

The Berlin Group NextGenPSD2

Document version

This is version 1.1 of CBA PSD2 API documentation. Version of Berlin Group NextGenPSD2 Implementation Guidelines referenced in the document is 1.3.8.

Changelog

| Version | Description |
|---------|--|
| 1.0 | Initial version |
| 1.1 | Added attribute debtorName and changed attribute debtorAccount to 'optional' for all single payment products |
| 1.2 | Added attribute debtorName and changed attribute debtorAccount to 'optional' for periodic payments |
| | |

Acronyms

| Acronym | Meaning |
|---------|--|
| AIS | Account Information Service |
| AISP | Account Information Service Provider |
| API | Application Programming Interface |
| ASPSP | Account Servicing Payment Service Provider |
| CBPII | Card-based Payment Instrument Issuer |
| CPSP | Credit Payment Service Provider |
| JSON | JavaScript Object Notation |
| NTP | Network Time Protocol |
| PIS | Payment Initiation Service |
| PISP | Payment Initiation Service Provider |
| PSU | Payment Service User |
| REST | Representational State Transfer |
| TPP | Third Party Provider |
| XS2A | Access to Accounts |

Overview

The Berlin Group NextGenPSD2 is the chosen standard utilized by all of the HUB members to support the TPP APIs as mandated by the PSD2. This section further clarifies and specifies, which methods are supported and the specific changes or additions of the HUB for the Croatian market in the implementation of the NextGenPSD2.

Use Cases in the NextGenPSD2

| ID | Use Case |
|-------|--|
| NGP1 | Initiation of a single payment |
| NGP2 | Initiation of a future dated single payment |
| NGP3 | Initiation of a multiple/bulk payment |
| NGP4 | Initiation of a recurring payment |
| NGP5 | Cancellation of Payments |
| NGP6 | Establish account information consent |
| NGP7 | Get list of reachable accounts |
| NGP8 | Get account details of a list of accessible accounts |
| NGP9 | Get balances for a given account |
| NGP10 | Get transaction information for a given account |
| NGP11 | Use cases related to card information access |
| NGP12 | Group signing baskets |
| NGP13 | Get confirmation on the availability of funds |

Required Authentication Methods

The NextGenPSD2 standard provides for different authentication methods or flows:

- redirect (*not compliant with OAuth*)
- OAuth redirect
- decoupled
 - embedded
 - redirect
- *embedded*

While all of these methods are allowed by the NextGenPSD2, the HUB standard envisions that all ASPSPs will support at least one of the **redirect** flows, which must allow for the PSU to use any of the credentials issued to it by the ASPSP.

It is within the decision of the individual ASPSP on which redirect flow it will support (OAuth or non-OAuth compliant) and this is documented in the ASPSP specific implementation guidelines.

Mandatory and Optional Endpoints

Payment Initiation Service Endpoints

| Method | Url | Short Description |
|--------|--|--|
| POST | /v1/{payment-service}/{payment-product} | Payment initiation request |
| GET | /v1/{payment-service}/{payment-product}/{paymentId} | Get Payment Information |
| DELETE | /v1/{payment-service}/{payment-product}/{paymentId} | Payment Cancellation Request |
| GET | /v1/{payment-service}/{payment-product}/{paymentId}/status | Payment initiation status request |
| POST | /v1/{payment-service}/{payment-product}/{paymentId}/authorisations | Start the authorisation process for a payment initiation |
| GET | /v1/{payment-service}/{payment-product}/{paymentId}/authorisations | Get Payment Initiation Authorisation Sub-Resources Request |
| GET | /v1/{payment-service}/{payment-product}/{paymentId}/authorisations/{authorisationId} | Read the SCA Status of the payment authorisation |
| PUT | /v1/{payment-service}/{payment-product}/{paymentId}/authorisations/{authorisationId} | Update PSU data for payment initiation |
| POST | /v1/{payment-service}/{payment-product}/{paymentId}/cancellation-authorisations | Start the authorisation process for the cancellation of the addressed payment |
| GET | /v1/{payment-service}/{payment-product}/{paymentId}/cancellation-authorisations | Will deliver an array of resource identifications to all generated cancellation authorisation sub-resources. |
| GET | /v1/{payment-service}/{payment-product}/{paymentId}/cancellation-authorisations/{cancellationId} | Read the SCA status of the payment cancellation's authorisation. |
| PUT | /v1/{payment-service}/{payment-product}/{paymentId}/cancellation-authorisations/{cancellationId} | Update PSU Data for payment initiation cancellation |

Confirmation of Availability of Funds

| Method | Url | Short Description |
|--------|-------------------------|-------------------------------|
| POST | /v1/funds-confirmations | Confirmation of Funds Request |

Account Information Service Endpoints

| Metod | Url | Short Description |
|--------|---|---|
| GET | /v1/accounts | Read Account List |
| GET | /v1/accounts/{account-id} | Read Account Details |
| GET | /v1/accounts/{account-id}/balances | Read Balance |
| GET | /v1/accounts/{account-id}/transactions/ | Read Transaction List |
| GET | /v1/accounts/{account-id}/transactions/{resourceId} | Read Transaction Details |
| GET | /v1/card-accounts | Read Card Account List |
| GET | /v1/card-accounts/{account-id} | Read Card Account Details |
| GET | /v1/card-accounts/{account-id}/balances | Read Card Account Balance |
| GET | /v1/card-accounts/{account-id}/transactions/ | Read Card Account Transaction List |
| GET | /v1/card-accounts/{account-id}/transactions/{resourceId} | Read Card Account Transaction Details |
| POST | /v1/consents | Create consent |
| GET | /v1/consents/{consentId} | Get Consent Request |
| DELETE | /v1/consents/{consentId} | Delete Consent |
| GET | /v1/consents/{consentId}/status | Consent status request |
| GET | /v1/consents/{consentId}/authorisations/{authorisationId} | Read the SCA status of the consent authorisation. |
| PUT | /v1/consents/{consentId}/authorisations/{authorisationId} | Update PSU Data for consents |
| GET | /v1/consents/{consentId}/authorisations | Get Consent Authorisation Sub-Resources Request |
| POST | /v1/consents/{consentId}/authorisations | Start the authorisation process for a consent |

Signing Basket Service Endpoints

| Metod | Url | Short Description |
|--------|---|--|
| POST | /v1/signing-baskets | Create a signing basket resource |
| GET | /v1/signing-baskets/{basketId} | Returns the content of an signing basket object. |
| DELETE | /v1/signing-baskets/{basketId} | Delete the signing basket |
| GET | /v1/signing-baskets/{basketId}/status | Read the status of the signing basket |
| POST | /v1/signing-baskets/{basketId}/authorisations | Start the authorisation process for a signing basket |
| GET | /v1/signing-baskets/{basketId}/authorisations | Get Signing Basket Authorisation Sub-Resources Request |
| PUT | /v1/signing-baskets/{basketId}/authorisations/{authorisationId} | Update PSU Data for signing basket |
| GET | /v1/signing-baskets/{basketId}/authorisations/{authorisationId} | Read the SCA status of the signing basket authorisatio |

Message Flows

There are no specific message flows or message flow changes specific to the Croatian standard. The Berlin Group NextGenPSD2 implementation guidelines should be consulted as the normative reference for descriptions of the message flows in the Croatian standard.

Country Specific Interpretation of NextGenPSD2

The nation-wide standard specifies the following guarantees for the implementation of the NextGenPSD2 by all ASPSPs in Croatia:

- All ASPSPs will provide support for TPP messages on operational issues
- All ASPSPs will provide support for multi-currency accounts
- All ASPSPs will use the IBAN as the account representation
- All ASPSPs will support future dated payments

Additionally, the TPPs should note the following rules for certain fields specified by the NextGenPSD2, specifically:

- the PSU-ID-Type is conditionally required, meaning that the TPP must provide the PSU-ID-Type whenever it provides the PSU-ID (*see also: OpenAPI specification for the PSU-ID-Type field*)
- the PSU-ID-Corporate-Type is conditionally required, meaning that the TPP must provide the PSU-ID-Type whenever it provides the PSU-ID (*see also: OpenAPI specification for the PSU-ID-Type field*)
- The ASPSPs **will** enforce the explicit start of authorization, whenever the TPP will provide the TPP-Explicit-Authorisation-Preferred header
- The ASPSPs will support at least one of the following formats for account information:
 - Camt.053 (XML based)
 - JSON
 - MT940 (Text based)
- The ASPSPs will support at least one of the following balance types:
 - openingBooked
 - expected
 - interimAvailable
 - forwardAvailable
 - closingBooked

The following services / requirements are ASPSP specific and their support is not mandated by the Croatian standard:

- Information on transaction fees transported through the XS2A interface support will be provided based on individual ASPSP decision
- PSU-ID field may be required by some ASPSPs
- PSU-Corporate-ID field may be required by some ASPSPs
- SCA exemptions will be provided by individual ASPSPs based on their own risk assessment and use of exemptions for their own services
- Signing basket support and individual restrictions for the signing baskets will be determined by ASPSPs based on their supported workflows and processes
- All optional endpoints for AIS services defined by the NextGenPSD2 are left to the individual ASPSPs
- The following optional query parameters support for AIS is left to the individual ASPSPs: bookingStatus with values “pending” or “both”

TPPs should review the ASPSP specific documentation for the points mentioned above.

TPPs should also review the Country Specific Changes described in the next paragraph.

| Country Specific Changes to NextGenPSD2

The following section specifies the changes to the core NextGenPSD2 specifications, which are specific to Croatian banks.

Payment Initiation

For the following request:

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

The Croatian standard defines payment service and payment product combinations, including some payment services not defined in the NextGenPSD2:

- **Single Payment Products**
 - sepa-credit-transfers
 - target-2-payments
 - cross-border-credit-transfers
 - domestic-credit-transfers-hr
 - instant-domestic-credit-transfers-hr
 - hr-rtgs-payments
- **Bulk Payment Products**
 - pain.001-credit-transfers
- **Periodic Payment Products**
 - domestic-credit-transfers-hr

The detailed specifications of each product call, including which are mandatory and which are optional for individual ASPSP implementations are **defined in the Open API specifications as descriptions** and are also included below:

CBA payment services and products

| | Single payment product (JSON) | Single payment product (XML) | Bulk payment products (XML only) | Periodic payment products (JSON only) |
|--|-------------------------------|------------------------------|----------------------------------|---------------------------------------|
| {payment-product} | {payment-service} | | | |
| | payments | payments | bulk-payments | periodic-payments |
| sepa-credit-transfers | mandatory | n.a. | n.a. | n.a. |
| instant-sepa-credit-transfers | n.a. | n.a. | n.a. | n.a. |
| target-2-payments | optional | n.a. | n.a. | n.a. |
| cross-border-credit-transfers | mandatory | n.a. | n.a. | n.a. |
| pain.001-sepa-credit-transfers | n.a. | n.a. | n.a. | n.a. |
| pain.001-instant-sepa-credit-transfers | n.a. | n.a. | n.a. | n.a. |
| pain.001-target-2-payments | n.a. | n.a. | n.a. | n.a. |
| pain.001-cross-border-credit-transfers | n.a. | n.a. | n.a. | n.a. |
| domestic-credit-transfers-hr | mandatory | n.a. | n.a. | optional |
| instant-domestic-credit-transfers-hr | optional | n.a. | n.a. | n.a. |
| hr-rtgs-payments | optional | n.a. | n.a. | n.a. |
| pain.001-credit-transfers | n.a. | n.a. | mandatory | n.a. |

Based on the supported products, the following have been completely removed from the OpenAPI specification:

- instant-sepa-credit-transfers
- pain.001-sepa-credit-transfers
- pain.001-instant-sepa-credit-transfers
- pain.001-target-2-payments
- pain.001-cross-border-credit-transfers

Mandatory, Optional and Conditional Fields

*The specification of mandatory, optional and conditional fields supplements the information provided in the Open API Specification. The Open API Specification does not always provide the full picture (due to technical limitations of the OpenAPI file format) and **this definition should be considered as the normative guide**, similarly to the NextGenPSD2 Implementation Guidelines. Note that the mandatory / optional / conditional specifications for the payment products defined by the NextGenPSD2 **may deviate** from the specifications provided in the Berlin Group Implementation Guidelines.*

In addition, the following comments are valid for all three payment services:

- (1) Debtor's reference; if omitted, for domestic payments (inside Croatia) default is HR99
- (2) Creditor's reference; if omitted, for domestic payments (inside Croatia) default is HR99
- (3) Applicable for future payments
- (4) If omitted, for payments inside EEA default is SHA
- (5) If debtorAccount is used, IBAN is mandatory, currency of the debtor account is optional
- (6) Creditor agent BIC or creditor agent name, charge bearer and creditor address are mandatory for cross-border payments if creditor agent is outside EEA
- (7) ASPSPs might change the condition on the debtor account to mandatory, if they implement other options to fulfil the requirement according to item 36 of the EBA Opinion of June 2020

Periodic Payments

| Data Element | HR Domestic |
|-----------------------------------|-------------------------|
| endToEndIdentification | optional |
| debtorName | optional |
| debtorAccount | optional ⁽⁷⁾ |
| ultimateDebtor | optional |
| instructedAmount | mandatory |
| creditorAccount | mandatory |
| creditorAgent | n.a. |
| creditorAgentName | n.a. |
| creditorName | mandatory |
| creditorAddress | optional |
| ultimateCreditor | optional |
| purposeCode | optional |
| chargeBearer | n.a. |
| remittanceInformationUnstructured | mandatory |
| remittanceInformationStructured | optional |
| requestedExecutionDate | optional |
| startDate | mandatory |
| executionRule | optional |
| endDate | optional |
| Frequency | mandatory |
| dayOfExecution | conditional |