

A stylized world map in shades of green and yellow, overlaid with a network of dark lines representing global connectivity. The map is centered on the Atlantic Ocean, showing the Americas on the left and Europe and Africa on the right.

NOVO BANCO

SANDBOX

PSD2

SANDBOX – PSD2

	Main flows
1	EnRollment : Obtain client_id, client_secret and valid scopes from a PSD2 Certificate Qwac/Qseal
2	Authorization : Obtain a token bearer valid for API request.
3 ^a	Create a consent for TPP's with rol AIS or FCS
3b	Create a payment for TPP's with rol PIS
4	Authorize Consent or Payment by Embedded or Redirect Approach

SANDBOX – PSD2

API	oAuth
	TPP EnRollment

The screenshot displays a web interface for configuring and testing an API endpoint. On the left, there is a configuration panel with the following sections:

- API:** A dropdown menu set to "oAuth".
- App/API Key:** A dropdown menu set to "Select an App/API Key".
- Create an Application:** A link to create a new application.
- Authentication Type:** A dropdown menu set to "None" with an "Edit" button below it.

The main area on the right shows the results of a request:

- Request URL:** `https://api.novobanco.es/psd2/sandbox/oAuth/v1/tppEnroll`
- Response Code:** `201 Created`
- Response Header:**

```
connection: Keep-Alive
content-type: application/json;charset=UTF-8
date: Thu, 18 Jul 2019 08:41:47 GMT
host: api.novobanco.es
keep-alive: timeout=5, max=100
origin: https://api.novobanco.es
referer: https://api.novobanco.es
server: Apache/2.4.33 (Unix) OpenSSL/1.0.2o
strict-transport-security: max-age=63072000; includeSubDomains; preload
transfer-encoding: chunked
x-content-type-options: nosniff
x-frame-options: DENY
```
- Response Body:** A JSON object containing client details, highlighted with a red box:

```
{
  "clientId": "1767510996a49e40ce8ea59c0d65d50762",
  "clientSecret": "5013365503914167bef00b30a38cd6e3",
  "clientName": "APP01",
  "organization": "Minsait",
  "callback": "https://www.callback.com",
  "email": "APP01@minsait.com",
  "scopes": "[PSP_AI]"
}
```

SANDBOX – PSD2

API OAuth

Authorization Token

POST /v1/token OAuthToken

Implementation Notes
 This endpoint allows requesting an access token following one of the flows below:

- Client Credentials (2-legged, there isn't resource owner information)

Response Class(Status 200)

Model | Model Schema

```
{
  "access_token": "7a5a618b-6bfs-415d-89f3-ceb68bc06121",
  "token_type": "Bearer",
  "expires_in": "3600",
  "scope": "PSP_AI"
}
```

application/json

Parameters

Parameter	Value	Description	Parameter
client_id	1767510996a49e40ce8ea59c0d65d50762	Client_id obtained in Provider Enroll Process	query
scope	PSP_AI	Scope requested	query
client_secret	501336503914167bef00b30a38cd6e3	Client_secret obtained in Provider Enroll Process	query
grant_type	client_credentials	Grants	query

Add Parameter

Response Messages

HTTP Status Code	Reason	Response Model	Header
400	bad input parameter		

Submit

Request URL

https://api.novobanco.es/psd2/sandbox/oauth/v1/token?client_id=1767510996a49e40ce8ea59c0d65d50762&scope=PSP_AI&client_secret=501336503914167bef00b30a38cd6e3

Response Code

201 Created

Response Header

```
connection: Keep-Alive
content-type: application/json;charset=UTF-8
date: Thu, 18 Jul 2019 08:46:36 GMT
host: api.novobanco.es
keep-alive: timeout=5, max=99
origin: https://api.novobanco.es
referer: https://api.novobanco.es
server: Apache/2.4.33 (Unix) OpenSSL/1.0.2o
strict-transport-security: max-age=63072000; includeSubDomains; preload
transfer-encoding: chunked
x-content-type-options: nosniff
x-frame-options: DENY
```

Response Body

```
{
  "access_token": "2515362b-3b48-45c2-81ac-0fafff5c04bc",
  "token_type": "Bearer",
  "expires_in": "3600",
  "scope": "PSP_AI",
  "refresh_token": null
}
```

SANDBOX – PSD2

API	Account Information AIS

Descripción	Response	X-Request-Id
OK	200	0470df9f-600d-48c3-be03-52589a931c25
CREATED	201	17a4cc34-7f86-436f-82db-c3eddd156b78
ACCEPTED	202	2db45ecd-4a6b-4b35-a7b6-68021a9a4548
NO CONTENT	204	f2720bac-a413-4fe0-9e38-d03df438d49d
BAD REQUEST	400	ebec43de-fe98-452b-be59-b0144cf7fc09
UNAUTHORIZED	401	f70e6efe-e5dc-4041-836c-920fb4f41450
FORBIDDEN	403	a7014484-126a-43bf-b584-9a52f20e709d
NOT FOUND	404	4700f55a-ee06-401d-bbad-a5b40cf0a002
METHOD NOT ALLOWED	405	21769171-6b01-47ed-8e3a-624ccaac9c27
NOT ACCEPTABLE	406	ac98fbb7-d95b-4b6b-b8cf-4dcbc3a3943c
REQUEST TIMEOUT	408	3974e113-2de7-4888-b1d2-905f6cd46272
UNSOPPORTED MEDIA TYPE	415	9c3fb41d-3506-4600-807a-a4f2f88d9a03
TOO MANY REQUEST	429	46ccab24-17e6-4f7a-b1c5-13368e82f170
INTERNAL SERVER ERROR	500	e04e0ef1-143b-4041-bf0e-80b7c3747885
SERVICE UNAVAILABLE	503	7c121fec-79f2-4844-b095-e72bc3caebc5

SANDBOX – PSD2

API	Consents

Service	Description	Response	X-Request-Id
/v1/consents	CREATED	201	34d45ea7-ee24-40f4-99dd-3747708af880
/v1/consents	CREATED	201	f26e9fb4-f571-452a-9cfa-64d591b9d41d
/v1/consents	CREATED	201	5cf03705-1178-45a2-9f85-d7b53fde2cf8
PUT /v1/consents/{consentId}/authorisations/{authorisationId}	OK	200	3a3d12f8-a5c1-449e-8995-35e7856902dd
PUT /v1/consents/{consentId}/authorisations/{authorisationId}	OK	200	d77dbfd4-9cb9-4089-8569-ae5530271e38
PUT /v1/consents/{consentId}/authorisations/{authorisationId}	OK	200	733fe8b7-1e59-41e1-9040-4d2ca9092cf7
PUT /v1/consents/{consentId}/authorisations/{authorisationId}	OK	200	7e780dc1-b86d-4cfc-9902-844cc977b0d2

SANDBOX – PSD2

API	Payments PIS

Service	Description	Response	X-Request-Id
POST /v1/{payment-service}/{payment-product}	CREATED	201	2db45ecd-4a6b-4b35-a7b6-68021a9a4548
PUT /v1/{payment-service}/{payment-product}/{paymentId}/authorisations/{authorisationId}	OK - psuAuth	200	7be29de6-b1f3-11e9-a2a3-2a2ae2dbcce4
PUT /v1/{payment-service}/{payment-product}/{paymentId}/authorisations/{authorisationId}	OK - authTran	200	d5c19d60-b1f0-11e9-a2a3-2a2ae2dbcce4
PUT /v1/{payment-service}/{payment-product}/{paymentId}/cancellation-authorisations/{cancellationId}	OK - psuAuth	200	7be29de6-b1f3-11e9-a2a3-2a2ae2dbcce4
PUT /v1/{payment-service}/{payment-product}/{paymentId}/cancellation-authorisations/{cancellationId}	OK - authTran	200	d5c19d60-b1f0-11e9-a2a3-2a2ae2dbcce4
GET *	OK	200	0470df9f-600d-48c3-be03-52589a931c25
DELETE /v1/{payment-service}/{payment-product}/{paymentId}	ACCEPTED	202	2db45ecd-4a6b-4b35-a7b6-68021a9a4548
DELETE /v1/{payment-service}/{payment-product}/{paymentId}	ACCEPTED	202	e26940dc-b1ef-11e9-a2a3-2a2ae2dbcce4
DELETE /v1/{payment-service}/{payment-product}/{paymentId}	NO CONTENT	204	f2720bac-a413-4fe0-9e38-d03df438d49d
	BAD_REQUEST	400	ebec43de-fe98-452b-be59-b0144cf7fc09
	UNAUTHORIZED	401	f70e6efe-e5dc-4041-836c-920fb4f41450
	FORBIDDEN	403	a7014484-126a-43bf-b584-9a52f20e709d
	NOT_FOUND	404	4700f55a-ee06-401d-bbad-a5b40cf0a002
	METHOD_NOT_ALLOWED	405	21769171-6b01-47ed-8e3a-624ccaac9c27
	REQUEST_TIMEOUT	408	ac98fbb7-d95b-4b6b-b8cf-4dcbc3a3943c
	UNSUPPORTED_MEDIA_TYPE	415	9c3fb41d-3506-4600-807a-a4f2f88d9a03

SANDBOX – PSD2

API	Funds Confirmation FCS

Service	Description	Response	X-Request-Id
/v1/funds-confirmations	BAD REQUEST	400	80926360-a918-491a-abf0-810fc3d4ff33
/v1/funds-confirmations	BAD REQUEST	400	ed7b8905-35cd-412d-a206-028c4b5a08f1

SANDBOX – PSD2

APIs	Generic X-Request_Id

Descripción	Response	X-Request-Id
OK	200	0470df9f-600d-48c3-be03-52589a931c25
CREATED	201	17a4cc34-7f86-436f-82db-c3eddd156b78
ACCEPTED	202	2db45ecd-4a6b-4b35-a7b6-68021a9a4548
NO CONTENT	204	f2720bac-a413-4fe0-9e38-d03df438d49d
BAD REQUEST	400	ebec43de-fe98-452b-be59-b0144cf7fc09
UNAUTHORIZED	401	f70e6efe-e5dc-4041-836c-920fb4f41450
FORBIDDEN	403	a7014484-126a-43bf-b584-9a52f20e709d
NOT FOUND	404	4700f55a-ee06-401d-bbad-a5b40cf0a002
METHOD NOT ALLOWED	405	21769171-6b01-47ed-8e3a-624ccaac9c27
NOT ACCEPTABLE	406	ac98fbb7-d95b-4b6b-b8cf-4dcbc3a3943c
REQUEST TIMEOUT	408	3974e113-2de7-4888-b1d2-905f6cd46272
UNSOPPORTED MEDIA TYPE	415	9c3fb41d-3506-4600-807a-a4f2f88d9a03
TOO MANY REQUEST	429	46ccab24-17e6-4f7a-b1c5-13368e82f170
INTERNAL SERVER ERROR	500	e04e0ef1-143b-4041-bf0e-80b7c3747885
SERVICE UNAVAILABLE	503	7c121fec-79f2-4844-b095-e72bc3caebc5