The Berlin Group NextGenPSD2

Acronyms

Acronym	Meaning
CBA	Croatian Banking Association (locale acronym CBA)
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
XML	Extensible Markup Language
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
SCA	Strong Customer Authentication
SHA	Shared (SWIFT payment fee option)
BIC	Bank Identification Code
SEPA	Single European Payment Area
SCT	SEPA Credit Transfer
RTGS	Real Time Gross Settlement
EEA	European Economic Area
HR	ISO 3166-2 country code for Croatia

Overview

The Berlin Group NextGenPSD2 is the chosen standard utilized by all of the CBA 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 CBA 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 CBA 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

{payment-product}	Single payment product (JSON)	Single payment product (XML)	Bulk payment products (XML only)	Periodic payment products (JSON only)
	{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
(4) If omitted, for payments inside EEA default is SHA
(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

Single Payments

Data Element	Data Type	SCT EU Core	Target2 Paym. Core	Cross Border CT Core	HR Domestic	HR Domestic Instant	HR RTGS
endToEndIdentification	Max35Text	optional[1]	optional	optional	optional[1]	optional[1]	optional
debtorAccount	Account Reference[5]	mandatory	mandatory	mandatory	mandatory	mandatory	mandatory
ultimateDebtor	Max70Text	optional	n.a.	n.a.	optional	optional	n.a.
instructedAmount	Amount	mandatory	mandatory	mandatory	mandatory	mandatory	mandatory
creditorAccount	Account Reference	mandatory	mandatory	mandatory	mandatory	mandatory	mandatory
creditorAgent[6]	BICFI	optional	conditional	conditional	n.a.	n.a.	n.a.
creditorAgentName[6]	Max70Text	n.a.	n.a.	conditional	n.a.	n.a.	n.a.
creditorName	Max70Text	mandatory	mandatory	mandatory	mandatory	mandatory	mandatory
creditorId	Max35Text	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
creditorAddress[6]	Address	optional	optional	optional	optional	optional	Optional
ultimateCreditor	Max70Text	optional	n.a.	n.a.	optional	optional	n.a.
purposeCode	Purpose Code	optional	n.a.	n.a.	optional	optional	optional
chargeBearer[6]	Charge Bearer	n.a.	conditional[4]	conditional[4]	n.a.	n.a.	n.a.
remittanceInformationUnstructured	Remittance	optional	optional	optional	mandatory	mandatory	mandatory
remittanceInformationStructured	ISODate	optional[2]	n.a.	n.a.	optional[2]	optional[2]	optional
requestedExecutionDate	ISODateTime	optional	optional	optional	optional	optional	optional

Periodic Payments

Data Element	HR Domestic
endToEndIdentification	optional
debtorAccount	mandatory
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