

**KH PSD2 OPEN BANKING
&
THIRD PARTY PROVIDERS

INTEGRATION GUIDE**

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Introduction

Open Banking is the result of a regulation introduced by The Competition & Markets Authority. It will deliver a platform for greater competition and choice for customers. It will enable personal and business customers to share their data securely with banks and third parties, allowing them to compare products, initiate payments and request account information. The data is shared via Application Programming Interfaces (APIs).

If you are an authorised Third-Party Provider (TPP) by the FCA please use the following links to access our dedicated Open Banking portals.

1. Onboarding Process

a. Sandbox

You must be enrolled and registered on the Open Banking directory to participate securely within the Open Banking ecosystem.

We currently support Dynamic registration processes. Request details could be found in above open-id configuration well known endpoint. Please request your KH secure details by using contact details in part 8.

Well-known Endpoint -> <https://aspsp.kleinworthambros.com/oauth/v1/.well-known/openid-configuration>

Dynamic Registration -> <https://sandbox.kleinworthambros.com/auth/api/reg>

KH Secure access link -> <https://ebanking-test.kleinworthambros.com>

b. Production

You must be integrated with our sandbox environment before enrolling in production.

Well-known Endpoint -> <https://openbanking.kleinworthambros.com/oauth/v1/.well-known/openid-configuration>

Dynamic Registration -> <https://obapi.kleinworthambros.com/auth/api/reg>

KH Secure access link -> <https://ebanking.kleinworthambros.com>

2. Access Links

a. Sandbox

This will allow you to perform some early integration and technical Proof-Of-Concept, without the need to request connectivity to the live APIs.

Token	https://sandbox.kleinworthambros.com/auth/api/token
Assets	https://sandbox.kleinworthambros.com/accounts/open-banking/v3.1/aisp
Payments	https://sandbox.kleinworthambros.com/payments/open-banking/v3.1/pisp
CBPII	https://sandbox.kleinworthambros.com/cbpii/open-banking/v3.1/cbpii
Authorization	https://aspsp.kleinworthambros.com/aspsp/authorize

b. Production

Token	https://obapi.kleinworthambros.com/auth/api/token
Assets	https://obapi.kleinworthambros.com/accounts/open-banking/v3.1/aisp
Payments	https://obapi.kleinworthambros.com/payments/open-banking/v3.1/pisp
CBPII	https://obapi.kleinworthambros.com/cbpii/open-banking/v3.1/cbpii
Authorization	https://openbanking.kleinworthambros.com/aspsp/authorize

3. End Points

a. Accounts and Transactions API

The Account and Transaction API is intended to give a third party, upon consent of the owning customer, access to product, service and transaction information relating to that account such that they may provide the customer with value-adding products or services.

i. Account-access-consents	POST /account-access-consents GET /account-access-consents/{ConsentId} DELETE /account-access-consents/{ConsentId}
ii. Accounts	GET /accounts GET /accounts/{AccountId}

iii. Balances	GET /accounts/{AccountId}/balances
iv. Transactions	GET /accounts/{AccountId}/transactions
v. Beneficiaries	GET /accounts/{AccountId}/beneficiaries
vi. Direct Debits	GET /accounts/{AccountId}/direct-debits
vii. Standing Orders	GET /accounts/{AccountId}/standing-orders
viii. Scheduled Payments	GET /accounts/{AccountId}/scheduled-payments

b. Payments Initiation

The payment initiation API enables any third party, registered as an approved Payment Initiation Service Provider (PISP) with Open Banking, to provision secure payments on behalf of our customers. The payment, once approved and authorised by the customer, is submitted for processing.

We currently support the submission of domestic and international payments from our customer’s UK personal and business current accounts.

i. Domestic Payments	POST /domestic-payment-consents GET /domestic-payment-consents/{ConsentId} GET /domestic-payment-consents/{ConsentId}/funds-confirmation POST /domestic-payments GET /domestic-payments/{DomesticPaymentId}
ii. Domestic Scheduled Payments	POST /domestic-scheduled-payment-consents GET /domestic-scheduled-payment-consents/{ConsentId} POST /domestic- scheduled-payments GET /domestic-scheduled-payments/{Domestic ScheduledPaymentId}
iii. International Payments	POST /international-payment-consents GET /international-payment-consents/{ConsentId} GET /international-payment-consents/{ConsentId}/funds-confirmation POST /international-payments GET /international-payments/{InternationalPaymentId}

MjI0TDJWdUx5SXNJbk52Wm5SM1IYSmxYM0psWkdseVpXTjBYM1Z5YVhNaU9sc2lhSFlwY0hNNkx5OTNkM2N1YTJ4bGFXNTNiM0owYUdGdFlu
SnZjeTVqYjIwldpXNHZJbDBzSW5OdIpuUjNZWEpsWDNKdmJHVnpJanBiSWtGSIUxQWYU3dpYjNkBlIXNBjMkYwYVc5dVgyTnZiWEJsEdWdWR
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JNklqQXdNVFU0TURBd01ERKIVVvK6UTBGQldDSXNJbTI5WjE5dVIXMWxJam9pVTBjZ1MyeGxhVzUzYjNkMEIFaGhiV0p5YjJNNZ1FtRnVheUJNYVcx
cGRHVmtJaXdpYjNkblgyTnZibJJoWTNSeklqcGJleUp1WVcxblq2IRblZ6YVc1bGMzTWIMQ0psYldGcGJDSTZJa3RJTfVODmJXMWxjbU5wWVd3d
FZHVmhiVUjYykdWcGJuZHjblJvWVcxaWntOXpMbU52YINJc0luQm9iMjVsSWpvaU1ESXdOelU1TnpNd01EQWIMQ0owZVhCbElqb2IRblZ6YVc1
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5Sb1IXMWljbTI6TG1OdmJTSXNJbkJvYjI1bElqb2INREI3TnpVNU56TXdNREFpTENKMGVYQmxJam9pVkdWamFHNXBZMkZzSW4xZEXdSnZjbWRm
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SMGNITTZMeTkzZDNjdWEyeGxhVzUzYjNkMGFHRnRZbkp2Y3k1amlyMHZaVzR2SWI3aWMyOW1kSGRoY21WZmRHOXpYM1Z5YVNVJNklitaDBkS
EJ6T2k4dmQzZDNMbXRzWlDsdWQyOXlkr2hoYldKeWlZTXVZMjI0TDJWdUx5SXNJbk52Wm5SM1IYSmxYMjI1WDJKbGFHRnNabDI2Wmw5dmNt
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iZ3N3eVRMbHBHS2VEa3JoU0FjU3piS3dKRC1Ea0NHQ3NkaDRyZfliOE5kM1FNbHA3cGNnc1VzQzZ4aUwzTW5RdkMzRUZ0X3dJQIJTemRpNVg4T
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e. API Response Codes

200	OK
201	Created
204	No Content
400	Bad Request (Standard Error Codes to be found in R/W Data API Specification -v3.1)
401	Unauthorized
403	Forbidden
405	Method Not Allowed
406	Not Acceptable
429	Too Many Requests
500	Internal Server Error
503	Service Unavailable

4. Test Data

All the relevant test data / test clients will be provided to TPP's once they are onboarded to test the Sandbox.

- Test Clients
- Test Accounts
- Test Beneficiaries
- Remaining test data like transactions, statements...etc
- TPPs will need to activate KH secure application using test client credentials (see part 6).

5. Activating KH Secure application for OTP

TPP needs to activate KH secure application by using test client UserID and Password:

- Download the application:
<https://play.google.com/store/apps/details?id=com.kleinworthambros.khsecure&hl=en>

<https://itunes.apple.com/gb/app/kh-secure/id1407876284>

- Install application
- Accept access requests
- Access eBanking test page:
<https://ebanking-test.kleinworthambros.com>
- Log-in using credentials provided
- Follow instruction on screen and on the app (includes scanning 2 images)
- Create access PIN/Biometric security for the app
- App can be used now to generate OTP/PAC

6. Limited Functionality

- We do not support internal transfers until further notice

7. Contact Details

E – mail: openbankingsupport@kleinworthambros.com

NAME	ROLE	PHONE	E-MAIL
PAULAUSKAS Linas	Primary Technical Contact	+442075973395	linas.paulauskas@kleinworthambros.com
LI Xiang	Technical Business Analyst	+442075973006	xiang.li@kleinworthambros.com
KANANATA Ravi	IT Project Manager	+442075973012	ravi.kananata@kleinworthambros.com
RUPARELIA Amit	Project Manager	+442075973245	amit.ruparelia@kleinworthambros.com