Not found // used in case RESOURCE\_UNKNOWN – accountId is unknown in the context of the TPP

400 Bad Request // syntax error

### **Request Header**

Attribute	Type	Condition	Description
X-Request-ID	UUID	Mandatory	If missing, System will response with 400/ FORMAT_ERROR / TPP Message missing field: XXXX
Consent-ID	String	Mandatory	Mandatory in this context

			<p>If missing, System will response with 400/ FORMAT_ERROR / TPP Message missing field: XXXX 400/ CONSENT_UNKNOWN 401/ CONSENT_INVALID 401/ CONSENT EXPIRED</p>
Content-Type	String	Mandatory	application/json
PSU-ID	String	Mandatory	<p>Mandatory in this context If missing, System will response with 400/ FORMAT_ERROR / TPP Message missing field: XXXX 401/ PSU_CREDENTIALS_INVALID (in case of attribute defined, but the ID cannot be matched, or PSU is blocked) TPP Message: ID</p>
PSU-ID-Type	String	Conditional	Not used in this context
PSU-Corporate-ID	String	Conditional	Not used in this context
PSU-Corporate-ID-Type	String	Conditional	Not used in this context
Authorization Bearer	String	Conditional	Not used in this context
TPP-Certificate	String	Conditional	A signature of the request by the TPP on application level. Not used in V1
Signature	String	Conditional	A signature of the request by the TPP on application level. Not used in V1
Digest	String	Conditional	Not used in V1
TPP-Redirect-Preferred	Boolean	Optional	<p>Based on the implemented cases Default=false Not used in the context</p>
TPP-Redirect-URI	String	Conditional	<p>URI of the TPP. Mandatory if the tppRedirectPreferred parameter is set to true If missing, System will response with 400/ FORMAT_ERROR / TPP Message missing field: XXXX Not used in the context</p>
TPP-Nok-Redirect-URI	String	Optional	Not used in this context
TPP-Explicit- Authorisation-Preferred	Boolean	Optional	Not used in this context

Additional PSU related information (subject to further changes)

PSU-IP-Address	String	Optional	Used to indicate the presence of the user (for counting the access to an account)
PSU-Agent	String	Optional	Not used in this context

PSU-Geo-Location	String	Optional	Not used in this context
------------------	--------	----------	--------------------------

### **Response Code** 200 OK

### **Response Header**

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 (out of the request).
Content-Type	String	Mandatory	application/json

### **Response Body**

Array of accounts details / JSON

In addition, all valid links (optional)

```
{ "accounts":
  [ { "resourceId": "3dc3d5b3-7023-4848-9853-f5400a64e80f",
    "iban": "AT123100001000975706",
    "currency": "EUR",
    "accountType": "Girokonto",
    "cashAccountType": "CurrentAccount",
    "name": "Main Account",
    "_links" : {
      "balances": { "href" : "/v1/accounts/3dc3d5b3-7023-4848-9853-f5400a64e80f/balances" },
      "transactions" : { "href" : "/v1/accounts/3dc3d5b3-7023-4848-9853-f5400a64e80f/transactions" }
    }
  },
```

```
{ "resourceId" : "3dc3d5b3-7023-4848-9853-f5400a64e81g",
  "iban": "AT123100001000975706",
  "currency" : "USD",
  "accountType": "ForeignCurrencyAccount",
  "cashAccountType" : "CurrentAccount",
```

```

"name" : "US Dollar Account",
"_links" : {
  "balances" : { "href" : "/v1/accounts/3dc3d5b3-7023-4848-9853-
f5400a64e81g/balances" }}
} ]
}

```

### 5.3.3.3 GET /v1/accounts/{account-id}/{query-parameters}

*&withBalance=true*

Account details - Related to the consentID

Result: for a particular account the details

Based on Chapter 6.6.2 of the Berlin Group Framework 1.3 Implementation Guidelines.

Path	account-id
Query Parameter	withBalance / type. Boolean (last booking balance)
Request Header	Consent-ID mandatory
Result code	200 OK
Response body	Account details + balances

Error handling

404/ RESOURCE\_UNKNOWN – accountId is unknown in the context of the TPP

400/ Bad Request (syntax error)

Balance Option: If for an account no balance is available, the account information is will be still forwarded, the balance will be empty

#### **Request Header**

Attribute	Type	Condition	Description
X-Request-ID	UUID	Mandatory	If missing, System will response with

			400/ FORMAT_ERROR / TPP Message missing field: XXXX
Consent-ID	String	Mandatory	Mandatory in this context If missing, System will response with 400/ FORMAT_ERROR / TPP Message missing field: XXXX 400/ CONSENT_UNKNOWN 401/ CONSENT_INVALID 401/ CONSENT_EXPIRED
Content-Type	String	Mandatory	application/json
PSU-ID	String	Mandatory	Mandatory in this context If missing, System will response with 400/ FORMAT_ERROR / TPP Message missing field: XXXX 401/ PSU_CREDENTIALS_INVALID (in case of attribute defined, but the ID cannot be matched or PSU is blocked) TPP Message: ID
PSU-ID-Type	String	Conditional	Not used in this context
PSU-Corporate-ID	String	Conditional	Not used in this context
PSU-Corporate-ID-Type	String	Conditional	Not used in this context
Authorization Bearer	String	Conditional	Not used in this context
TPP-Certificate	String	Conditional	A signature of the request by the TPP on application level. Not used in V1
Signature	String	Conditional	A signature of the request by the TPP on application level. Not used in V1
Digest	String	Conditional	Not used in V1
TPP-Redirect-Preferred	Boolean	Optional	Based on the implemented cases Default=false Not used in the context
TPP-Redirect-URI	String	Conditional	URI of the TPP. Mandatory if the tppRedirectPreferred parameter is set to true If missing, System will response with 400/ FORMAT_ERROR / TPP Message missing field: XXXX Not used in this context
TPP-Nok-Redirect-URI	String	Optional	Not used in this context
TPP-Explicit-Authorisation-Preferred	Boolean	Optional	Not used in this context

Additional PSU related information (subject to further changes)

PSU-IP-Address	String	Optional	Used to indicate the presence of the user (for counting the access to an account)
PSU-Agent	String	Optional	Not used in this context
PSU-Geo-Location	String	Optional	Not used in this context

### **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 (out of the request).
Content-Type	String	Mandatory	application/json

### **Response Body**

Account / account details / JSON

```
{
  "account" :
  {
    "resourceId" : "3dc3d5b3-7023-4848-9853-f5400a64e80f",
    "iban" : "AT123100001000975706",
    "currency" : "EUR",
    "accountType" : "Girokonto",
    "cashAccountType" : "CurrentAccount",
    "name" : "Main Account",
    "_links" : {
      "balances" : { "href" : "/v1/accounts/3dc3d5b3-7023-4848-9853-f5400a64e80f/balances" },
      "transactions" : { "href" : "/v1/accounts/3dc3d5b3-7023-4848-9853-f5400a64e80f/transactions" }
    }
  }
}
```

### **Response Body**

Account / account details and balances / JSON

```
{
  "account" :
  {
    "resourceId" : "3dc3d5b3-7023-4848-9853-f5400a64e80f",
    "iban" : "AT123100001000975706",
    "currency" : "EUR",
    "accountType" : "Girokonto",
    "cashAccountType" : "CurrentAccount",
    "name" : "Main Account",
```

```

    {
      "balances" :
      [ {"balanceType" : "closingBooked",
        "balanceAmount": {"currency" : "EUR", "amount": "500.00"},
        "referenceDate" : "2019-09-05"
      },
        {"balanceType" : "expected",
        "balanceAmount": {"currency" : "EUR" , "amount" : "900.00"},
        "lastChangeDateTime" : "2019-09-01T15:30:35.035Z"
      } ]
    }
  }

```

#### 5.3.3.4 GET /v1/accounts/{account-id}/balances

Related to the consentID

Read balances for a given account (list of balances); default "closingBooked" balance.  
Based on Berlin Group Framework 1.3 Implementation Guidelines, Chapter 6.6.3.

Path	account-id
Request Header	Consent-ID    mandatory
Result code	200 OK
Response body	balances

Error handling

404/ RESOURCE\_UNKNOWN – accountId is unknown in the context of the TPP

400/ Bad Request (syntax error)

200/ no data available

Sample:

```

{
  "account": {
    "resourceId": "000A",

```



```

    "balances": [],
  },
  "tppMessages": [
    {
      "category": "WARNING",
      "code": "NO_BALANCES_AVAILABLE",
      "path": "",
      "text": "NO_BALANCES_AVAILABLE"
    }
  ]
}

```

### Request Header

Attribute	Type	Condition	Description
X-Request-ID	UUID	Mandatory	If missing, System will response with 400/ FORMAT_ERROR / TPP Message missing field: XXXX
Consent-ID	String	Mandatory	Mandatory in this context If missing, System will response with 400/ FORMAT_ERROR / TPP Message missing field: XXXX 400/ CONSENT_UNKNOWN 401/ CONSENT_INVALID 401/ CONSENT EXPIRED
Content-Type	String	Mandatory	application/json
PSU-ID	String	Mandatory	Mandatory in this context If missing, System will response with 400/ FORMAT_ERROR / TPP Message missing field: XXXX 401/ PSU_CREDENTIALS_INVALID (in case of attribute defined, but the ID cannot be matched, or PSU is blocked) TPP Message: ID
PSU-ID-Type	String	Conditional	Not used in this context
PSU-Corporate-ID	String	Conditional	Not used in this context
PSU-Corporate-ID-Type	String	Conditional	Not used in this context
Authorization Bearer	String	Conditional	Not used in this context
TPP-Certificate	String	Conditional	A signature of the request by the TPP on application level. Not used in V1

Signature	String	Conditional	A signature of the request by the TPP on application level. Not used in V1
Digest	String	Conditional	Not used in V1
TPP-Redirect-Preferred	Boolean	Optional	Based on the implemented cases Default=false Not used in the context
TPP-Redirect-URI	String	Conditional	URI of the TPP. Mandatory if the tppRedirectPreferred parameter is set to true If missing, System will response with 400/ FORMAT_ERROR / TPP Message missing field: XXXX
TPP-Nok-Redirect-URI	String	Optional	Not used in this context
TPP-Explicit-Authorisation-Preferred	Boolean	Optional	Not used in this context

Additional PSU related information (subject to further changes)

PSU-IP-Address	String	Optional	Used to indicate the presence of the user (for counting the access to an account)
PSU-Agent	String	Optional	Not used in this context
PSU-Geo-Location	String	Optional	Not used in this context

### **Response Header**

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

### **Response Body (for the request for a single account)**

Account – Optional

Balances - Mandatory

```
{
  "account": { "resourceId" : "3dc3d5b3-7023-4848-9853-
    f5400a64e80f" },

```



Query Parameter	withBalance	// closing booked balance only
	dateFrom	// Mandatory
	dateTo	// default: actual day if not filled
	bookingStatus	// Mandatory – String codes: "booked"; // "pending"; "both"
		// based on the description V 1.1 only // "booked" is mandatory as option
Request Header	X-Request-ID	mandatory
	Consent-ID	mandatory
	Content-Type	mandatory
		Accept: application/text; q=1.0, application/xml; q=0.8
		For more information about this options please refer to chapter 5.3.3.1 Basic principles
Result code	200 OK	
Response body	transactions	

#### Error handling

404/ Not Found / TPP\_Message: RESOURCE\_UNKNOWN – accountId is unknown in the context of the TPP

400/ Bad Request (syntax error):

Sample: dateFrom is missing

"code": "FORMAT\_ERROR",

"path": "QUERY",

"text": "Invalid date format"

429/ Too Many Requests / TPP\_Message: ERROR; ACCESS\_EXCEEDED

#### **Request Header**

Attribute	Type	Condition	Description
X-Request-ID	UUID	Mandatory	If missing, System will response with

			400/ FORMAT_ERROR / TPP Message missing field: XXXX
Consent-ID	String	Mandatory	Mandatory in this context If missing, System will response with 400/ FORMAT_ERROR / TPP Message missing field: XXXX 400/ CONSENT_UNKNOWN 401/ CONSENT_INVALID 401/ CONSENT_EXPIRED
Content-Type	String	Mandatory	application/text or application/xml
Accept	String	Optional	Accept: application/text; q=1.0, application/xml; q=0.8
PSU-ID	String	Mandatory	Mandatory in this context If missing, System will response with 400/ FORMAT_ERROR / TPP Message missing field: XXXX 401/ PSU_CREDENTIALS_INVALID (in case of attribute defined, but the ID cannot be matched or PSU is blocked) TPP Message: ID
PSU-ID-Type	String	Conditional	Not used in this context
PSU-Corporate-ID	String	Conditional	Not used in this context
PSU-Corporate-ID-Type	String	Conditional	Not used in this context
Authorization Bearer	String	Conditional	Not used in this context
TPP-Certificate	String	Conditional	A signature of the request by the TPP on application level. Not used in V1
Signature	String	Conditional	A signature of the request by the TPP on application level. Not used in V1
Digest	String	Conditional	Not used in V1
TPP-Redirect-Preferred	Boolean	Optional	Based on the implemented cases Default=false Not used in the context
TPP-Redirect-URI	String	Conditional	URI of the TPP. Mandatory if the tppRedirectPreferred parameter is set to true If missing, System will response with 400/ FORMAT_ERROR / TPP Message missing field: XXXX
TPP-Nok-Redirect-URI	String	Optional	Not used in this context
TPP-Explicit-Authorisation-Preferred	Boolean	Optional	Not used in this context

Additional PSU related information (subject to further changes)

PSU-IP-Address	String	Mandatory	used to indicate the presence of the user (for counting the access to an account)
PSU-Agent	String	Optional	Not used in this context
PSU-Geo-Location	String	Optional	Not used in this context

### **Response Header**

<b>Response Header Attribute</b>	<b>Type</b>	<b>Condition</b>	<b>Description</b>
X-Request-ID	UUID	Mandatory	ID of the request, unique to the call, as determined by the initiating party (out of the request).
Content-Type	String	Mandatory	application/xml or application/text optional : additional information: charset=ISO-8859-5 in case of application/text

### **Response Body**

camt.052/camt.053 / SWIFT MT940/SWIFT MT942

The system will deliver always ZIP-container with one or more XML-documents, for SWIFT a text file with MT940/MT942 will be created (concatenation is possible)

## 6 Fallback process

In case of technical problems using the XS2A API connection as defined in Article 33 a fallback procedure can be used from the TPP. In such case the TPP will be grant access using the dedicated authorization solution as for the PSU.

As TPP you will receive the authorization solution to have access to the XS2A API services: Initiation payments and getting account information.

To receive the authorization solution and further information please contact RBI's Support Desk [cashmanagementsupport@rsc.co.at](mailto:cashmanagementsupport@rsc.co.at)