Documentation for Mandate API v.1.0

Introduction

The Betalingsservice Mandate API is intended for Creditors and Merchants, you, and enables you to submit a mandate creation requests to your customers, debtors, for approval in the BS app. Thereby enabling your customers to select a payment account and approve the request using a Strong Customer Authentication (SCA) compliant solution on their mobile device. Identification of debtors is conducted by either mobile number or national id (for Denmark its CPR number).

To ensure a smooth transition with a wide range of business models and processes given new regulatory frameworks, the API generates a creditor debtors reference automatically should you not have the ability to supply your customers identification number on the fly. Thereby ensuring a seamless experience for your customers and your organisation.

The API consists of three core resources, which are:

- Ability to **Submit mandate request** enables you to send a mandate request to a given debtor. This operation give you the means to inform the customer about what they are approving via a product or service description section in addition to opt for real-time status updates via callbacks enabling you to follow it throughout it's life-cycle.

- **Get status** on a previously submitted mandate request, by proactively utilizing and retrieving the current life-cycle state.
- A submitted mandate request can be **Cancel**ed up until a debtor takes action or its timed-out.

The API enables you to e.g.;

- Create an instant Betalingsservice on-boarding during a online-, phone- and face2face sale session
- Offer Instant Betalingsservice on-boarding without internal customer references for immediate SCA approval
- Create a seamless alternative to NemID in online channels

Together these resources enable you to manage the Mandate creation process and integrate it into your overall on-boarding process.

Terms

To utilize this service you need to have a Betalingsservice Creditor Agreement and adhere to the General Rules for Betalingsservice Creditors.

Authentication

Before you can use Betalingsservice Mandate API, you must go through on-boarding process.

You will receive two keys, one set for Sandbox and another set for Production access, which are the pairs of unique identifier called "Client ID" and "Client Secret". The Client Secret should not be shared with anyone.

The two keys will be needed to authenticate your application to the respective environments. The key for sandbox environment is used for a test transaction, and that of production environment for a live transaction.

You need access tokens to invoke Betalingsservice Mandate API's resources. Access tokens are passed in the HTTP header when invoking the API. Authorization server provides a Token Endpoint that you can use to generate and renew your access token. The response of the Token Endpoint is a JSON message. You extract the token for the JSON and pass it with an HTTP Authorization header to access the API.

After issuing an access token, you can revoke it in case of theft or a security violation. You can do this by calling a Revoke Endpoint.

OAuth 2.0

OAuth 2.0 is the industry-standard protocol for authorization. Read more at The OAuth 2.0 Authorization Framework, https://tools.ietf.org/html/rfc6749

Mandate API currently supports OAuth 2.0 Specification with `confidential` client type. A Confidential client is capable of maintaining the confidentiality of its credentials provided by an authorization server.

OAuth 2.0 defines four roles:

1. Resource owner: An entity capable of granting access to a protected resource.
2. Resource server: The server hosting protected resources, capable of accepting and responding to protected resource requests using access tokens.

3. Client: An application making protected resource requests on behalf of the resource owner and with its authorization.
4. Authorization server: The server issuing access tokens to the client after successfully authenticating the resource owner obtaining authorization.

At a very high-level, it is possible to break the full OAuth flow into two parts.

1. Get a token from the authorization server.
2. Use the token to access the resource server.

OAuth 2.0 defines a concept called "authorization grant" which is a credential representing the resource owner's authorization (to access its protected resources) used be the client to obtain an access token. Mandate API supports `Client Credentials` grant type.

Authorization server

Token Endpoint

POST /token

With the Client Credentials grant type, the client can request an access token using only its credentials when the client is requesting access to the protected resource under its control. Once the client makes this request to the authorization server, it will return back an access token to the protected resource. The access token returned back to the client for Mandate API is `Bearer` type.

The client should request access tokens with the minimal scope and lifetime necessary. The authorization server takes the client identity into account when choosing how to honor the requested scope and lifetime, and may issue an access token with less rights than requested.

Generate access token using Client Credential grant type

1. Obtain a valid client_id and Client_secret.
2. Combine the pair in the format `client_id:client_secret` and encode the combined string using base64. See Encode to Base64 format, https://www.base64encode.org/
3. Use the following sample cURL command to obtain the access token.

```
$ curl -k -d "grant_type=client_credentials" \
        -H "Authorization: Basic <Base64 encoded
client_id:client_secret>" \
        -H 'Content-Type: application/x-www-form-urlencoded' \
        https://api-gateway.nets.eu/token
```

4. You receive a response similar to the following:

```
{"token_type":"Bearer","expires_in":2061,"access_token":"ca19a540f544777860e44e75f605d927"}
```

5. Note that, according to OAuth2.0 Authorization Framework, the Client Credential grant type does not allow for the issuing the refresh tokens.
See https://tools.ietf.org/html/rfc6749#section-4.4.3

Revoke Endpoint

POST /revoke

PARAMETERS

token[*required]

The token to be revoked

<Base64 encoded client_id:client_secret>[*required]

Combine the pair in the format client_id:client_secret and encode the combined string using base64.

token_type_hint[*optional]

If you do not specify this parameter, the authentication server will search in both key spaces (`access_token` and `refresh_token`) and if it finds a matching token then it will be revoked. Therefore, if this parameter is not specified, it will take longer to revoke the token. However, if you specify this parameter, the authentication server only searches in the respective token space. Hence, it is much faster to revoke the token. For the Client Credentials grant type, you have only the option of `access_token`.

Example:

```
$ curl -X POST \
  https://api-gateway.nets.eu/revoke \
  -H 'Authorization: Basic <Base64 encoded client_id:client_secret>' \
  -H 'Content-Type: application/x-www-form-urlencoded' \
  -d
'token=<token_to_be_revoked>&token_type_hint=<access_token_or_refresh_token>'
```

RESPONSES

Valid token

200 - OK

You receive an empty response with the HTTP status as 200. The following HTTP headers are returned:

```
Revokedaccesstoken: a0d210c7a3de7d548e03f1986e9a5c39
Authorizeduser: admin@carbon.super
Revokedrefreshtoken: 5e87a8235cd4d066e15c4c989f5ecf94
Content-Type: text/html
Pragma: no-cache
Cache-Control: no-store
Date: Tue, 23 Aug 2018 19:28:52 GMT
Transfer-Encoding: chunked
```

Invalid token

200 - OK

You still receive an empty response with the HTTP status as 200 but only the following HTTP headers are returned:

```
Content-Type: text/html
Pragma: no-cache
Cache-Control: no-store
Date: Tue, 23 Aug 2018 19:31:45 GMT
Transfer-Encoding: chunked
```

Because the authorization server cannot find the token in any key space, you will not see `Revokedaccesstoken` or `Revokedrefreshtoken` in the HTTP headers.

API Specification

Headers and payload

Request data must be in JSON format. The *Content-Type* header value must be `application/json`.

Response will be in JSON format. The *Accept* header value must be `application/json`.

Errors

Mandate API uses conventional HTTP response code to indicate the success or failure of an API request.

In general:

Codes in the 2XX range indicate success.

Codes in the 4xx range indicate an error provided with failed information, e.g. initial validation on mandate request failed, or mandate request not found.

Codes in the 5XX range indicate an error with Mandate API's servers. Please contact Nets BS API Support (BS-API-Support@nets.eu) if you experience any error.

Core resources

Mandate request

Submit a new mandate request

PUT /mandate/{mandateRequestUUID}

Submit a new mandate request with the given UUID.

PARAMETERS

mandateRequestUUID^{*required} *(path)*

ID of mandate request to submit. This needs to be a unique UUID generated by the client. See RFC4122, A Universally Unique IDentifier (UUID) URN Namespace, https://tools.ietf.org/html/rfc4122.

Example:

0e90e6f9-9e8e-4e9d-9976-2460689dc136

MandateRequest^{*required} *(body)*

Mandate request that needs to be submitted. This needs to be a valid mandate request.
See Description of Mandate Request Model

Example Request

```
$ curl -X PUT \ <base URL>/mandate/0e90e6f9-9e8e-4e9d-9976-2460689dc136 \ -H
'Authorization: Bearer 9b5d4e49-195c-33a1-9c2d-5d3effd7bacc' \ -H 'Content-
Type: application/json' \ -H 'Accept: application/json' \ -d
'{      "uuid":"0e90e6f9-9e8e-4e9d-9976-
2460689dc136",      "creditorsDebtorReference":"ABCDEFGHIJ12345",      "debto
rIdentity":{          "phoneNo":4511131742      }, "productDescription":{
"title":"Insurance policy", "description":"Car insurance policy 1234"
},      "callback":{          "url":"https://myinsurancecompany.dk/mandatere
quest/callback"     } }'
```

RESPONSES

202 - Accepted

If callback is specified, Mandate Request Status object will be returned. Read more
at CallbackHandling

400 - Initial validation on mandate request failed. See Description of Mandate Operation Failed
Response Model

Example:

```
{
    "errorCode": 1,
    "errorText": "Invalid input: inconsistent mandateRequestUUID. Action: Use
the same mandateRequestUUID in the path and payload when submit a new mandate
request."
}
```

Description of Mandate Request Model

Properties	Description
mandateRequestUUID*required	string pattern: ^[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}$ example: 0e90e6f9-9e8e-4e9d-9976-2460689dc136 Creditor created identifier for this mandate request, following the ISO standard UUID. UUID should be represented as 32 hexadecimal (base 16) digits, displayed in five groups separated by hyphens, in the form 8-4-4-4-12 for a total of 36 characters (32 alphanumeric characters and four hyphens)

Properties	Description
creditorsDebtorReference	string pattern: ^[a-zA-Z0-9æøåÆØÅ]{1,15}$ example: ABCDEFGHIJ12345 The creditors own reference to the contract between the debtor and the creditor (corresponds to 'kundenummer' in BetalingsService). Both letters and numbers from 1 to 15 characters, including Danish characters are accepted. If no creditorsDebtorReference property has been supplied, Betalingsservice Mandate API will autogenerate a unique value of the creditorsDebtotReference. The format will be BSE + A sequential ascending number - example: BSE000000000001
debtorIdentity*required	object Use *ONLY* one of the below properties Properties_Description phoneNo_string example +4511131742 nationalId_string example 0509821209
productDescription*required	object Properties_Description title*required_string maxLength 40 minLength 1 example Insurance policy

For debtorIdentity:

Properties	Description
phoneNo	string example: +4511131742 Phone number can be prefixed with '00' or '+' then the country code
nationalId	string example: 0509821209 National identification number (CPR number for Denmark)

For productDescription:

Properties	Description
title*required	string maxLength: 40 minLength: 1 example: Insurance policy

Properties	Description		
	description*required	string maxLength: 50 minLength: 1 example: Car insurance policy 1234	
callback	object		
		Properties	**Description**
		url*required	string example: https://myinsurancecompany.dk/mandaterequest/callback pattern: https:\/\/(www\.)?[-a-zA-Z0-9@:%._\+~#=]{2,256}\.[a-z]{2,6}\b([-a-zA-Z0-9@:%_\+.~#?&//=]*) The URL to call when the mandate request status changes during processing (must be HTTPS). Mandate API will send status update to the specified URL. See response structure via Callback Examples.
		authToken	string example: cn389ncoiwuencr pattern: .+ If provided, the API will use this token as a bearer token in the Authorization header when the callback url is called. **Note**: If you provide the authToken, please make sure that the life time of the authToken will cover the lifetime of your mandate request and retry interval in case of callback error.

Description of Mandate Operation Fail Response

Property	Description
errorCode*required	integer example: 1 A code identifying the error. Note that the error code is planned for the future use. All errors will use code '1' at the moment.
errorText*required	string example: "Invalid input: Unrecognizable UUID [aE90E6F9-9E8E-4E9D-9976-2460689DC139]. Action: Check the UUID before retry again" A short text describing why the operation failed. See List of Static Validation Errors

Get status of a mandate request (NOT AVAILABLE - in pipeline)

GET /mandate/{mandateRequestUUID}/status

Retrieve the status update of a previously submitted mandate request

PARAMETERS

mandateRequestUUID*required *(path)*

ID of the mandate request to fetch status for.

Example:

0e90e6f9-9e8e-4e9d-9976-2460689dc136

Example Request
```
$ curl -X GET \
        -H 'Authorization: Bearer 9b5d4e49-195c-33a1-9c2d-5d3effd7bacc' \
        -H 'Content-Type: application/json' \
        -H 'Accept: application/json' \
        '<base URL>/mandate/0e90e6f9-9e8e-4e9d-9976-2460689dc136/status'
```

RESPONSES

200 - successful operation

Mandate Request Status object will be returned.

4 examples below

```json
{
  "uuid": "0e90e6f9-9e8e-4e9d-9976-2460689dc136",
  "statusMandate": {
    "statusCodeEnum": "VALIDATED"
  }
}


{
  "uuid": "0e90e6f9-9e8e-4e9d-9976-2460689dc136",
  "statusMandate": {
    "statusCodeEnum": "ACCEPTED_BY_DEBTOR",
    "creditorsDebtorReference": "BSE000000001234"
  }
}


{
  "uuid": "0e90e6f9-9e8e-4e9d-9976-2460689dc136",
  "statusMandate": {
    "statusCodeEnum": "VALIDATED_FAILED",
      "errorDescription" : "<Validation error reason>"
  }
}

{
  "uuid": "0e90e6f9-9e8e-4e9d-9976-2460689dc136",
  "statusMandate": {
    "statusCodeEnum": "COMPLETED",
    "creditorsDebtorReference": "BSE000000001234",
    "mandateId": 123456789
  }
}
```

400 - Initial validation on UUID failed.

Example:

```json
{
  "errorCode": 1,
  "errorText": "Invalid input: Input does not conform to API specification.
Action: Check API documentation to find out more information"
}
```

404 - Mandate request not found.

Example:

```
{
    "errorCode": 1,
    "errorText": "Invalid input: Unrecognizable UUID [0e90e6f9-9e8e-4e9d-
9976-2460689dc136]. Action: Check the UUID before retry again."
}
```

Description of Mandate Request Status Model

Properties	Description
mandateRequestUUID*required	string pattern: ^[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}$ example: 0e90e6f9-9e8e-4e9d-9976-2460689dc136 Creditor created identifier for this mandate request, following the ISO standard UUID.
statusMandate*required	object The status of the mandate (only present if mandate creation request send in the payload). See List of Mandate Statuses.

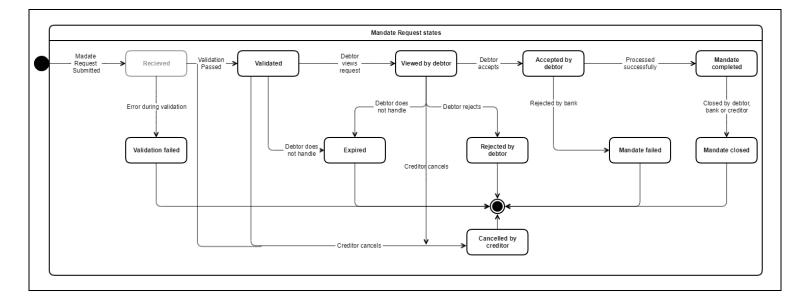| Properties	Description
stausCodeEnum*required	string example: CANCELLED_BY_CREDITOR Enum: [RECEIVED, VALIDATED, VALIDATION_FAILED, VIEWED_BY_DEBTOR, ACCEPTED_BY_DEBTOR, REJECTED_BY_DEBTOR, EXPIRED, MANDATE_FAILED, COMPLETED, CLOSED, CANCELLED_BY_CREDITOR]

|

		string pattern: ^[a-zA-Z0-9æøåÆØÅ]{1,15}$ example: ABCDEFGHIJ12345 The creditors own reference to the contract between the debtor and the creditor (corresponds to 'kundenummer' in Betalingsservice). Alphanumeric string - 15 characters. The creditorsDebtorReference property only exist when mandate statuses are ACCEPTED_BY_DEBTOR, MANDATE_FAILED, COMPLETED, and CLOSED. See List of Mandate Statuses for more details.
	creditorsDebtorReference	
	mandateId	string minLength: 1 maxLength: 9 example: 123456789 The ID of the mandate. This field is empty until the Betalingsservice mandate is completed. The mandateId property is only exist when mandate status are COMPLETED, and CLOSED. See List of Mandate Statuses for more details. Retrieving of the ID of the mandate can be expected on the date of mandate creation + 1 day.
	errorDescription	string example: The mandate was rejected by the debtor's bank

List of Mandate Statuses

StatusCodeEnum	Description	CreditorsDebtorReference	Mandate Id
RECEIVED	The mandate creation request is received but not yet presented to the debtor. (This status code will be presented only when you request get status operation and not present in callback.).	No	No
VALIDATED	The mandate creation request is successfully validated.	No	No
VALIDATION_FAILED	The mandate creation request failed validation. A text detailing the validation error will also be provided.	No	No
VIEWED_BY_DEBTOR	The mandate creation request is viewed by the debtor.	No	No
EXPIRED	The mandate creation request is expired. Debtor did not handled the mandate request in time.	No	No
CANCELLED_BY_CREDITOR	The mandate creation request is cancelled by creditor.	No	No
REJECTED_BY_DEBTOR	The mandate creation request is rejected by the debtor.	No	No
ACCEPTED_BY_DEBTOR	The mandate creation request is accepted by the debtor.	Yes	No
MANDATE_FAILED	The mandate creation request failed.	Yes	No
COMPLETED	The mandate creation is completed	Yes	Yes

	successfully. Retrieving of the Mandate Id can be expected on the date of mandate creation + 1 day.		
CLOSED	The mandate is closed.	Yes	Yes

Mandate Request State Diagram

Cancel a mandate request (NOT AVAILABLE - in pipeline)

POST /mandate/{mandateRequestUUID}/cancel

Cancel a previously submitted mandate request. A mandate request can be cancelled only if the mandate status is VALIDATED or VIEWED_BY_DEBTOR.

PARAMETERS

mandateRequestUUID^{*required} *(path)*

ID of the mandate request to cancel.

Example:

0e90e6f9-9e8e-4e9d-9976-2460689dc136

Example of Cancel request

```
$ curl -X POST \
    -H 'Authorization: Bearer 9b5d4e49-195c-33a1-9c2d-5d3effd7bacc' \
    -H 'Content-Type: application/json' \
    -H 'Accept: application/json' \
    '<base URL>/mandate/0e90e6f9-9e8e-4e9d-9976-2460689dc136/cancel'
```

RESPONSES

200 - successful operation

400 - The operation failed to complete

Mandate Operation Fail Response object will be returned. See [Description of Mandate Operation Failed Response Model](#)

Example:

```
{
    "errorCode": 1,
    "errorText": "Invalid input: Unable to cancel mandate request. Action:
Check API document to find out more information."
}
```

404 - Mandate request not found

Mandate Operation Fail Response object will be returned. See [Description of Mandate Operation Failed Response Model](#)

Example:

```
{
    "errorCode": 1,
    "errorText": "Invalid input: Unable to cancel mandate request. Action:
Check API document to find out more information."
}
```

Callback Handling

If a callback is specified in the mandate request, Mandate API will send status update to the specified URL using POST operation. If authentication token (authToken) is specified together with the URL, it will be included in the authorization header of the callback. The authToken is optional for the callback. If you provide the authToken, please make sure that the life time of the authToken will cover the lifetime of your mandate request and retry interval in case of callback error.

When Mandate API sends a status update, it waits for HTTP response from the server that it sends to, in this case, it is a callback URL. Mandate API will keep both HTTP response status and response body for audit purpose and using it for retry mechanism. Mandate API takes the order of status update seriously when it comes to sending a callback. If the main callback event is sent successfully, each status update will be seen only once. Otherwise, retry mechanism will kick in.

Callback Examples

Callback contains uuid and mandate status of a mandate request. Below is the example of the callback that you will received.

RESPONSES

Example of mandate status:

```
{
  "uuid": "0e90e6f9-9e8e-4e9d-9976-2460689dc136",
  "statusMandate":{
      "statusCodeEnum":"VIEWED_BY_DEBTOR"}
}
{
  "uuid": "0e90e6f9-9e8e-4e9d-9976-2460689dc136",
  "statusMandate":{
      "statusCodeEnum":"ACCEPTED_BY_DEBTOR",
      "creditorsDebtorReference": "ABCDEFGHIJ12345"}
}
{
  "uuid": "0e90e6f9-9e8e-4e9d-9976-2460689dc136",
  "statusMandate":{
      "statusCodeEnum":"COMPLETED",
      "creditorsDebtorReference": "ABCDEFGHIJ12345",
      "mandateId":"276340164"}
}
```

Retry mechanism

Mandate API uses conventional HTTP response code to indicate the success of callback being sent. Codes in the `2xx` range indicate success, other than that indicates failure. If the callback has been sent successfully, Mandate API will continue with the next status update. Otherwise Mandate API will retry sending the same status update until the callback has been sent successfully or reaches the retry limit.

Production retry mechanism (NOT AVAILABLE - in pipeline)

On failure Mandate API will retry up to 9 times. After 9th failed retry, callback will be stopped and no more status updates will be sent for this mandate request.

To elaborate on the retry interval, let assume that Mandate API received failed HTTP response code from the main callback event of a mandate request. Now, the retry mechanism will kick-in. No early than one second after 1 failed attempt, the 1st retry attempt of that status update will be made. However, the 1st retry can take up to 1 minute as retry attempts has lower priority than normal flow of callbacks. Let assume that it's still failed - the 2nd try will be sent no early than 10 seconds after the 1st retry. If it's still failed, the 3rd retry will be sent no early than 30 seconds of the 2nd retry. Let assume that Mandate API received success status code this time. Then Mandate API will proceed with sending the next status update of that mandate request.

List of retry interval

Counter	Seconds
1	1
2	10
3	30
4	60
5	120
6	350
7	3600
8	86400
9	259200

Please keep in mind that you can actively retrieve the current status of the mandate request using GET operation as mentioned earlier.

Creditors Debtor Reference

Creditors debtor reference is an optional field when you submit a mandate request. It is the creditors own reference to the contract between the debtor and the creditor (corresponds to 'kundenummer' in Betalingsservice). The creditorsDebtorReference property only exist when mandate statuses are ACCEPTED_BY_DEBTOR, MANDATE_FAILED, COMPLETED, and CLOSED. See List of Mandate Statuses for more details.

If the creditorsDebtorReference is provided in the original payload of mandate request, it will be presented in mandate statuses as mentioned above. Otherwise, you will receive an auto-generated one in the format of alphanumeric string - 15 characters–starting with BSE and follows by 12 digits–e.g. BSE000000000001.

API Sandbox

An environment is provided that developers and testers can use to try out the functionality of the Mandate API providing simulated responses. As mentioned earlier in [Authentication](#) section, you will receive ONE key for the sandbox environment. You should use that key to request an access token from the authorization server and use the token to access the resource server.

Base URL Sandbox

https://api-gateway.nets.eu/bs-sandbox/v1

Use unique identifying Sandbox Client ID and Client Secret for access token.

Supported scenarios

Below is a list of the scenarios that are currently supported by the sandbox environment.

Submit a new mandate request

You can submit a new mandate request with callback URL. A payload with debtor identity should be provided. Please also include creditors debtor reference as specified in the table. After you submit the request, you will receive status update via your callback URL.

CreditorsDebtorReference

Creditors debtor reference will be auto-generated if you haven't provided it in the payload. The pattern for auto-generated CreditorsDebtorReference is 'BSE' and follows by 12 digits, e.g. BSE000000000001.

Disclaimer

Production retry mechanism is not available in the sandbox. However, a simple retry mechanism is provided.

Mandate API sandbox uses conventional HTTP response code to indicate the success of callback being sent. Codes in the 2XX range indicate success, other than that indicates failure. If the callback has been sent successfully, Mandate API will continue with the next status update. Otherwise Mandate API will retry sending the same status update until the callback has been sent successfully or reaches the retry limit. On failure Mandate API will retry up to 3 times. After 3rd

failed retry, callback will be stopped and no more status updates will be sent for the mandate request.

Scenario name	Debtor Id/Debtor Id type	CreditorsDebtorReference	Callbacks generated in specified order
Receive valid mandate request	+4511223344/Phone no.	CDR000000000001	• Mandate request validated
Failed upon static validation	12345ABC/Phone no.	-	• Mandate request rejected immediately (HTTP status code 400) without callback generated and with error message "Invalid input: Input does not conform to API specification."
Failed upon dynamic validation	0101991234/National ID	CDR000000000002	• Mandate request validation failed with error message: "Debtor not found"
Failed upon duplicate mandate request	+4510203040/Phone no.	-	• Mandate request reject immediately (HTTP status code 400) without callback generated and with error message "Invalid input: MandateRequest with same uuid but with different payload was submitted again. Action: Make sure you do not submit the same mandate request twice."
Expired	1010886789/National ID	CDR000000000003	• Mandate request validated • Mandate request expired
Viewed by debtor (Mandate Request without CreditorsDebtorsReference specified)	0505954321/National ID	-	• Mandate request validated • Mandate request viewed by debtor
Rejected by debtor	0202972345/National ID	CDR000000000004	• Mandate request validated

			• Mandate request viewed by debtor • Mandate request rejected by debtor
Accepted by debtor	+4599887766/Phone no.	CDR000000000005	• Mandate request validated • Mandate request viewed by debtor • Mandate request accepted by debtor with CreditorsDebtorsReference: "CDR000000000005"
Accepted by debtor (Mandate Request without CreditorsDebtorsReference specified)	+4520203333/Phone no.	-	• Mandate request validated • Mandate request viewed by debtor • Mandate request accepted by debtor with sequential system generated CreditorsDebtorReference, e.g. BSE000000001
Completed (Created and activated)	0303984567/National ID	CDR000000000006	• Mandate request validated • Mandate request viewed by debtor • Mandate request accepted by debtor • Mandate request completed with mandate ID: "123456789"
Failed	+4512121212/Phone no.	CDR000000000007	• Mandate request validated • Mandate request viewed by debtor • Mandate request accepted by debtor • Mandate request failed with error message: "There is no agreement"
Closed (Created and inactivated)	+4511223366/Phone no.	CDR000000000008	• Mandate request validated • Mandate request viewed by debtor

			• Mandate request accepted by debtor • Mandate request completed with mandate ID: "123456789" • Mandate request closed with mandate ID: "123456789"

Get status of a mandate request

You can get the status of the mandate request for each scenario by using the UUID specified in the table below.

Scenario name	UUID	Status
Initial validation on UUID failed	asdf-123	• Bad Request. HTTP status code 400 returns immediately.
Receive valid mandate request	1a81e023-617d-4876-9013-f63880f42011	• Mandate request validated
Unknown mandate request	cee76793-6dd0-4e96-82bb-0eefa11978e4 (or other UUIDs which are not presented in any scenario)	• No status found. HTTP status code 404 returns immediately.
Failed upon dynamic validation	54d16953-ea76-4ade-b619-1e07e458d814	• Mandate request validation failed with error message: "Debtor not found"
Expired	a935f03d-cc47-4761-8927-904c76f03878	• Mandate request expired
Viewed by debtor (Mandate Request without CreditorsDebtorsReference specified)	5fedac92-ccbd-4c5d-bb91-3d36bd011e32	• Mandate request viewed by debtor
Rejected by debtor	22dd6d0f-8569-4f40-918b-401b1dd30cad	• Mandate request rejected by debtor

Accepted by debtor	1d2ffa51-eb64-4ecd-b62a-4dd6241b3256	• Mandate request accepted by debtor with CreditorsDebtorsReference: "CDR000000000005"
Accepted by debtor (Mandate Request without CreditorsDebtorsReference specified)	65afa312-12f1-48ca-b904-828d752d6719	• Mandate request accepted by debtor with sequential system generated CreditorsDebtorReference as e.g."BSE000000000001"
Completed (Created and activated)	8f27863f-a9bd-4d74-84ee-a06dcf668461	• Mandate request completed with mandate ID: "123456789"
Mandate failed	749aa0d0-c915-4ee9-954e-6d8fe3f592e0	• Mandate request failed with error message: "There is no agreement"
Closed (Created and inactivated)	d1bf0635-d9d4-403a-b573-7b863e775b90	• Mandate request closed with mandate ID: "123456789"

Cancel a mandate request

You can send cancel mandate request for each scenario by using the UUID specified in the table below. Note that only some scenarios can be cancelled successfully.

Scenario name	UUID	Cancel operation succeeded?
Cancelling in valid state (Mandate request can be cancelled if its status is VALIDATED or VIEWED_BY_DEBTOR.)	57500194-9067-4c6a-84bb-f4d24e5ecf88	Yes. HTTP status code 200 returns immediately.

Unknown UUID	4842b8f4-69f3-4df1-a53a-0347cea299a1	No. Mandate request not found. HTTP status code 404 returns immediately.
Invalid UUID	dfdf33	No. Cancel operation failed. HTTP status code 400 returns immediately.
Cancelling in invalid state (Mandate request cannot be cancelled if its status is RECEIVED, VALIDATION_FAILED, ACCEPTED_BY_DEBTOR, REJECTED_BY_DEBTOR, EXPIRED, MANDATE_FAILED, COMPLETED, CLOSED, CANCELLED_BY_CREDITOR.)	52a3bc15-fcfd-49a4-9623-93b5e0fd40e2	No. Cancel operation failed. HTTP status code 400 returns immediately. The cause of this can vary but the response the creditor will always be the same.

Q&A

Authorization server Base URL

https://api-gateway.nets.eu

Mandate API Base URL Production (NOT AVAILABLE - in pipeline)

https://api-gateway.nets.eu/bs/v1

List of Static Validation Errors

At the moment, Error Code is always '1' for all static validation errors.

Error Text	Description
Invalid input: Input does not conform to API specification. Action: field [uuid] must not be null.	Mandate request is invalid because UUID is not specified in the payload. You have to specify UUID in the payload identical to the UUID in path.
Invalid input: inconsistent mandateRequestUUID. Action: Use the same mandateRequestUUID in the path and payload when submit a new mandate request.	Mandate request is invalid because UUID used in path and payload are not identical. You have to use the same UUID both places.
Invalid input: Input does not conform to API specification. Action: field [debtorIdentity] must not be null.	Mandate request is invalid because of missing debtor identity. You have to provide debtor identity, either phone number for national ID.
Invalid input: Input does not conform to API specification. Action: field [debtorIdentity.phoneNo] must match \"^\\d{8}$|((\\+|00)(9[976]\\d|8[987530]\\d|6[987]\\d|5[90]\\d|42\\d|3[875]\\d|2[98654321]\\d|9[8543210]|8[6421]|6[6543210]|5[87654321]|4[987654310]|3[9643210]|2[70]|7|1)){1}\\d{8,14}$\".	Mandate request is invalid because debtor's phone number does not contain 8 digits or the phone number does not begin with + or 00 and country code and 8-14 digits. You have to provide a valid phone number as specified.
Invalid input: Input does not conform to API specification. Action: field [debtorIdentity.nationalId] must match \"^(0[1-9]|[12]\\d|3[01])(0[1-9]|1[0-2])\\d{6}$\".	Mandate request is invalid because debtor's national ID does not match with the pattern used for Danish national ID. You have to provide a valid Danish national ID.
Invalid input: Input does not conform to API specification. Action: field [productDescription] must not be null.	Mandate request is invalid because of missing product description. You have to provide product description with title and description.

Invalid input: Input does not conform to API specification. Action: field [productDescription.description] must not be null.	Mandate request is invalid because of missing description in the product description. You have to provide product description with title and description.
Invalid input: Input does not conform to API specification. Action: field [productDescription.title] must not be null.	Mandate request is invalid because of missing title in the production description. You have to provide product description with title and description.
Invalid input: Input does not conform to API specification. Action: field [callback.url] must not be null.	Mandate request is invalid because of missing callback URL. If you need a callback, you have to provide at least URL for the callback. AuthToken is optional.
Invalid input: Input does not conform to API specification. Action: field [callback.authToken] must match \".+\".	Mandate request is invalid because callback's authToken is specified, but it is an empty string. If you need a callback's authToken, you have to provide at least one character there.
Invalid input: Input does not conform to API specification. Action: field [creditorsDebtorReference] must match \"^[a-zA-Z0-9æøåÆØÅ]{1,15}$\".	Mandate request is invalid because of invalid creditorsDebtorReference. You have to provide creditorsDebtorReference as 15 characters–it can be both letters and/or number, including Danish letters.
Invalid input: MandateRequest with same uuid [846d582e-9515-425d-8931-b8fed9b7b436] but different payload was submitted again. Action: Make sure you do not submit the same mandate request twice.	Mandate request is invalid because UUID is used with different payload that is already existed in the system. You need to change UUID in order to submit this mandate request.
Invalid input: Invalid json at line [3], column [3]. Action: Unexpected character ('\"' (code 34)): was expecting comma to separate Object entries.	Mandate request is invalid because of missing comma to separate object entries. You have to add the missing comma before line 3, column 3, as stated in the error text.
Invalid input: The operation failed to complete. Action: Check API document to find out more information.	Mandate request is invalid because of your input doesn't conform to API contract. You have to check your payload whether it's align with API documentation.

	Please make sure that you don't provide any other properties that are not specified in the contract.