

LLOYDS BANKING GROUP OPEN BANKING API IMPLEMENTATION VARIATIONS GUIDE

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1 INTRODUCTION

1.1 BACKGROUND

There is currently no standardised way for ASPSPs to communicate the differences in ASPSP implementations.

This covers both:

- · Differences in on-boarding and directory interactions
- Differences in capability delivered for the Read/Write APIs

The above can generate challenges to TPPs as they will not know:

- What processes to follow in order to onboard with each ASPSP
- Which API endpoints they can call
- What data elements they can receive from different ASPSPs, and for unstructured data what format they receive it

Furthermore, TPPs have different sets of requirements for the Read/Write APIs. This is because of their business models, applications and service offerings. Therefore TPPs need the ability to identify which ASPSP implementations are suitable match to their offerings. This will ensure they can offer a good end user experience.

1.2 PURPOSE OF THIS DOCUMENT

This Implementation Variations Guide outlines the variations in Lloyds Banking Group's Open Banking API endpoint and API response implementation. Information contained within this document aims to make the development of applications by TPPs using Read/Write APIs faster and easier.

2 COMPLETING AN END-TO-END API JOURNEY

This section explains how to on-board onto the Lloyds Banking Group Developer Portal and how to complete an end-to-end API journey. In this instance the example used is an Account Information API journey.

2.1 On-Board onto the Developer Portal

- 1. Log into the Developer Portal by clicking the 'Log in with Openbanking' button on the top right of the portal. You will need to have logon credentials for a company listed on the Open Banking Production Directory. When you log in, your user is placed into a new Developer Organization corresponding to your company (or it will add you to the organization if it already exists).
- 2. To use our APIs, you must have an application, which is effectively a Client ID and Client Secret (these are used to identify who is calling our APIs). To create an application, click on 'Apps' in the menu bar and then click 'Create new App'.
- 3. When creating your new application, give it a name, a description and a redirect URL. You must also provide a Software Statement Assertion (SSA), which can be obtained from the Open Banking Directory. Your SSA will expire 24 hours after it is issued to you, so make sure you create the application when the SSA is still valid. If you use an SSA after it has expired, you will be presented with an error message. Once the application is created, you will be issued a Client ID and Client Secret.
- 4. Now you have an application, you need to subscribe to our APIs. To subscribe, click on 'API Products' in the menu bar and then select the API for each of the brands you wish to subscribe to (e.g. Lloyds Bank), finally click on subscribe and select the application you created in step 3.
- 5. Lloyds Banking Group will now do some checks and either approve or reject the subscription request. You will get an email when this is done.
- 6. When you have the approval email, you can now test the APIs.

2.2 On-BOARD USING DYNAMIC CLIENT REGISTRATION

2.2.1 TPPs using OBIE issued certificates

This section applies to TPPs who are already registered with the OBIE and have a login for the OBIE directory

- 1. Certificate Signing Request (CSR) is needed to generate an SSA. Please refer to the Open Banking documentation on how to create CSRs.
- 2. After creating the CSR, retain the private keys and upload only the CSR to the Open Banking portal to generate the certificates.
- 3. Follow the OBIE Confluence page to generate the SSA link

2.2.2 TPPs using eIDAS certificates

This applies to all TPPs who are not yet registered with OBIE, but are in possession of eIDAS certificates.

1. For those TPPs who are not registered with Open Banking, OBIE has provided APIs to do a soft onboarding, which can be used to generate an SSA which must be used during LBG

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dynamic client registration.

- 2. The SSA is a JSON Web Token (JWT) containing client metadata about an instance of TPP client software. The JWT is issued and signed by the Open Banking Directory.
- The SSA's Lifetime / Validity period is not defined by Open Banking. ASPSPs in the Open Banking ecosystem are required to implement pragmatic time ranges in which to accept an SSA.
- 4. LBG has set the SSA validity to 24 hrs for use in dynamic registration.

The APIs exposed by OBIE to register and generate an SSA are documented here

Please find the below typical steps to register with OBIE through directory services

- 1. Enrol your organization onto the Open Banking Directory through <u>Directory Services 2.0</u>.
- 2. Only TPPs can use this enrolment endpoint, so please set OrganizationType to tpp POST /organization/{OrganizationType}
- Update the business or the technical contacts for the given organization. This is required for the LBG to create an user while creating an application.
 PUT /organization/{OrganizationType}/{OrganizationId}/contact/{ContactType}
- 4. Create a software statement on the directory POST /organization/{OrganizationType}/{OrganizationId}/software-statement
- 5. Update a software statement (if needed) PUT /organization/{OrganizationType}/{OrganizationId}/software-statement
- 6. Upload your eIDAS QSEAL against your organization. If OrganizationCertificateType is set to QWAC or QSEAL then the PEM file should contain a QWAC or a QSEAL certificate respectively. POST/organization/{OrganizationType}/{OrganizationId}/certificate/{OrganizationCertificateType}
- Associate/de-associate a QSEAL certificate with the given software statement PUT/organization/{OrganizationType}/{OrganizationId}/softwarestatement/{SoftwareStatementId}/certificate/{OrganizationAssociativeCertificateType}/{CertificateOrKeyId}
- Generate a Software Statement Assertion for the given SoftwareStatementID (LBG will accept SSAs generated within last 24 hours).
 GET/organization/{OrganizationType}/{OrganizationId}/softwarestatement/{SoftwareStatementId}/software-statement-assertion

If you have any further questions about your enrolment request please contact Open Banking: by emailing servicedesk@openbanking.org.uk

2.3 REGISTER DYNAMICALLY (/REGISTER API)

The /register endpoint should be called with the appropriate request body and appropriate transport certificate.

- 1. The register endpoint accepts a single jws string as its payload body.
- 2. The claims that should form part of the jws body are described by the OBIE dynamic registration data model
- 3. Include the SSA that was acquired from OBIE in the claims of the request object.

- 4. The main validation checks that will be performed on the request object are detailed below
- 5. SSA contained in the request object should be used within 24 hrs of its issue time, when the dynamic registration request is made.
- 6. The scope in the request object should conform to the roles available in the SSA or a subset of them.
- 7. The request object and the SSAs signature will be validated using the appropriate public certificates.
- 8. Distinguished name (certificate subject) of the transport certificate will be validated against the information contained in the SSA.
- 9. The response structure will conform to the OBIE specification as specified in their swagger contract
- 10. The important information from the response that should be retained for future use is the client_id and client_secret.
- 11. All request object validation failures will result in HTTP 400 error with a short description in the body.

2.3.1 Create an application

Follow the below steps to create an application –

curl --request POST \

- --url {secure-domain}/prod01/lbg/dcr-api/v1.0/register \
- --header 'accept: application/json' \
- --header 'content-type: application/jose' \
- --data 'request object in jws format' \
- --key ./private-cert.key \
- --cert ./public-cert.pem \
- --cacert ./root-ca.pem

URL

Parameter	Example Value	Description
secure-domain	OB Transport, OBWAC: https://secure- api.lloydsbank.com OBWAC, QWAC: https://secure-api- eidas.lloydsbank.com/	Please refer to the Other Useful Information section for all brand specific domains

Certs

Parameter	Example Value	Description

CACert Combination of Root & Intermediate (Full chain)	Must provide in the request if the QWAC transport certs are being used. However this is optional for the OBWAC, OB Transport.
--	---

Data

Parameter	Example Value	Description
Nested JWS with SSA	Valid JWS token	Construct the request payload as the OBIE Dynamic Client Registration V3.2

2.3.2 Product Auto subscription and auto approval based on TPP role

If dynamic registration response completed successfully, based on the scopes sent in the request object, the appropriate API Products will be auto subscribed and auto approved and will become available for immediate consumption.

2.3.3 Developer portal login for OBIE registered TPPs

TPPs who already have an OBIE directory login will be able to use it to login to the LBG developer portal and view/amend the newly created app using dynamic registration, using the email ID of the first contact inside the SSA, which was used during dynamic registration.

2.4 OTHER USEFUL INFORMATION

1. Access our consent domains from browser:

https://authorise.lloydsbank.co.uk/ib/pb/cwa/404

https://authorise.halifax-online.co.uk/ib/pb/cwa/404m

https://authorise.bankofscotland.co.uk/ib/pb/cwa/404

https://authorise.mbna.co.uk/ib/pb/cwa/404

Our APIs themselves all sit behind the following domains – these are over MA-TLS – so we
would like you to try presenting your OB-signed client cert against these to validate the SSL
handshake is working as expected (e.g. by using an appropriate openSSL command, in
chrome etc.).

https://secure-api.lloydsbank.com

https://secure-api.halifax.co.uk

https://secure-api.bankofscotland.co.uk

https://secure-api.mbna.co.uk

Our APIs themselves all sit behind the following domains – these are over MA-TLS – so you
will be required to present your eIDAS QWAC client cert against these to validate the SSL
handshake is working as expected (e.g. by using an appropriate openSSL command, in
chrome etc.).

https://secure-api-eidas.lloydsbank.com/

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https://secure-api-eidas.halifax.co.uk/

https://secure-api-eidas.bankofscotland.co.uk/

https://secure-api-eidas.mbna.co.uk/

The list of supported QTSPs is available in the OBIE Transparency Calendar –

https://openbanking.atlassian.net/wiki/spaces/AD/pages/1130594843/Lloyds+Bank+PLC

4. Discovery Endpoints (OBIE)

https://authorise-api.lloydsbank.co.uk/prod01/channel/lyds/.well-known/openid-configuration https://authorise-api.halifax-online.co.uk/prod01/channel/hfx/.well-known/openid-configuration https://authorise-api.bankofscotland.co.uk/prod01/channel/bos/.well-known/openid-configuration

https://authorise-api.mbna.co.uk/prod01/channel/mbn/.well-known/openid-configuration

5. Discovery Endpoints (eIDAS)

https://authorise-api.lloydsbank.co.uk/prod01/channel/lyds/eidas/.well-known/openid-configuration

https://authorise-api.halifax-online.co.uk/prod01/channel/hfx/eidas/.well-known/openid-configuration

https://authorise-api.bankofscotland.co.uk/prod01/channel/bos/eidas./well-known/openid-configuration

https://authorise-api.mbna.co.uk/prod01/channel/mbn/eidas/.well-known/openid-configuration

"token_endpoint_auth_methods_supported": ["client_secret_basic"]

Please note that as part of token end point call, the Client ID should not be populated in the body of the request.

- 6. We do not support refresh tokens.
- 7. Hybrid Flow support is optional in the OB Security Profile. Please note that we support OIDC non-hybrid flow.
- 8. Lloyds Banking Group's Public Keys are available at the Keystore set up by Open Banking
- All APIs are secured with TLS Mutual Authentication where Certs are signed by Open Banking CA.
- 10.We do not support JWS client assertion. Please use your client ID and client secret in the basic auth header.
- 11. Nonce String Limit: When submitting an AISP or PISP request, the maximum length a nonce string can be is 100 characters. Beyond this, the consent will not be activated.
- 12. As part of our implementation we support registration of an application with multiple Oauth redirect URLs. TPPs can register multiple redirect URLs when creating an application on the Developer Portal, however once an application has been created and the Client ID and Client Secret generated it cannot be amended and additional redirect URLs cannot be added.
- 13. For digital signatures we will support PS256 from 13th March 2019 as well as maintaining support for RS256, please see Discovery Endpoints for more information. The digital

signatures generated by LBG will only use PS256.

14. App to App makes use of a different authorisation endpoint to that of the authorization_endopint URI detailed in the well-known discovery endpoint. For relevant details see sections 6.2, 7.2 & 8.

2.5 TESTING THE ACCOUNT INFORMATION APIS

1. Set up Client Credentials Token

In this step you (the AISP) obtain an Access Token using a Client Credentials Grant Type. When an Access Token expires, you will need to re-request for another Access Token. curl -k -X POST \

- --key ./private-cert.key \
- --cert ./public-cert.pem \
- --cacert ./ca-cert.pem \
- --url {secure-domain}/prod01/lbg/lyds/oidc-api/v1.1/token \
- --header 'accept: application/json' \
- --header 'cache-control: no-cache' \
- --header 'content-type: application/x-www-form-urlencoded' \
- --data 'grant_type=client_credentials&client_id=c1d81a9a-609a-47be-9363-8fa038b987da&client_secret=qJ4dE5yO6xK2oM0fQ5wR0tF4kV0uL4xR5kO6dB7dJ4iU7qI0yB&s cope=accounts'

URL

Parameter	Example Value	Description
secure-domain	OB Transport, OBWAC: https://secure- api.lloydsbank.com OBWAC, QWAC: https://secure-api- eidas.lloydsbank.com/	Please refer to the Other Useful Information section for all brand specific domains

Certs

Parameter	Example Value	Description
CACert	Combination of Root & Intermediate	Must provide in the request if the QWAC transport certs are being used. However this is optional for the OBWAC, OB Transport.

Data

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Parameter	Example Value	Description
grant_type	client_credentials	The grant type being requested
client_id	c1d81a9a-609a-47be-9363- 8fa038b987da	The Client ID of your application registered in the developer portal
client_secret	qJ4dE5yO6xK2oM0fQ5wR0tF 4kV0uL4xR5kO6dB7dJ4iU7ql0 yB	The Client Secret of your application registered in the developer portal
scope	accounts	The scope being requested

2. Invoke the Account Request API

Using the Access Token obtained in the previous step, invoke the Accounts API. curl -k -v --request POST $\$

- --key ./private-cert.key \
- --cert ./public-cert.pem \
- --cacert ./root-ca.pem \
- --compressed \
- --url <u>{secure-domain}/prod01/lbg/lyds/open-banking/v2.0/account-requests</u> {secure-domain}/prod01/lbg/lyds/open-banking/v3.1/aisp/account-access-consents \
- --header 'authorization: Bearer

AAIkMDM5NDJmZTUtOGNiMi00NzVmLWIwMTItNDgyZjM0ZTExYzI5ujAPRjg9HCsXYdEx15e-1h8ZdUQvTtl2Q3lkxQl3tv3n1zVlTnK0jbC1xzhnx6XRH7KBbLCr8qzYUBN0pGDSjdKGgYfFw5om5YFzRrq7j4I8_b6KSlgZ1F4Cs7SvpLLJmHSKL0tGPIA0VSsaAyHilg'\

- --header 'content-type: application/json; charset=UTF-8' \
- --header 'x-fapi-customer-ip-address: REPLACE_THIS_VALUE' \
- --header 'x-fapi-customer-last-logged-time: REPLACE_THIS_VALUE' \
- --header 'x-fapi-financial-id: REPLACE_THIS_VALUE' \
- --header 'x-fapi-interaction-id: REPLACE_THIS_VALUE' \
- --header 'x-jws-signature: REPLACE_THIS_VALUE' \
- --data '{"Data":{"Permissions":["ReadBeneficiariesBasic"],"ExpirationDateTime":"2018-08-28T15:39:19.515Z","TransactionFromDateTime":"2016-04-

 $02T11:59:32.044Z", "TransactionToDateTime": "2017-07-16T17:59:09.521Z"\}, "Risk": \{\}\}' = (1.59) + (1.$

URL

Parameter	Example Value	Description
secure-domain	OB Transport, OBWAC: https://secure- api.lloydsbank.com OBWAC, QWAC: https://secure-api- eidas.lloydsbank.com/	Please refer to the Other Useful Information section for all brand specific domains

Headers

Parameter	Example Value	Description
authorization	Bearer AAIkMDM5NDJmZTUtOGNiMi00NzVmL WIwMTItNDgyZjM0ZTE	The access token obtained in step 1

Certs

Parameter	Example Value	Description
CACert	Combination of Root & Intermediate	Must provide in the request if the QWAC transport certs are being used. However this is optional for the OBWAC, OB Transport.

Body

Parameter	Example Value	Description
data	{"Data":{"Permissions":["ReadBeneficiarie sBasic"],"ExpirationDateTime":"2010-08-28T15:39:19.515Z","TransactionFromDat eTime":"2016-04-02T11:59:32.044Z","TransactionToDateTime":"2017-07-16T17:59:09.521Z"},"Risk":{}}	The permissions being requested

Please refer here for a full list of the allowed permissions.

Take note of the AccountRequestID in the response data. This is required in the next step.

3. Authorize Consent

In this step, you create the authorization request (using a signed JWT request containing the AccountRequestId as a claim) for the customer to consent to the account request directly with the ASPSP. Hybrid Flow support is optional in the OB Security Profile. Please note that we support OIDC non-hybrid flow (requesting for 'code' as the response type only).

Using a web browser, invoke the URL below to emulate the customer giving consent (changing the values as required).

Please note for App to App the below consent URI differs. For relevant details see sections 6.2, 7.2 & 8.

https://authorise-api.lloydsbank.co.uk/prod01/lbg/lyds/oidc-

api/v1.1/authorize?response_type=code&client_id=c1d81a9a-609a-47be-9363-

8fa038b987da&state=123456&scope=openid%20accounts&redirect_uri=https://example.com/redirect&nonce=4987594875485-

j&request=eyJhbGciOiJSUzI1NilsImtpZCI6Ikd4bElpd2lhblZxc0R1dXNoZ2pFME9UVXhPVGsifQ.ey Jpc3MiOiJodHRwczovL2FwaS5hbHBoYWJhbmsuY29tliwiYXVkljoiczZCaGRSa3F0MylsInJlc3Bvb

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nNIX3R5cGUiOiJjb2RIIGlkX3Rva2VuliwiY2xpZW50X2lkljoiczZCaGRSa3F0MylsInJIZGlyZWN0X3 VyaSl6Imh0dHBzOi8vYXBpLm15dHBwLmNvbS9jYiIsInNjb3Blljoib3BlbmlkIHBheW1lbnRzIGFjY29 1bnRzliwic3RhdGUiOiJhZjBpZmpzbGRrailsIm5vbmNlljoibi0wUzZfV3pBMk1qliwibWF4X2FnZSI6O DY0MDAsImNsYWltcyl6eyJ1c2VyaW5mbyl6eyJvcGVuYmFua2luZ19pbnRlbnRfaWQiOnsidmFsd WUiOiJ1cm46YWxwaGFiYW5rOmludGVudDo4ODM3OSIsImVzc2VudGlhbCl6dHJ1ZX19LCJpZF 90b2tlbil6eyJvcGVuYmFua2luZ19pbnRlbnRfaWQiOnsidmFsdWUiOiJ1cm46YWxwaGFiYW5rOmlu dGVudDo4ODM3OSIsImVzc2VudGlhbCl6dHJ1ZX0sImFjcil6eyJlc3NlbnRpYWwiOnRydWUsInZhb HVlcyl6WyJ1cm46b3BlbmJhbmtpbmc6cHNkMjpzY2EiLCJ1cm46b3BlbmJhbmtpbmc6cHNkMjpjYS JdfX19fQ.ehVeTgyYW7w9Gbbwp53h5J-

yghKc_KV3XU8vSkioJEiTRHj4dUmvjlleLb7GcohKBI7wHULjQjRTam1Zds_WAtiH2bk86YNQalzf9mt3SVzpIdtCaJdGiMYkD7ePf2mKDDluSH_HWgiLzy-B5diH-5JKtwHVMmxoaLbG4lzoCdo

URL Parameters

Parameter	Example Value	Description
response_type	code id_token	The OAuth flow type being used
client_id	c1d81a9a-609a-47be-9363-8fa038b987da	The Client ID of your application registered in the developer portal
state	12345	The state as specified by the TPP
scope	openid accounts	The scope being requested
redirect_uri	https://example.com/redirect	The redirect URL of the application registered in the developer portal. This must match the redirect URL from your software statement on the Open Banking Directory.
nonce	4987594875485-j	The nonce as specified by the TPP
request	eyJhbGciOiJSUzI1NilsImtpZCI6lkd4bElpd 2lhblZxc0R1dXNoZ2pFME9UVXhPVGsif Q.eyJpc3MiOiJodHRwczovL2FwaS5hbHB oYWJhbmsuY29tliwiYXVkljoiczZCaGRSa 3F0MylsInJlc3BvbnNlX3R5cGUiOiJjb2RII GlkX3Rva2VuliwiY2xpZW50X2lkljoiczZCa GRSa3F0MylsInJlZGlyZWN0X3VyaSI6lm h0dHBzOi8vYXBpLm15dHBwLmNvbS9jYi IsInNjb3BIljoib3BlbmlkIHBheW1lbnRzIGFj Y291bnRzliwic3RhdGUiOiJhZjBpZmpzbG RrailsIm5vbmNlljoibi0wUzZfV3pBMk1qliw ibWF4X2FnZSI6ODY0MDAsImNsYWltcyl 6eyJ1c2VyaW5mbyl6eyJvcGVuYmFua2lu Z19pbnRlbnRfaWQiOnsidmFsdWUiOiJ1c m46YWxwaGFiYW5rOmludGVudDo4OD M3OSIsImVzc2VudGlhbCI6dHJ1ZX19LC JpZF90b2tlbil6eyJvcGVuYmFua2luZ19pb nRlbnRfaWQiOnsidmFsdWUiOiJ1cm46Y	This is an OIDC request object containing a claim identifying the accounts that needs to be authorized. To modify it to support your test scenario use the debugger at https://jwt.io

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Parameter	Example Value	Description
	WxwaGFiYW5rOmludGVudDo4ODM3OSI slmVzc2VudGlhbCl6dHJ1ZX0sImFjcil6ey Jlc3NlbnRpYWwiOnRydWUsInZhbHVlcyI 6WyJ1cm46b3BlbmJhbmtpbmc6cHNkMjp zY2EiLCJ1cm46b3BlbmJhbmtpbmc6cHN kMjpjYSJdfX19fQ.ehVeTgyYW7w9Gbbwp 53h5J- yghKc_KV3XU8vSkioJEiTRHj4dUmvjlleLb 7GcohKBI7wHULjQjRTam1Zds_WAtiH2b k86YNQalzf9mt3SVzpIdtCaJdGiMYkD7e Pf2mKDDluSH_HWgiLzy-B5diH- 5JKtwHVMmxoaLbG4lzoCdo	

Follow the UI flow and at the end of the flow take note of the authorization code and id token appended to the URL (e.g.

https://example.com/redirect?code=xxxxxxxxxxxx&id_token=xxxxxxxxxxx).

4. Validate the c_hash and the s_hash of the ID Token

At this point, you will now introspect the ID Token and use it as a detached signature to check:

- The hash of the Authorization Code to prove it hasn't been tampered with during redirect (comparing the hash value against the c_hash attribute in ID Token)
- The hash of the state to prove it hasn't been tampered with during redirect (comparing the state hash value against the s_hash attribute in the ID Token)

Also validate the signatures using the Lloyds Banking Group public key obtained from the OBIE.

5. Get the Access Token required to access the Account

Following the OAuth2.0 protocol, you now exchange the access code for the access token required for step 6.

curl -k -v -u <client_id>:<client_secret> \

- --key ./22uobbpbcf1ztrsvxfoaj4.key \
- --cert ./22uobbpbcf1ztrsvxfoaj4_open_banking_test_issuing_ca_.pem \
- --compressed \
- -X POST \

-d

'grant_type=authorization_code&redirect_uri=https://example.com/redirect&code=gktvoeyJlbm MiOiJBMTI4Q0JDLUhTMjU2liwiYWxnIjoiUINBMV81liwia2lkIjoicTQtMjAxNy1tMi1ib3MifQ.cB1t7 tqgnQ_5Mu0XH2yR3oPfF_8HgrHi7uVSZY67Z77Qu-8K9c_6FVASDyoa-

9O0Yi5fXqKMua_FrGveJ1Jur715HNqVaVPrR9v1M3akH8J92Af7nxED1R3647jKeftBkvy89h58 98Aexa6q1nMAsFL9N0W-

5239ztqzNY00Qys4EfqEdKyyUZYvTRcgg0Z8Snw9c4_J48twgHY4DLl5DvGjekPPILCEe-YebWgIUcb21z8JCudJKFnvQoZNryiT0oYbBeuu_7IVAUzJPvG5KiicnczWssgGX2WRTAj2-i6OGVcOcRpjcdE0RNKLwbBC2q9-

HiD9_plMr5VjrkFn9A.9JwONmpP8iZKJh4sXdOskw.3cr4SulCTjU0tSzMrvp3K4zfbJ6t4bXkaq6v9V-qvnnkGg7Pm8Vwfi906kALBpL3m5FKh19XV1mL7miQonlgRXbeHehkmG7IU-dXmq-suJnb-y4WCSFkHhZDYh2wsxDVY_l9BRZOyknSPjqdorlnwOnZRU0PALwPWhBB3BQFrRxaNLIAETvqjMMmTZssadVt9lZ10DFbflsGIE78B8pkg-

hoHdmFpXVCadnq8JgKi8knwKmUJ6bZqyfZbyR2isXvIAc5Bx1C5VK7png2fw0nPTUBt7H9euU2qv-

UsKo6OInJeDwHpxkQDFM8GFZyMOXyjEae6Zozj4pXAyHAmdKfFwy1Kbv2jyUXq4FCeQHphII4wKvhgSNOVvA_asOExj8DIGPalgzphMKseXmKTzWMpv3gRsmIGdZvH7IMhGsq7EZnlheYW

UK3fMymJCQXu7jzEBP7DsJfNsCG6S9yG8Aih72_mrAvXjXEU_pqqbL6d8gWJJ4mnwlln-VxBxyO0M759VNgTw4tP93rNAjiPmJGwHQrtBxmg5lR-ET2oxTF_LyZWYFyVmIOiEPwabfvTrZxpcdwTRJK_mXfYGeWABxEZZXIZE7pWHoxusxRdnylen4s35MHcZjWjCa8DddglkngYAF8l6otGyeuRZqHN6cu32uH5zHx9Z7E_rZmXT3h_uu9QK-lfhllaCr8OWMOrDOL.0HPU-Bu1wR8RYCq-5QV0tQ'\{secure-domain}/prod01/lbg/lyds/oidc-api/v1.1/token

URL

Parameter	Example Value	Description
secure-domain	OB Transport, OBWAC: https://secure- api.lloydsbank.com OBWAC, QWAC: https://secure-api- eidas.lloydsbank.com/	Please refer to the Other Useful Information section for all brand specific domains

Certs

Parameter	Example Value	Description
CACert	Combination of Root & Intermediate	Must provide in the request if the QWAC transport certs are being used. However this is optional for the OBWAC, OB Transport.

Body

Parameter	Example Value	Description
client_id	c1d81a9a-609a-47be-9363-8fa038b987da	Client ID of your application registered in the developer portal
client_secret	qJ4dE5yO6xK2oM0fQ5wR0tF4kV0uL4xR 5kO6dB7dJ4iU7qI0yB	Client Secret of your application registered in the developer portal
grant_type	authorisation_code	The grant type being requested
redirect_uri	https://example.com/redirect	The redirect URL which must match that of the application registered in the developer portal
code	gktvoeyJlbmMiOiJBMTI4Q0JDLUhTMjU2I iwiYWxnIjoiUINBMV81Iiwia2lkIjoicTQtMjA xNy1tMi1ib3MifQ.cB1t7tqgnQ_5Mu0XH2y R3oPfF_8HgrHi7uVSZY67Z77Qu- 8K9c_6FVASDyoa- 9O0Yi5fXqKMua_FrGveJ1Jur715HNqVaV PrR9v1M3akH8J92Af7nxED1R3647jKeftB	The authorisation code retrieved in step 3

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Parameter	Example Value	Description
	kvy89h5898Aexa6q1nMAsFL9N0W- 5239ztqzNY00Qys4EfqEdKyyUZYvTRcgg 0Z8Snw9c4_J48twgHY4DLI5DvGjekPPIL CEe- YebWgIUcb21z8JCudJKFnvQoZNryiT0oY bBeuu_7IVAUzJPvG5KiicnczWssgGX2W RTAj2- i6OGVcOcRpjcdE0RNKLwbBC2q9- HiD9_plMr5VjrkFn9A.9JwONmpP8iZKJh4 sXdOskw.3cr4SulCTjU0tSzMrvp3K4zfbJ6t 4bXkaq6v9V- qvnnkGg7Pm8Vwfi906kALBpL3m5FKh19 XV1mL7miQonlgRXbeHehkmG7IU-dXmq- suJnb- y4WCSFkHhZDYh2wsxDVY_I9BRZOykn SPjqdorInwOnZRU0PALwPWhBB3BQFrR xaNLIAETvqjMMmTZssadVt9IZ10DFbflsG IE78B8pkg- hoHdmFpXVCadnq8JgKi8knwKmUJ6bZq yfZbyR2isXvIAc5Bx1C5VK7png2fw0nPTU Bt7H9euU2gy- UsKo6OInJeDwHpxkQDFM8GFZyMOXyj Eae6Zozj4pXAyHAmdKfFwy1Kbv2jyUXq4 FCeQHphII4wKvhgSNOVvA_asOExj8DIG PalgzphMKseXmKTzWMpv3gRsmIGdZv H7IMhGsq7EZnlheYWUK3fMymJCQXu7j zEBP7DsJfNsCG6S9yG8Aih72_mrAvXjX EU_pqqbL6d8gWJJ4mnwlIn- VxBxyO0M759VNgTw4tP93rNAjiPmJGw HQrtBxmg5IR- ET20xTF_LyZWYFyVmIOiEPwabfvTrZxp cdwTRJK_mXfYGeWABxEZZXIZE7pWHo xusxRdnylen4s35MHcZjWjCa8DddglkngY AF8l6otGyeuRZqHN6cu32uH5zHx9Z7E_r ZmXT3h_uu9QK- IfhIIaCr8OWMOrDOL.0HPU- Bu1wR8RYCq-5QV0tQ	

Take note of the access token and ID Token in the response data.

6. Validate the at_hash of the ID Token

At this point, you will now introspect the ID Token and use it as a detached signature to check:

• The hash of the access token to prove it hasn't been tampered with during redirect (comparing the hash value against the at_hash attribute in ID Token)

Also validate the signature of the ID Token using the Lloyds Banking Group public key obtained from the OBIE.

7. Get Accounts

You can use the Access Token to retrieve Accounts (bulk or specific). The following examples are from the Account and Transaction API Specification.

Where the initial Access Token expires, you must obtain a new Access Token (refresh tokens

are not supported).

- curl --request GET \
- --key ./private-cert.key \
- --cert ./public-cert.pem \
- --carcert ./root-ca.pem \
- --compressed \
- --url {secure-domain}/prod01/lbg/lyds/open-banking/v2.0/accounts {secure-domain}/prod01/lbg/lyds/open-banking/v3.1/aisp/accounts \
- --header 'accept: application/json; charset=UTF-8' \
- --header 'authorization: Bearer

gktvoeyJhbGciOiJSUzl1NilsImtpZCl6InE0LTIwMTctbTEtYm9zIn0.eyJpc3MiOiJsbG95ZHMiLCJ wcml2YXRIIjoiQUFJa01ETTVOREptWIRVdE9HTmlNaTAwTnpWbUxXSXdNVEI0TkRneVpqTT BaVEV4WXpJNXFhRWU5Z0RCQnAwbiBRQU9xRXo4Ti16UTYwbUhPOFZHU1BQTGhkajdzY jFMYV9wX05mYmJkSnQySHRZc0QyakRXMHdYaS13ZVhZV2s5aHhPSWZrb0d3dE9OamZo SU56RFMtYWFxLVlhaW10WmFQbDMtd1MzUFdva0l0OG5WZW4wMF81NGczeU1zMEhlMk VhdUVhcEZIX3hTeEFRVGt2Q2NHWnhyRmRaWDVHRm9FUEh3UEFjUnptSWhpZ3NZczNiRn RsWkVmR0V3dURTU1V0SWpRQVAzU1ZNNmJxd1ZJQThab3hwazVvRnptWEJLMUI1dHppS 0pMX0IwN0ZhYldHOE5qaWtUWHREcXFudDNLbVVhNjVac2dGT3BZT2VUQUFXTkdmdnBK MDhZRnV2MnhvOVRjcmRleiYxdjZCSFBaZkdpLW9tMF9BUjk5NnZRSDJqOTZONE5XM0INM 0VIWGpVZG9IMWpoU0ZpcTc4eGhxWXU5MENicHhnSDJ4eng1Y2h6QIN1WHJNaIY2VnVSZ2 ZMMUZoRXNZRjITY1FKQIRuNmIIVjhLODZDQ0RtZGJuZjFGQjVybTNQWkZFdFZid0RCYmhBiter and the property of the propertydmhQeXI4bkp6ei1lZkJnVzBrcWNnIn0.dmev3qQ4I14Vgps9Z7rjAJn31Zsepw8m15GWCqeSHL OvlGvbi2RS_uUdDpKAQg3aUpSvJUbffLP0RfG4RVLIYVI2vPlSKzO9L1eHZj7QM_S7p03g1cX CFowZye8IgWolBsVNd4MOIq9rQWHW3ywrS8Fx9S9tum7wlvn8tqlluQqLRa5coKthWW5uz66M8IHfrigeMCOYWsboG5uF0aKni20C1sLHGFWMDZU1M3n25bV0AZh7INvDoB 7EloIgr8IQiOZj0BSPKNtIDMGTXlixM8uVIW6eUJS3Z9dgvO7' \

- --header 'x-fapi-customer-ip-address: REPLACE THIS VALUE' \
- --header 'x-fapi-customer-last-logged-time: REPLACE_THIS_VALUE' \
- --header 'x-fapi-financial-id: REPLACE_THIS_VALUE' \
- --header 'x-fapi-interaction-id: REPLACE_THIS_VALUE'

URL

Parameter	Example Value	Description
secure-domain	OB Transport, OBWAC: https://secure- api.lloydsbank.com OBWAC, QWAC: https://secure-api- eidas.lloydsbank.com/	Please refer to the Other Useful Information section for all brand specific domains

Certs

Parameter	Example Value	Description
CACert	Combination of Root & Intermediate	Must provide in the request if the QWAC transport certs are being used. However this is optional for the OBWAC, OB Transport.

Headers

Parameter	Example Value	Description
authorization	Bearer gktvoeyJhbGciOiJSUzI1NiIsImtpZCI6InE0 LTIwMTctbTEtYm9zIn0.eyJpc3MiOiJsbG9 5ZHMiLCJwcml2YXRIIjoiQUFJa01ETTVO REptWIRVdE9HTmINaTAwTnpWbUxXSX dNVEI0TkRneVpqTTBaVEV4WXpJNXFh RWU5Z0RCQnAwbjBRQU9xRXo4Ti16UT YwbUhPOFZHU1BQTGhkajdzYjFMYV9w X05mYmJkSnQySHRZcoQyakRXMHdYa S13ZVhZV2s5aHhPSWZrb0d3dE9OamZ oSU56RFMtYWFxLVIhaW1OWmFQbDMt d1MzUFdva0I0OG5WZW4wMF81NGcze U1zMEhlMkVhdUVhcEZIX3hTeEFRVGt2 Q2NHWnhyRmRaWDVHRm9FUEh3UEFj UnptSWhpZ3NZczNiRnRsWkVmR0V3dU RTU1V0SWpRQVAzU1ZNNmJxd1ZJQTh ab3hwazVvRnptWEJLMUI1dHppS0pMX0I wN0ZhYIdHOE5qaWtUWHREcXFudDNL bVVhNjVac2dGT3BZT2VUQUFXTkdmdn BKMDhZRnV2MnhvOVRjcmRlejYxdjZCS FBaZkdpLW9tMF9BUjk5NnZRSDJqOTZ ONE5XM0INMOVIWGpVZG9IMWpoU0Zp cTc4eGhxWXU5MENicHhnSDJ4eng1Y2h 6QIN1WHJNalY2VnVSZ2ZMMUZoRXNZ RjITY1FKQIRuNmIIVjhLODZDQ0RtZGJuZ jFGQjVybTNQWkZFdFZid0RCYmhBdmh QeXI4bkp6ei1IZkJnVzBrcWNnIn0.dmev3q Q4I14Vgps9Z7rjAJn31Zsepw8m15GWCq eSHLOvIGvbi2RS_uUdDpKAQg3aUpSvJ UbffLP0RfG4RVLIYVI2vPISKzO9L1eHZj7 QM_S7p03g1cXCFowZye8IgWolBsVNd4 MOIq9rQWHW3ywrS8Fx9S9tum7wIvn8tq IluQqLRa5c- oKthWW5uz66M8IHfrigeMCOYWsboG5u F0aKni20C1sLHGFWMDZU1M3n25bV0A Zh7INvDoB7EloIgr8IQiOZj0BSPKNtIDMG TXlixM8uVIW6eUJS3Z9dgvO7- LxJrphDeg26ZrYQyMFDxVXjA8VmP2KB OInDggbvLwrHkw	The token obtained in step 4
client_secret	qJ4dE5yO6xK2oM0fQ5wR0tF4kV0uL4xR 5kO6dB7dJ4iU7qI0yB	Client Secret of your application registered in the developer portal

3 ACCOUNT INFORMATION SERVICE APIS: ADDITIONAL INFORMATION

3.1 SPECIFICATION

The OBIE has provided a set of mandatory and optional Account Information specifications for ASPSPs, which can be found here.

Within the AISP API specifications, Lloyds Banking Group supports following types of banking accounts: Current Accounts, Saving Accounts and Credit Card Accounts.

In addition to all **mandatory** AISP API specifications which Lloyds Banking Group has implemented, the following tables show which **optional** Account Information API specifications are currently implemented for each API.

3.1.1 Accounts

Name		Current Accounts*	Saving Credit Card Accounts		Description
	V2.0	V3.1	V3.1	V3.1	
AccountId	√	✓	1	✓	A unique and immutable identifier used to identify the account resource. This identifier has no meaning to the account owner.
Currency	*	*	√	√	Identification of the currency in which the account is held. Usage: currency should only be used in case one account number covers several currencies and the initiating party needs to identify which currency needs to be used for settlement on the account.
AccountType	✓	✓	✓	✓	Specifies the type of account (personal or business).
AccountSubType	✓	✓	✓	✓	Specifies the sub type of account (product family group).
NickName	√	*	√		The nickname of the account, assigned by the account owner in order to provide an additional means of identification of the account.
Account Provides the details to identify an account.					_
SchemeName	✓	✓	✓	✓	Name of the identification scheme, in a coded form as published in an external list.
Identification	✓	√	√	✓	Identification assigned by an institution to identify an account. This identification is known by the account owner.
Name	✓	✓	✓	✓	The account name displayed for different customer segements are given below
					Retail Customers: This will be the

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	name of the person who owns the account.
	Business Customers (O4B): This field will be the legal entity name of the business that owns the account.
	Commercial Clients (CBO): This will be the name that the account holder gave the account when they openned the account.

^{*} This includes Commercial non-Sterling accounts for v3.1.2.

3.1.2 Balances

Name	Currer Accou		Saving Accounts	Credit Card Accounts	Description
	V2.0	V3.1	V3.1	V3.1	•
AccountId	✓	✓	√	~	A unique and immutable identifier used to identify the account resource. This identifier has no meaning to the account owner.
Amount	✓	✓	✓	✓	Amount of money of the cash balance.
Currency	1	*	✓	✓	A code allocated to a currency by a Maintenance Agency under an international identification scheme, as described in the latest edition of the international standard ISO 4217 "Codes for the representation of currencies and funds".
CreditDebitIndicator	✓	✓	✓	✓	Indicates whether the balance is a credit or a debit balance. Usage: a zero balance is considered to be a credit balance.
Type**	✓	✓	✓	✓	Balance type, in a coded form.
DateTime	✓	✓	✓	✓	Indicates the date (and time) of the balance.
CreditLine					Set of elements used to provide details on the credit line.
Included	~	1	1	~	Indicates whether or not the credit line is included in the balance of the account. Usage: if not present, credit line is not included in the balance amount of the account.
Amount	✓	✓	✓	✓	Amount of money of the credit line.

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Currency	1	*	√	√	A code allocated to a currency by a Maintenance Agency under an international identification scheme, as described in the latest edition of the international standard ISO 4217 "Codes for the representation of currencies and funds".
Type**	✓	✓	✓	✓	Limit type, in a coded form.

^{*} This includes Commercial non-Sterling accounts for v3.1.2.

3.1.3 Account Access Consent / Account Requests

Name	Currer Accou	nt	Saving Accounts	Credit Card Accounts	Description
	V2.0	V3.1	V3.1	V3.1	•
ConsentId		✓	✓	✓	Unique identification as
AccountRequestId	✓		✓	✓	assigned to identify the account request resource.
Status	✓	✓	✓	✓	Specifies the status of the account request resource.
CreationDateTime	✓	✓	✓	✓	Date and time at which the resource was created.
StatusUpdateDateTime	✓	✓	✓	✓	Date and time at which the resource status was updated.
Permissions	1	√	√	~	Specifies the Open Banking account request types. This is a list of the data clusters being consented by the PSU, and requested for authorisation with the ASPSP.
ExpirationDateTime	✓	√	√	~	Specified date and time the permissions will expire. If this is not populated, the permissions will be open ended.
TransactionFromDateTime	1	√	✓	~	Specified start date and time for the transaction query period. If this is not populated, the start date will be open ended, and

^{**} Due to High Cost of Credit (HCC) regulatory requirements the 'Available' balance (balance including pending transactions) returned by the /balance endpoint will no longer include the pre-agreed credit (overdraft) the account may have. The 'Available' balance shown to the PSU in the PISP consent journeys will also change in line with these requirements. In addition, to align with our online channels we will be removing the 'Credit' and 'Available' optional fields from the Credit line sub section of the /balance endpoint. These changes will only apply to PCAs and BCAs.

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					data will be returned from the earliest available transaction.
					Specified end date and time for the transaction query period.
TransactionToDateTime	✓	✓	✓	✓	If this is not populated, the end date will be open ended, and data will be returned to the latest
					available transaction.

^{*} This includes Commercial non-Sterling accounts for v3.1.2. Commercial Clients will be presented with applicable Sterling and non-Sterling accounts during authorisation.

3.1.4 Product

Name	Currently Available		Description	
	V2.0	V3.1	·	
AccountId	✓	✓	A unique and immutable identifier used to identify the account resource. This identifier has no meaning to the account owner.	
ProductIdentifier	✓		Identifier within the parent organization for the product. Must be unique in the organization.	
ProductId		✓		
ProductType	✓	✓	Descriptive code for the product category - BCA/PCA	
ProductName	✓	✓	The name of the product used for marketing purposes from a customer perspective i.e. what the customer would recognise	
SecondaryProductIdentifier	✓		Identifier within the parent organization for the product. Must be unique in the organization.	
SecondaryProductId		✓	product. Must be unique in the organization.	
PCA				
ProductDetails		✓		
CreditInterest		✓	Details about the interest that may be payable to the PCA account holders. Provided where applicable.	
Overdraft		✓	Details about overdraft rates, fees & charges. Provided where applicable.	
OtherFeesCharges		√	Contains details of fees and charges which are not associated with either borrowing or features/benefits. Provided where applicable.	
BCA				
ProductDetails		✓		
CreditInterest		√	Details about the interest that may be payable to the BCA account holders. Provided where applicable.	
Overdraft		✓	Details about overdraft rates, fees & charges. Provided where applicable.	

OtherFeesCharges	√	Contains details of fees and charges which are not associated with either borrowing or features/benefits. Provided where applicable.
Other Products		
OtherProductType	✓	Other Product type will contain only Savings accounts. The values returned will be either Personal Savings Account or Business Savings Account.
Name	✓	Long name associated with the product
Description	✓	Description of the Product associated with the account
CreditInterestRate		
TierBandMethod	✓	The methodology of how credit interest is paid/applied. 1. Whole (INWH) - The same interest rate is applied irrespective of the PSA/BSA balance 2. Tiered (INTI) - Interest rates are tiered i.e. increasing rate for each tier as balance increases, but interest paid on tier is fixed for that tier and not on whole balance. 3. Banded (INBA) - Interest rates are banded i.e. increasing rate on whole balance as balance increases.
Calculation Method	✓	Methods of calculating interest.
Destination	✓	Describes whether accrued interest is payable only to the PSA/BSA or to another bank account.
TierValueMinimum	✓	Minimum deposit value for which the credit interest tier applies.
TierValueMaximum	✓	Maximum deposit value for which the credit interest tier applies.
Applicationfrequency	~	How often interest is applied to the PSA/BSA for this tier/band i.e. how often the financial institution pays accumulated interest to the customer's PSA/BSA
DepositInterestAppliedCover age	✓	Amount on which interest is applied
FixedVariableInterestRateTy pe	✓	Type of interest rate i.e. variable
AER	✓	The annual equivalent rate (AER) is interest that is calculated under the assumption that any interest paid is combined with the original balance and the next interest payment will be based on the higher account balance. Overall, this means that interest can be compounded several times in a year depending on the number of times that interest payments are made.

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BankInterestRateType	✓	Interest rate types, other than AER, which financial institutions may use to describe the annual interest rate payable to the PSA/BSA
BankInterestRate (O)	✓	Bank Interest for the PSA/BSA product

3.1.5 Standing Orders

Name	Currently Available		Description	
	V2.0 V3.1			
AccountId	✓	✓	A unique and immutable identifier used to identify the account resource. This identifier has no meaning to the account owner.	
Frequency	✓	✓		
Reference	✓	✓	Unique reference, as assigned by the creditor, to unambiguously refer to the payment transaction.	
FirstPaymentDateTime	✓	✓	The date on which the first payment for a Standing Order schedule will be made.	
FirstPaymentAmount	✓	✓	The amount of the first Standing Order	
Currency	✓	√	A code allocated to a currency by a Maintenance Agency under an international identification scheme, as described in the latest edition of the international standard ISO 4217 "Codes for the representation of currencies and funds".	
NextPaymentDateTime	✓	✓	The date on which the next payment for a Standing Order schedule will be made.	
NextPaymentAmount	✓	✓	The amount of the next Standing Order	
Currency	✓	✓	A code allocated to a currency by a Maintenance Agency under an international identification scheme, as described in the latest edition of the international standard ISO 4217 "Codes for the representation of currencies and funds".	
FinalPaymentDateTime	✓	✓	The date on which the final payment for a Standing Order schedule will be made.	
FinalPaymentAmount	✓	✓	The amount of the final Standing Order	
Currency	✓	✓	A code allocated to a currency by a Maintenance Agency under an international identification scheme, as described in the latest edition of the international standard ISO 4217 "Codes for the representation of currencies and funds".	
StandingOrderStatusCode	✓	✓	Specifies the status of the standing order in code form.	
CreditorAccount			Provides the details to identify the beneficiary account.	

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SchemeName	√	√	Name of the identification scheme, in a coded form as published in an external list.
Identification	✓	✓	Unique and unambiguous identification of the servicing institution.
Name	√	✓	Name of the account, as assigned by the account servicing institution, in agreement with the account owner in order to provide an additional means of identification of the account.

3.1.6 Direct Debits

Name	Currently Available		Description
	V2.0	V3.1	·
AccountId	1	√	A unique and immutable identifier used to identify the account resource. This identifier has no meaning to the account owner.
MandateIdentification	✓	✓	Direct Debit reference. For AUDDIS service users provide Core Reference. For non AUDDIS service users provide Core Reference if possible or last used reference.
DirectDebitStatusCode	✓	✓	Specifies the status of the direct debit in code form.
Name	✓	✓	Name of Service User.
PreviousPaymentDateTime	✓	✓	Date of most recent direct debit collection.
PreviousPaymentAmount	✓	✓	The amount of the most recent direct debit collection.
Currency	√	✓	A code allocated to a currency by a Maintenance Agency under an international identification scheme, as described in the latest edition of the international standard ISO 4217 "Codes for the representation of currencies and funds".

3.1.7 Beneficiaries

Name	Currently Available*		Description
	V2.0	V3.1	•
AccountId	✓	√	A unique and immutable identifier used to identify the account resource. This identifier has no meaning to the account owner.
BeneficiaryId		✓	A unique and immutable identifier used to identify the beneficiary resource. This identifier has no meaning to the account owner. Only available for BACS Beneficiaries.
Reference	~	✓	Unique reference, as assigned by the creditor, to unambiguously refer to the payment transaction.
CreditorAccount			Provides the details to identify the beneficiary account.

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✓	✓	Name of the identification scheme, in a coded form as published in an external list.
✓	✓	Identification assigned by an institution to identify an account. This identification is known by the account owner.
		Name of the account, as assigned by the account servicing institution, in agreement with the account owner in order to provide an additional means of identification of the account.
•	•	Usage: The account name is different from the account owner name. The account name is used in certain user communities to provide a means of identifying the account, in addition to the account owner's identity and the account number.
le for BAC	S beneficia	aries)
	✓	Name of the identification scheme, in a coded form as published in an external list
	✓	Unique and unambiguous identification of the servicing institution
	✓	Name by which an agent is known and which is usually used to identify that agent
	✓	Nation with its own government
	✓	Information that locates and identifies a specific address, as defined by postal services, presented in
	✓	e for BACS beneficia

3.1.8 Transactions

Name	Current Accounts*		Saving Accounts	Credit Card Accounts	Description
	V2.0	V3.1	V3.1	V3.1	•
AccountId	✓	✓	✓	✓	A unique and immutable identifier used to identify the account resource. This identifier has no meaning to the account owner.
TransactionReference	✓	√	✓	✓	Unique reference for the transaction. This reference is optionally populated, and may as an example be the FPID in the Faster Payments context.
Amount	✓	✓	✓	✓	Amount of money in the cash transaction entry.
Currency	✓	✓	✓	√	A code allocated to a currency by a Maintenance Agency under an international identification scheme,

					as described in the latest edition of the international standard ISO 4217 "Codes for the representation of currencies and funds".
CreditDebitIndicator	✓	✓	✓	✓	Indicates whether the transaction is a credit or a debit entry.
Status	✓	√	✓	✓	Status of a transaction entry on the books of the account servicer.
					Date and time when a transaction entry is posted to an account on the account servicer's books.
BookingDateTime	✓	✓	√	√	Usage: booking date is the expected booking date, unless the status is booked, in which case it is the actual booking date.
					Date and time at which assets become available to the account owner in case of a credit entry, or cease to be available to the account owner in case of a debit transaction entry.
ValueDateTime	✓	✓	✓	√	Usage: if transaction entry status is pending and value date is present, then the value date refers to an expected/requested value date.
					For transaction entries subject to availability and for which availability information is provided, the value date must not be used. In this case the availability component identifies the number of availability days.
TransactionInformation	✓	✓	✓	✓	Further details of the transaction. This is the transaction narrative, which is unstructured text.
BankTransactionCode					Set of elements used to fully identify the type of underlying transaction resulting in an entry.
Code	✓	✓	✓		Specifies the family within a domain.
SubCode	✓	✓	✓		Specifies the sub-product family within a specific family.
ProprietaryBankTransac	Set of elements to fully identify a proprietary bank transaction code.				
Code	~	✓	✓	✓	Proprietary bank transaction code to identify the underlying transaction.
Issuer	✓	✓	✓	✓	Identification of the issuer of the proprietary bank transaction code.
Balance Set of elements used to define the balance as a numerical					

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				representation of the net increases and decreases in an account after a transaction entry is applied to the account.
Amount	✓	✓	✓	Amount of money of the cash balance after a transaction entry is applied to the account.
Currency	✓	✓	✓	A code allocated to a currency by a Maintenance Agency under an international identification scheme, as described in the latest edition of the international standard ISO 4217 "Codes for the representation of currencies and funds". Indicates whether the balance is a credit or a debit balance. Usage: a zero balance is considered to be a credit balance.
CreditDebitIndicator	~	√	√	Indicates whether the balance is a credit or a debit balance. Usage: a zero balance is considered to be a credit balance.
Туре	✓	✓	✓	Balance type, in a coded form.

^{*} This includes non-Sterling Commercial accounts for v3.1.2.

3.1.9 Statements

	Cı	urrently Ava	ilable	Description		
Name	Current	Savings	Credit Card			
Name	Accounts	Accounts	Accounts	Description		
	V3.1	V3.1	V3.1			
AccountId	✓	✓	✓	A unique and immutable identifier used to identify the account resource. This identifier has no meaning to the account owner.		
StatementId	✓	✓	✓	Unique identifier for the statement resource within a servicing institution. This identifier is both unique and immutable.		
Туре	✓	✓	✓	RegularPeriodic		
StartDateTime	✓	✓	✓	Date and time at which the statement period starts.		
EndDateTime	✓	✓	✓	Date and time at which the statement period ends.		
CreationDateTime	✓	✓	✓	Date and time at which the resource was created.		
StatementDescription	✓	✓	✓	Other descriptions that may be available for the statement resource.		
Statement/File						
AccountId	✓	✓	✓	A unique and immutable identifier used to identify the account resource. This identifier has no meaning to the account owner.		

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StatementId	√	√	✓	Unique identifier for the statement resource within a servicing institution. This identifier is both unique and immutable.
{StatementID}/File	✓	✓	✓	Return a PDF file for a specific StatementID received in the request i.e. application/pdf file

3.1.10 Scheduled-Payments

Name	Currently Available*		Description	
	V2.0	V3.1		
AccountId		✓	A unique and immutable identifier used to identify the account resource. This identifier has no meaning to the account owner.	
ScheduledPayment		✓		
ScheduledPaymentId		✓	A unique and immutable identifier used to identify the scheduled payment resource. This identifier has no meaning to the account owner.	
ScheduledPaymentDateTime		✓	The date on which the scheduled payment will be made.	
ScheduledType		✓	Specifies the scheduled payment date type requested.	
Reference		✓	Unique reference, as assigned by the creditor, to unambiguously refer to the payment transaction.	
Amount		✓	A number of monetary units specified in an active currency where the unit of currency is explicit and compliant with ISO 4217.	
Currency		✓	A code allocated to a currency by a Maintenance Agency under an international identification scheme, as described in the latest edition of the international standard ISO 4217 "Codes for the representation of currencies and funds".	
CreditorAccount			Provides the details to identify the beneficiary account.	
SchemeName		✓	Name of the identification scheme, in a coded form as published in an external list.	
Identification		✓	Unique and unambiguous identification of the servicing institution.	
Name		✓	Name of the account, as assigned by the account servicing institution, in agreement with the account owner in order to provide an additional means of identification of the account.	

^{*} This includes Commercial non-Sterling accounts for v3.1.2.

3.1.11 Offers

	Cı	urrently Avai	ilable	
Name	Current Accounts	Savings Accounts	Credit Card Accounts	Description
	V3.1	V3.1	V3.1	
AccountId			✓	A unique and immutable identifier used to identify the account resource. This identifier has no meaning to the account owner.
OfferId			✓	A unique and immutable identifier used to identify the offer resource. This identifier has no meaning to the account owner.
OfferType			✓	Balance Transfer or Money Transfer
Description			✓	Further details of the offer.
StartDateTime			✓	Date and time at which the offer starts.
EndDateTime			✓	Date and time at which the offer ends.
Rate			✓	Rate associated with the offer type.
Term			✓	Further details of the term of the offer.

3.1.12 **Proprietary Bank Transaction Codes**

Lloyds Banking Group supports the following Proprietary Bank Transaction Codes:

Proprietary Bank Transaction Code	Text Description
DD	Direct Debit
FPI	Faster Payments Inbound
FPO	Faster Payments Outbound
MPI	Mobile Payment In
MPO	Mobile Payment Out
SAL	Salary
ВР	Bill Payments
CHQ	Cheque(s)
CHG	Charge
COR	Correction
DEB	Debit card
SO	Standing Order
BNS	Bonus
BGC	Bank Giro Credit
INT	Interest
CPT	Cashpoint
CSH	Cash

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CSQ	Cash/Cheque(s)
DEP	Deposit
DIV	Dividend
EFT	Electronic Funds Transfer
EUR	Euro Cheque
FE	Foreign Exchange
FEE	Service Fee
LTB	Bank Transfer
MTG	Mortgage payment
NS	National Savings Dividend
NSC	National Savings Certificate
ОТН	Other
PAY	Counter withdrawal
PSB	Premium Savings Bond
PSV	Paysave
SPB	Cashpoint
TC	Trustcard Payment
TD	Transferred
TDG	Transferred Interest Gross
TDI	Transferred Interest
TDN	Transferred Interest Net
TFR	Funds transfer
UT	Unit Trust
СОМ	Commission
IB	Internet Banking
DR	Overdrawn Balance
SDC	Collection Credit
SCR	Refund Debit
SDD	Collection Debit
SDR	Reversal Credit
SUR	Excess Management Reversal

3.2 ACCOUNT INFORMATION API RULES AND EXCEPTIONS

There are a number of important implementation variations relating to our Account Information APIs that TPPs should be aware of. These are listed below:

No.	End Point	Rule / Exception
1	/account/{AccountID}/Transactions	For cheque transactions (identified by Transaction Code "CHQ") that are currently pending, there will be 2 records

		provided to the TPP:
		a "pending" record - for this record LBG will apply the "Value Date" to the "Booking Date" field
		a "booked" record - for this record LBG will apply the "Booking Date" to the "Value Date" field
2	/account/{AccountID}/Transactions	No partial transaction data will be provided to TPPs. Instead the TPP will be sent a 400 response.
	/a account// A account/D)/Transcretions	For combined Cash + Cheque transactions (identified by Transaction Code "DEP") where the cheque amount is currently pending, there will be 2 records provided to the TPP:
3	/account/{AccountID}/Transactions	a "pending" record - for this record LBG will apply the "Value Date" to the "Booking Date" field
		a "booked" record - for this record LBG will apply the "Booking Date" to the "Value Date" field
4	/account/{AccountID}/Product	Lloyds Banking Group have provided supplementary product information and links to Terms and Conditions in the 'Notes' field. This contains important details about conditions that apply to accounts, and about thresholds for credit interest.
	OBReadProduct2/Data/Product/PCA	This data should be published alongside product details to ensure that products are presented clearly and do not mislead customers.
	/account/{AccountID}/Product	Lloyds Banking Group have used optional segments fields
5	OBReadProduct2/Data/Product/PCA	for PCA only to help provide account comparison.
6	/account/{AccountID}/Product	Details of overdrafts will only be published if the customer currently uses the overdraft facility available on
	OBReadProduct2/Data/Product/PCA	their account.
		Lloyds Banking Group have provided supplementary product information in the 'Notes' field. This contains important details about conditions that apply to accounts.
		This data should be published alongside product details to ensure that products are presented clearly and do not mislead customers.
		Please find below the breakdown of the information provided and the section to which it applies:
	/account/{AccountID}/Product	
7		"Please be aware:
	OBReadProduct2/Data/Product/BCA	The information provided reflects a normal Credit Interest arrangement." - Applies to: 'CreditInterest' array.
		 "Overdraft arrangement fees may apply." Applies to: 'Overdraft' array. Due to technical constraints, Lloyds Banking Group are unable to provide account-specific data in relation to Overdraft arrangement fees.

		"The first time you go overdrawn, without an agreed overdraft facility, or exceed your agreed limit with us by £50 or more, you may be charged an Unauthorised Borrowing Fee (UBF) of £15. After that, the UBF is applied every time you increase your unauthorised borrowing by £50 or more from the previous day's closing balance, unless a higher limit is agreed with us or until the account is within its existing limit or in credit." - Applies to: 'Overdraft' array. The above describes additional detail with regards to the application of the "UnauthorisedBorrowing" fee.
		"The Account Monthly Fee provided is the standard value associated with this product." - Applies to: 'OtherFeesCharges' array. - The above relates to the value provided as the "ServiceCAccountFeeMonthly" fee.
8	/account/{AccountID}/Transactions	Lloyds Banking Group will provide "TransactionReference" only for transactions (identified by Transaction Code "FPO") that are currently posted.
9	/account/{AccountID}/Transactions	Though we comply to the full ISO date time formats, Transaction from and to booking dates with time segment set can be subject to date roll which could affect the set of transactions served.
10	/account/{AccountID}/Transactions	Credit cards only: Transactions are returned in a reversed chronological order. However, if the statement is created with payments pending, they will be posted in the following statement period and may appear out of sequence.
11	/accounts/{AccountId}/standing-orders	Standing Orders are not applicable for Commercial Clients. The endpoint will be accessible by TPPs for Commercial Clients and the response will be 201 HTTP status code 200 with blank body.
12	/accounts/{AccountId}/direct-debits	Direct Debits are not applicable for Commercial Clients. The endpoint will be accessible by TPPs for Commercial Clients and the response will be 201 HTTP status code 200 with blank body.
		When a Get beneficiaries call is made the following will be the order of display
		i. Domestic beneficiariesii. International beneficiariesiii. BACS beneficiaries
13	/accounts/{AccountId}/beneficiaries	Domestic beneficiaries will be displayed in one page. When the last domestic beneficiary is displayed or where no domestic beneficiaries are available selection of the next link will display international beneficiaries where available. When the last international beneficiary is displayed or where no international beneficiaries are available selection of the next link will display BACS beneficiaries where available. Once the last record is displayed or where no record is available the next link will not be presented.

		The beneficiaries endpoint response may include the same beneficiary listed under both domestic and BACS beneficiaries for a given Account ID.
14	/accounts/{AccountId}/scheduled-payments	Scheduled Payments endpoint when servicing BACS Scheduled Payments is applicable for Lloyds Bank and Bank of Scotland business accounts only.
15	All endpoints	Option for Lloyds Bank and Bank of Scotland Commercial Clients is only available on v3.1 of all endpoints.

4 CONFIRMATION OF FUNDS SERVICE APIS: ADDITIONAL INFORMATION

4.1 SPECIFICATIONS

The OBIE has provided a set of mandatory and optional confirmation of funds specifications for ASPSPs, which can be found here.

Refer to the request and response structure and data dictionary in OBIE specification, which can be found <u>here.</u>

4.2 FUNDS CONFIRMATION CONSENT

Name	Currently Available	Description
	V3.1	
ConsentId	✓	Unique identification as assigned to identify the funds confirmation consent resource.
CreationDateTime	✓	Date and time at which the resource was created.
Status	✓	Specifies the status of consent resource in code form. - Awaiting Authorisation - Authorised - Rejected - Revoked
StatusUpdateDateTime	✓	Date and time at which the resource status was updated.
ExpirationDateTime	✓	Specified date and time the funds confirmation authorisation will expire. If this is not populated, the authorisation will be open ended.
DebtorAccount	✓	Unambiguous identification of the account of the debtor to which a confirmation of funds consent will be applied.
SchemeName	✓	Name of the identification scheme, in a coded form as published in an external list.
Identification	✓	Identification assigned by an institution to identify an account. This identification is known by the account owner.
SecondaryIdentification	✓	This is secondary identification of the account, as assigned by the account servicing institution. This can be used by building societies to additionally identify accounts with a roll number (in addition to a sort code and account number combination). This field is for Credit Cards only and not for Savings and Current accounts.

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4.3 FUNDS CONFIRMATION

Name	Currently Available	Description
	V3.1	
FundsConfirmationId	✓	Unique identification as assigned by the ASPSP to uniquely identify the funds confirmation resource.
ConsentId	✓	Unique identification as assigned by the ASPSP to uniquely identify the funds confirmation consent resource.
CreationDateTime	✓	Date and time at which the resource was created.
FundsAvailable	✓	Flag to indicate the result of a confirmation of funds check.
Reference	✓	Unique reference, as assigned by the CBPII, to unambiguously refer to the request related to the payment transaction.
InstructedAmount	✓	Amount of money to be confirmed as available funds in the debtor account. Contains an Amount and a Currency.
Amount	✓	A number of monetary units specified in an active currency where the unit of currency is explicit and compliant with ISO 4217.
Currency	√	A code allocated to a currency by a Maintenance Agency under an international identification scheme, as described in the latest edition of the international standard ISO 4217 "Codes for the representation of currencies and funds".

5 PAYMENT INITIATION APIS: ADDITIONAL INFORMATION

5.1 SPECIFICATIONS

The OBIE has provided a set of mandatory and optional Payment Initiation specifications for ASPSPs, which can be found here (v1.1) and here (v3.1).

Our implementation of these APIs supports the following customer segments:

Payment journey	Retail and Business Customers	Commercial Clients
Domestic Single Immediate Payments	v1.1, v3.1	v3.1
Domestic Standing Orders	v3.1	N/A
Domestic Scheduled Payments	v3.1	v3.1
Balance Transfer/Money Transfer – Domestic Single Immediate Payments	v3.1 (Retail Customers)	N/A
Paym – Domestic Single Immediate Payments	v3.1 (Retail Customers)	N/A

5.2 DOMESTIC PAYMENT INITIATION API RULES AND EXCEPTIONS

There are a number of important implementation variations relating to our Payment Initiation APIs that TPPs should be aware of. These are listed below:

No.	Exception	Description	Applicability
1	Enquiry APIs not offered by Lloyds Banking Group on v1.1	Enquiry APIs ('GET /payment', 'GET /payment-submission') are optional as per the OBIE specifications and not implemented by Lloyds Banking Group. TPPs should call the POST endpoints again to enquire on the latest payment status - although use of this workaround is intended only for special cases (basically to be used sparingly).	Not available on Domestic Single Immediate Payments v1.1 Note: Enquiry endpoints are available for Domestic Single Immediate Payments v3.1, Domestic Scheduled Payments v3.1 and Domestic Standing Orders v3.1
2	Data will get truncated where API fields contain more characters than supported by the FPS scheme (ISO8583) format	This would result in the beneficiary bank receiving truncated information. TPPs should be aware and may wish to cater for this in their front-end validation.	Domestic Single Immediate Payments v1.1 Domestic Single Immediate Payments v3.1 Domestic Scheduled Payments v3.1 Domestic Standing Orders v3.1
3	45-minute time limit between payment consent and submission	There is a max time limit of 45 mins for a TPP to complete submission following successful consent. Note: Where a first time submission is recorded within the time limit	Domestic Single Immediate Payments v1.1 Domestic Single Immediate Payments v3.1

		mentioned above, any subsequent	Domestic Scheduled Payments v3.1
		(idempotent) requests will return the status of the first request	Domestic Standing Orders v3.1
4	Payment amount validation	Negative payment amounts are not allowed in any of the Lloyds Banking Group payment requests. Payment amounts are restricted to 2 decimal places. For Balance Transfers and Money Transfers the minimum payment amount is £100. For Paym the minimum payment amount is £1 and the maximum	Domestic Single Immediate Payments v1.1 Domestic Single Immediate Payments v3.1 Domestic Scheduled Payments v3.1 Domestic Standing Orders v3.1
5	Payment request categorisation (risk section)	In order for PISP initiated payments to be processed correctly we require each payment to be categorised as per the OBIE specifications. We strongly advise TPPs to correctly classify payments into the following categories: Ecommercegoods Ecommerceservices PayaPerson v1.1 PayaBill Other (by exception) PartytoParty v3.1 Please note that for Commercial customers, only PayaPerson v1.1 and PartytoParty v3.1 are applicable.	Domestic Single Immediate Payments v1.1 Domestic Single Immediate Payments v3.1 Domestic Scheduled Payments v3.1 Domestic Standing Orders v3.1
6	Special Characters	Characters in String fields are restricted to a specific char set and special characters are not allowed - if received, those chars will not be propagated to onward payment or records.	Domestic Single Immediate Payments v1.1 Domestic Single Immediate Payments v3.1 Domestic Scheduled Payments v3.1 Domestic Standing Orders v3.1
7	UK IBAN / UK BBAN	PISP APIs only support UK IBANs or UK BBANs (if sent via IBAN or BBAN format).	Domestic Single Immediate Payments v1.1 Domestic Single Immediate Payments v3.1 Domestic Scheduled Payments v3.1 Domestic Standing Orders v3.1

8	Supported Standing Order Frequencies	Only the following frequencies are supported by Lloyds Banking Group Domestic Standing orders: • Weekly • Four Weekly • Monthly • Quarterly • Half Yearly • Yearly • Two Monthly	Domestic Standing Orders v3.1 Note: First Payment date and expiry date must have the same day value excluding Weekly and Four Weekly. Example: Frequency: Monthly First Payment date: (26/02/2019) Final Payment date: (26/03/2019) Result: Payment accepted Exception is in place for month end i.e. 31/01/2019 with the next payment date 28/02/2019. This would be an acceptable date.
9	Variable Amounts not supported for Standing Orders	Lloyds Banking Group does not support variable amounts for first and subsequent payments.	Domestic Standing Orders v3.1
10	"Number of Payments" recurrence not supported for Standing Orders	Lloyds Banking Group does not support "no of payments" feature. "End Date" or "Unspecified" are the only acceptable values.	Domestic Standing Orders v3.1
11	Next working day is earliest Standing Order start date	First Payment date is always next working day - i.e. Lloyds Banking Group will not accept Standing orders beginning on the creation date.	Domestic Standing Orders v3.1
12	PAN payment scheme for Balance Transfer and Money Transfer	Lloyds Banking Group supports PAN as a payment scheme for Domestic Single Immediate Payments v3.1	Lloyds Banking Group does not support PAN as a payment scheme for - Domestic Single Immediate Payments v1.1 Domestic Scheduled Payments v3.1 Domestic Standing Orders v3.1
13	Earliest "Payment Instructed" day is next working day for scheduled payments	First Payment date is always next working day - i.e. Lloyds Banking Group will not accept Scheduled Payments beginning on the creation date.	Domestic Scheduled Payments v3.1
14	31 day restriction for Scheduled Payments	As per current Lloyds Banking Group Internet Banking rules, customers can only set Scheduled Payments for up to 31 days in the future.	Domestic Scheduled Payments v3.1
15	Mandatory information for Balance Transfer and Money Transfer payment requests	For Balance Transfers Lloyds Banking Group will need the following mandatory information: Creditor Account - SchemeName as UK.OBIE.PAN	Domestic Single Immediate Payments v3.1

		- Identification/Credit Card number	
		- Name	
		Debtor Account	
		- SchemeName as UK.OBIE.PAN	
		- Identification/Credit Card number	
		- Name	
		RemittanceInformation	
		- Offer code/ID	
		For Money Transfers Lloyds Banking Group will need the following mandatory information:	
		Creditor Account	
		- SchemeName as UK.OBIE.PAN	
		- Identification/Credit Card number	
		- Name	
		Debtor Account	
		- SchemeName as UK.OBIE.PAN	
		- Identification/Credit Card number	
		- Name	
		RemittanceInformation	
		- Offer code/ID	
		The following information is mandatory for Paym transactions:	
		- Creditor scheme should be UK.OBIE.Paym	
	Mandatory	- Creditor identification / mobile number should be a UK mobile number. The following formats are valid:	
16	requirements for Paym transaction	<+44><10 digit number>	Domestic Single Immediate Payments v3.1
	requests	<0044><10 digit number>	
		<44><10 digit number>	
		<0><10 digit number>	
		- Paym is only applicable for Retal Customers and for the 'PartytoParty' context code.	
	Instructed Amount	The value in the instructed amount field must be set to 2 decimal	Domestic Single Immediate Payments v1.1
17	Field	places. Any requests where the instructed amount is set to one character after the decimal point (i.e. 1.1 for a £1.10 payment) will	Domestic Single Immediate Payments v3.1

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	be rejected by Lloyds Banking	Domestic Scheduled Payments v3.1
	Group.	Domestic Standing Orders v3.1

5.3 INTERNATIONAL PAYMENT INITIATION API RULES AND EXCEPTIONS

There are a number of important implementation variations relating to our International Payment Initiation APIs that TPPs should be aware of. These are listed below:

No.	Field	LBG Exception	
1	Creditor Address	Address of the Creditor (payee) is mandatory. Only 3 lines of address will be accepted which must include the country of the Creditor.	
2	Credit Agent Address	2 options are available. Case 1: Where a BIC is available BIC to be sent in Creditor Agent field with a scheme of "UK.OBIE.BICFI". In this case the address of the recipient bank is optional Case 2: Where BIC is not available Creditor Agent Address is mandatory in the following format • 2 lines of address • Town name • Country code All fields are mandatory in this case	
3	Country requirements	Country Type 1: IBAN mandatory country Creditor Account Type must be set to IBAN and Creditor Agent Type must be set to BIC. Creditor Agent should be sent with the scheme as "UK.OBIE.BICFI". TPPs will need to quote a BIC/SWIFT and IBAN when sending International Payments to the following countries: All EU and EEA countries: Albania, Austria, Belgium, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Guernsey, Hungary, Iceland, Republic of Ireland, Italy, Jersey, Latvia, Liechtenstein, Lithuania, Luxembourg, Malta, The Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden and UK and also the following non EU and EEA countries: Andorra, Bahrain, Faroe Islands, Georgia, Gibraltar, Greenland, Isle of Man, Israel, Jordan, Kuwait, Lebanon, Macedonia, Montenegro, Moldova, Monaco, Pakistan, Palestine, Qatar, San Marino, Saudi Arabia, Switzerland, Tunisia, Turkey, and United Arab Emirates. Country Type 2: National clearing code mandatory countries Account number can be in BBAN or SCAN format but Creditor Agent should be sent with the Scheme as "UK.LBG.Clearingcode". The	

		following Clearing codes are expected to be sent for each respective country:
		Australia: Bank-State-Branch (BSB) Code Canada: Canadian Transit Number Hong Kong: Bank Code of Hong Kong India: IFSC - Indian Financial Sys Code New Zealand: New Zealand National Clearing Code South Africa: South Africa National Clearing United States: Fedwire code
		Country Type 3: All other countries (excluding Country Type 1 or 2)
		Creditor Account Type accepted: BBAN, SCAN or IBAN
		Creditor Agent: If IBAN is provided a BIC has to be provided
		Creditor Agent: for BBAN and SCAN scenarios the following is expected:
		 Required in the Parent block - Creditor Agent Name Required lin the Postal Address block: 2 lines of address, Town Name and Country code
		Local instrument: No value is expected in this field for Retail and Business Banking customers
		Creditor Postal Address is mandatory for all country types. Maximum of 3 lines of unstructured address and minimum of 1 line of address is required.
		Curency of Transfer - Validation: Currency of transfer for Retail and O4B should be either GBP or Instructed Amount currency
		Currency of Transfer if GBP: Where currency of transfer is GBP the instructed amount should also be GBP
4	Field level validations	Chargebearer: BornebyCreditor is not supported
		Ratetype: Only "Actual" is supported. However where a payment requires mutliple users to authorise then the rates displayed to the user will be indicative, all other rate types will be rejected for Retail and Business banking customers
		Unit currency is a mandatory field within the exchange rate block. If mentioned it should always be GBP.
		Contract identification is not supported for Retail and Business Banking customers
		For certain countries the purpose or reason for payment is mandatory. TPPs are expected to provide this in the below format only:
		For the following countries Reason for Payment to be provided in a Custom Field under supplementary data in this path - Data.Initiation.Supplementarydata.Purpose
5	Purpose codes	NOTE: Data.Initiation.Purpose as defined in the Specifications will not be used and may lead to rejections. TPPs will need to provide this information in the supplementary data as prescribed below.
		For the following countries – generic countries
		Reason for payment to be chosen from this list. Note: ONLY the R codes should be sent in the supplementary data for the above

		countries. Any other format will be rejected. Correct format – R24; incorrect format – R24 School Fees
		Incorrect format – R24 School Fees Reasoncodes for generic countries (note - text associated with the codes should not be sent) R24 School Fees R27 Inheritance R23 House Purchase Resident R28 Relocation R29 Mortgage payment R16 Salary R01 Charitable Donation R02 Expenses R03 Family maintenance R04 Fx Ccy Non-Res Deposit R05 Fees R06 Gift R07 Holiday R08 Hotel R09 Invoice R10 Loan R11 Medical R12 Own Account Transfer R13 Pension R14 Personal Transfer R15 Rent R17 Tax R18 Wages R20 Commission R21 Purchase of Shares R22 Grant R26 House Purchase Non-Res R25 Other For Jordan and UAE Please refer to the reason codes published here: https://www.bankofscotland.co.uk/onlinebankinghelp/international-payments/help-guidance.html For Jordan only the code should be sent in supplementary data i.e. ACM
		Note any text or other detail in the supplementary data section will be rejected. Spaces between text are not accepted.
		Additionally any Payment reference added under Referenceinformation. Reference will be concatenated with the purpose code provided as above up to a maximum of 35 characters.
6	Reference	Any payment reference provided under Data.Initiation.Referenceinformation.Reference will be truncated to a maximum of 35 characters
7	InstructionPriority	Lloyds Banking Group do not offer Instruction priority for Retail and Business Banking customers. All payments are treated as normal.
8	InstructedAmount	For most currencies i.e. GBP only 2 decimal places are supported. Certain currencies i.e. Kuwati Dinar support up to a maximum of 3 decimal places.

		For Japanese Yen 0 decimal places are supported.	
		We strongly advise TPPs to correctly classify payments into the following categories:	
		BillPayment	
9	PaymentContextCode	EcommerceGoods	
		EcommerceServices	
		Other	
		 PartytoParty 	
		Certain Business banking customers have enabled Multi Party authorisation and hence TPP should mention if they are happy to continue with the journey using the OBAuthorisation1 data element.	
10 Multi Party Authorisation		For International Payments where multi party authorisation applies only an indicative rate is displayed in the primary customer consent journey and the actual rate is shown during the secondary/final customer consent journey. This behaviour will be indicated back to TPPs in the submission call.	
11	Time between payment consent and submission	There is a maximum time limit of 90 seconds for a TPP to complete submission following successful consent of an international payment due to live exchange rates being quoted for the transaction. If the first submission request is received after 90 seconds this will result in a rejection of the submission request.	

6 CUSTOMER CONSENT

6.1 CUSTOMER CONSENT PROCESS

The customer consent process is described in Section 2.3.

6.2 RULES AND EXCEPTIONS

There are a number of important implementation variations relating to our customer consent process that TPPs should be aware of. These are listed below:

No.	Exception	Description
		AISPs will only be able to retrieve customer's account data for up to 90 days after a customer provides their consent. At this point, the AISP's access token will expire. After this 90 day period, in order for an AISP to retrieve customer's account data, it must re-direct the customer to the Lloyds Banking Group Gateway to provide re-authorisation for the AISP consent to continue for another 90 days.
		Please return to Section 2.3, step 3: 'Authorize Consent' for information on creating the authorisation request. The customer must be present for this reauthorisation to be successful. Once re-authorisation is complete, the AISP will then receive a new access token with a 90 day validity period. If an AISP attempts to make an API call with an expired bearer token (i.e. without the customer providing re-authorisation), they will be presented with a 401 error code, with the following message: '401 Unauthorized'.
		Please note AISPs can initiate and complete the reauthorisation step with the customer before or after the expiry of a bearer token.
1	90 day customer re- authorisation period	CBPIIs will only be able to retrieve customer's account data for up to 1 year after a customer provides their consent. At this point, the CBPII's access token will expire. After this 1 year period, in order for a CBPII to continue to retrieve a customer's account data, it must re-direct the customer to the Lloyds Banking Group Gateway to provide re-authorisation for the CBPII consent to continue for another year.
		Please return to Section 2.3 , step 3 : 'Authorize Consent' for information on creating the authorisation request. The customer must be present for this reauthorisation to be successful. Once re-authorisation is complete, the CBPII will then receive a new access token with a 1 year validity period. If a CBPII attempts to make an API call with an expired bearer token (i.e. without the customer providing re-authorisation), they will be presented with a 401 error code, with the following message: '401 Unauthorized'.
		Please note CBPIIs can initiate and complete the reauthorisation step with the customer before or after the expiry of a bearer token.
2	Customer journey timeouts	The timeout period for a customer undertaking an AISP journey is 20 minutes. At the point of this timeout, the user

		will be redirected to the bank's public site.
		The timeout period for a customer undertaking a PISP journey is 20 minutes. At the point of this timeout, the user will be redirected to the bank's public site.
		The timeout period for a customer undertaking a CoF journey is 20 minutes. At the point of this timeout, the user will be redirected to the bank's public site.
		If during an AISP journey, a customer closes the browser by mistake, the Account Request Status will be updated to 'Rejected' and the customer will have to start the journey afresh with the TPP.
3	Abandoned customer journeys	If during a PISP journey, a customer closes the browser by mistake, the Account Request Status will be updated to 'Rejected' and the customer will have to start the journey afresh with the TPP.
		If during a CoF journey a customer closes the browser by mistake, the customer will have to start the journey afresh with the TPP.
4	Suspended customer consents	We are able to suspend and reactivate customer consents to TPPs, on a customer's behalf. Please note that when we reactivate a suspended customer consent (on the same account the consent was revoked from), a new unique account ID is created.
5	App to App / Browser to App Authorisation	The authorization_endopint URI detailed in the current well-known discovery endpoint differs for App to App. To initiate authorisation and consent via the Lloyds Bank Personal or Business Banking mobile applications see section 8 for brand specific URIs.
		Lloyds Bank and Bank of Scotland Commercial journeys are not currently supported.

7 BUSINESS AND COMMERCIAL CUSTOMERS

7.1 OVERVIEW

As well as Retail customers, Lloyds Banking Group's API channel also enables TPPs to initiate payments and access data from *Online for Business* (O4B), *Business Internet Banking* (BIB) and *Commercial Banking Online* (CBO) customers.

7.2 RULES AND EXCEPTIONS

Notable implementation variations relating to our Business and Commercial customers are listed below:

No.	Exception	Description	Applicability
1	Support for > '1 to sign' payments	Online Payment Control (OPC) support is currently available for PISP payments via the API channel for version 3.1 only. The Authorisation Typeindicator is applicable to both Business Customers (O4B) and Commercial Clients (CBO).	Domestic Single Immediate Payment v3.1 Domestic Scheduled Payments v3.1 File Payments v3.1
2	App to App / Browser to App Consent - Business	The authorization_endopint URI detailed in the current well-known discovery endpoint differs for App to App. To initiate authorisation and consent via the Lloyds Bank or Bank of Scotland Business Banking mobile applications see section 8 for brand specific URIs.	This applies for all AISP/PISP journeys. Lloyds Bank and Bank of Scotland Commercial (CBO) journeys are not currently supported.
3	Debit Account Reference	Commercial channel (CBO) clients have the ability to specify a debit account reference utilising Supplementary Data in the OBDomestic2 class object. The reference can be a maximum of 18 characters in length.	Domestic Single Immediate Payments v3.1 Domestic Scheduled Payments v3.1
4	Bulk and Batch Files	Currently only Business (O4B) customers are able to access this functionality.	Commercial (CBO) functionality is currently being developed and will be available in due course. File Payments v3.1
5	Bulk and Batch Files	For Business (O4B) clients Lloyds Banking Group will accept only two file specifications in a CSV format. One for Bulk and one for Batch. Any files received not in one of those formats will be rejected. The file formats, available on the portal, give full details of the file structures including character sets and field lengths.	File Payments v3.1
6	Bulk and Batch Files	The file type must contain one of these values. This is the NameSpaced Enumeration that details the payment file type UK.LBG.O4B.BULK.BACS UK.LBG.O4B.BATCH.FPS If the file type contains any other value the	Execution date will be calculated from the supplied file contents. File Payments v3.1

		request will be rejected	
7	Bulk and Batch Files	The 'Requested Execution date' will be ignored if it comes in the consents journey message payload.	Execution date will be ascertained from the file contents. File Payments v3.1
8	Character sets for Domestic Payments and Bulk/Batch Files	Characters in String fields are restricted to a specific char set and special characters are not allowed. If received, those chars will not be propagated to onward payment or records. FPS scheme (ISO8583) format BACS Scheme Standard 18 CHAPS Scheme SWIFT format	Domestic Single Immediate Payments v3.1 Domestic Scheduled Payments v3.1 File Payments v3.1
9	Domestic Payment Cut-Off times	For Commercial (CBO) clients: BACS – Payments received after 17:00 will be rejected CHPS – Payments received after 17:25 will be rejected FPS – Payments received after 23:55 will be processed the next day IAT – Transfers received after 23:45 will be rejected For Business (O4B) clients: Business (O4B) clients processing a Bulk payment file will see a warning message displayed on the Lloyds Banking Group Secure Payments Gateway screens from 17:45. This warns of the impending cut off time. This will be displayed until 18:00 which is the hard cut-off time.	Domestic Single Immediate Payments V3.1 Domestic Scheduled Payments V3.1 File Payments 3.1
10	Confirmation of Funds	Due to the use of complex credit facilities and the manual payment referrals process, the confirmation of funds service will provide an explanatory message for Commercial (CBO) clients. This will be provided in Supplementary data.	Domestic Single Immediate Payments v3.1 Domestic Scheduled Payments v3.1
11	Field Length and Truncation	Data will get truncated where CSV file fields contain more characters than supported by the BACS, CHAPS and FPS payment schemes FPS scheme (ISO8583) format BACS Scheme Standard 18 CHAPS Scheme SWIFT format	Domestic Single Immediate Payments v3.1 Domestic Scheduled Payments v3.1 File Payments v3.1
12	Local instrument Types	The following local instrument types are acceptable for Commercial Clients: UK.OBIE.BACS UK.OBIE.CHAPS	Domestic Single Immediate Payments v3.1 Domestic Scheduled Payments v3.1 File Payments v3.1

		UK.OBIE.FPS UK.LBG.IAT If the local instrument does not contain one of these values the consent request will be	
		rejected.	
		Commercial (CBO) clients will not have	Account Information v2.0
		access to the following end points:	Account Information v3.1
		Direct Debits	Domestic Single Immediate Payments v3.1
		Standing Orders	Domestic Scheduled
13	End Points Not Supported	Products	Payments v3.1
	Cappoiled	Offers	File Payments v3.1
		Statements	International Payments
		International Payments	v3.1
		File Payments	International Scheduled Payments v3.1
		Business clients (O4B) will not have access to the following end points:	
14	End Points Not Supported	GET /file-payments/{FilePaymentId}/report-file;	File Payments v3.1
		GET /file-payments/{FilePaymentId}/payment-details	

8 APP TO APP

The following section contains useful information for TPPs who wish to initiate App to App re-direction for Lloyds Banking Group Mobile apps.

8.1 OVERVIEW

App to App enables TPPs to the initiate the Authorisation and Consent journey via the Lloyds Banking Group Personal and Business Banking mobile applications. This allows the TPP to redirect a user from the TPP application (in a mobile web browser or mobile app) to the Lloyds Banking Group mobile application installed on the user's device and deep link the user into the Lloyds Banking Group mobile application login screen. The user is then authenticated on their Lloyds Banking Group mobile application using the same credentials/methods as normally used when the user logs into their account using the application (e.g. biometric). In the scenarios where the user does not have the Lloyds Banking Group mobile application installed, they will be redirected to the Lloyds Banking Group browser journey as normal.

8.2 CONSENT AUTHORISE ENDPOINTS

The authorization_endpoint URI detailed in the current well-known discovery endpoint differs for App to App. To initiate authorisation and consent via the Lloyds Banking Group Personal and Business Banking mobile applications please use the following URIs.

These URIs can also be used as an alternative authorization_endpoint for those TPPs wanting to avoid the Channel Selection screens on the browser customer consent journey. In this scenario the customer will not be required to select account type from the drop down (Personal, Business or Commercial) before inputting their Internet Banking User ID.

Journey Type	OBIE API Version	Authentication Journey	Segment	authorize_endpoint
AISP	Account and Transaction v2.0 Account and Transaction v3.1	Account Information and Transaction (Also includes re-authorisation)	Retail	Lloyds Bank https://authorise- api.lloydsbank.co.uk/prod01/lbg/lyds/personal/oi dc-api/v1.1/authorize Bank of Scotland https://authorise- api.bankofscotland.co.uk/prod01/lbg/bos/person al/oidc-api/v1.1/authorize Halifax https://authorise-api.halifax- online.co.uk/prod01/lbg/hfx/personal/oidc- api/v1.1/authorize MBNA https://authorise- api.mbna.co.uk/prod01/lbg/mbn/personal/oidc- api/v1.1/authorize

PISP	Payment Initiation v1.1 Payment Initiation v3.1	Domestic Single Immediate Payments Domestic Standing Orders Domestic Scheduled Payments	Retail	Lloyds Bank https://authorise- api.lloydsbank.co.uk/prod01/lbg/lyds/personal/oi dc-api/v1.1/authorize Bank of Scotland https://authorise- api.bankofscotland.co.uk/prod01/lbg/bos/person al/oidc-api/v1.1/authorize Halifax https://authorise-api.halifax- online.co.uk/prod01/lbg/hfx/personal/oidc- api/v1.1/authorize MBNA https://authorise- api.mbna.co.uk/prod01/lbg/mbn/personal/oidc- api/v1.1/authorize
AISP	Account and Transaction v2.0 Account and Transaction v3.1	Account Information and Transaction (Also includes re-authorisation)	Business	Lloyds Bank https://authorise- api.lloydsbank.co.uk/prod01/lbg/lyds/business/oi dc-api/v1.1/authorize Bank of Scotland https://authorise- api.bankofscotland.co.uk/prod01/lbg/bos/busine ss/oidc-api/v1.1/authorize
PISP	Payment Initiation v1.1 Payment Initiation v3.1	Domestic Single Immediate Payments Domestic Standing Orders Domestic Scheduled Payments	Business	Lloyds Bank https://authorise- api.lloydsbank.co.uk/prod01/lbg/lyds/business/oi dc-api/v1.1/authorize Bank of Scotland https://authorise- api.bankofscotland.co.uk/prod01/lbg/bos/busine ss/oidc-api/v1.1/authorize

8.3 RULES AND EXCEPTIONS

Notable implementation variations relating to App to App and Browser to App.

1	AISP/PISP Commercial Journeys	App to App functionality is not supported for Lloyds Bank and Bank of Scotland Commerical Clients. TPPs should use the original authorization_endpoint URI detailed in the well-known discovery endpoint. Alternatively TPPs can use the following URIs in order to avoid the Channel Selector and send the user to the Commerical consent journey directly: https://authorise-api.lloydsbank.co.uk/prod01/lbg/lyds/commercial/oidc-api/v1.1/authorize https://authorise-api.bankofscotland.co.uk/prod01/lbg/bos/commercial/oidc-api/v1.1/authorize
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9 OPEN DATA APIS

The following section contains useful information for TPPs who wish to consume Lloyds Banking Group's Open Data APIs, broken down by each group of APIs.

9.1 ATM/BRANCH

No.	Exception	Description
1	Branch Identification	For ATMs that are linked to a physical branch, ATM API Branch Identification = Branch API Branch Identification. For ATMs that are not linked to a physical branch, the
		ATM API Branch Identification's final 2 digits are '99'.

9.2 PCA

No.	Exception	Description
		The data standard does not currently allow for conditions to be associated with certain fees and benefits. Lloyds Banking Group has addressed this by including notes with the related items. TPPs should be aware of this when consuming the data in the API. For example, as at launch of the API, the following notes were included in the data for certain products:
		Notes from OtherFeesCharges for Club Lloyds:
		The Club Lloyds monthly account fee comprises of:
		Club Lloyds monthly account fee is Free or £3 per month.
		The £3 fee is waived for each month you pay in at least £1,500 into your account. If in any month you don't pay in this amount, you will need to pay the £3 monthly account fee.
1	Account Behaviour Conditions	Notes from OtherFeesCharges for Club Lloyds Platinum:
		The Club Lloyds Platinum monthly account fee comprises of:
		Platinum Account monthly account fee of £17 per month
		Plus
		 Club Lloyds monthly account fee is Free or £3 per month
		The £3 fee is waived for each month you pay in at least £1,500 into your account. If in any month you don't pay in this amount, you will need to pay the £3 monthly account fee.
		Maximum combined monthly account fee of £20 per month.

		Notes from FeaturesBenefits for Halifax Reward:
		£3 reward each month you pay in £750 or more, pay out at least 2 different direct debits and stay in credit. If in any month you miss out on the £3 reward, you can still get it in future months too (when you meet the qualifying requirements.
		Notes from FeaturesBenefits for Halifax Ultimate Reward Account:
		A lower monthly fee of £12 applies if in the previous calendar month you pay in £750 or more and pay out at least 2 different direct debits and remain in credit.
		You also need to keep your account open/not change it to a different current account until the fee is due to be debited (by the 2nd working day of the following calendar month).
2	Packaged Accts	"Packaged" is shown as Segment under PCA; there is no FeatureBenefitGroup - Type option specifically for "Packaged" Bank Accounts so Lloyds Banking Group are recording as 'Other'.
3	Vantage Product	Lloyds Banking Group maintains separate API data records for Bank of Scotland Classic Vantage Account and Bank of Scotland Platinum Vantage Account as these are distinct products with their own product identifiers.
4	Club Products	Lloyds Banking Group maintains separate API data records for Club Lloyds and Club Lloyds Platinum as these are distinct products with their own product identifiers.
5	PCAs not eligible for Overdrafts	Lloyds Banking Group has the following products that do not provide an overdraft facility, and has referenced this as a product Note on the PCAMarketingState tab Lloyds Basic Account Lloyds Under 19's Account Bank of Scotland Basic Account Bank of Scotland Under 19's Account Halifax Basic Account Halifax ExpressCash Account
6	Unplanned Overdrafts	Lloyds Banking Group no longer charges for Unplanned Overdrafts so this is not referenced anywhere in API data records.
7	Card withdrawal limits	No specific field for ATM daily withdrawal limits so Lloyds Banking Group uses the Notes fields in the Features and Benefits.

8	Linking Account Information API to Open Data PCA products	Account Information API can only be linked to the Open Data for front book (on sale) products. Where Product Identifier is returned for a particular customer account (following a call to Account Information /accounts/{AccountId}/product) it means that the customer is on a product for which the terms, features and benefits can be found in the Open Data. This Product Identifier can be used to locate that product in the Open Data PCA API. This linking mechanism is only available at a product level so if multiple marketing state variations exist in Open Data for that product then the TPP should engage in further dialogue with the account holder to determine which applies to their present situation. For example, for the Lloyds Bank Student product terms vary depending on the academic year the student is in. These are represented as marketing states in the Open Data API, so while the linkage will allow a TPP to identify if the customer has a student product it will not facilitate the identification of the year of study, therefore the TPP will have to gather further information from the customer to identify the relevant PCA information.
9	Promotional vs. Destination products	Distinction between promotion ending and destination products: a) Promotions are detailed on the MarketingState within each applicable product. For example, in URCA, the Marketing State section indicates that there is a promotional offer available on the product, the duration and what this relates to, e.g. overdraft switcher offer for 6 months. There is then a promotional section with details of the overdraft offer and a regular section with the standard overdraft details. The promotional section includes notes on the promotion and the fee is showing as zero, whereas in the regular tab it has 1p per £7 borrowed. b) Destination products – on a student account, the customer will eventually graduate and not be eligible. The next account is not detailed.
10	Credit Interest	Lloyds Banking Group has the following products that offer Credit Interest on account balances within a defined tier and this will be reflected on the CreditInterest tab. Any account balance outside of the defined tier values will not receive credit interest. • Lloyds Under 19's Account • Lloyds Club Lloyds Account • Lloyds Club Platinum Account • Halifax ExpressCash Account • Bank of Scotland Under 19's Account • Bank of Scotland Classic Vantage Account • Bank of Scotland Platinum Vantage Account

9.3 BUSINESS CURRENT ACCOUNTS (BCAS) - £0 - £1M TURNOVER

API Section	Field(s)	Usage Notes
	Overdraft/Notes OverdraftFeeCharge Cap/Notes	Notes fields within the Overdraft section have been set as String (len 2000) rather than Array of strings (len 2000).
Overdraft	OverdraftFeeCharge Detail/Notes	Conditions which are applied to when certain fee/charges may be applied to an account are shown within the corresponding Notes field, linked via the corresponding OverdraftFeeChargeDetail (ID) value.
Eligibility	ResidencyIncluded	Regex pattern for this field insists on four characters, although it ought to be defined as up to four characters.
	FeeChargeDetail(ID)/ FeeType FeeChargeDetail(ID)/ OtherFeeType FeeChargeDetail(ID)/ FeeCategory	FeeCategory to FeeType mapping from CodeList references different enumerations compared to DD and Swagger specifications; the reason for this because the stated enumerations do not accurately reflect the categorisation of Fees and Charges by Lloyds Banking Group. This will not impact consumption of the data because the enumeration mappings are not forced within the Swagger.
	FeeChargeDetail(ID)/ FeeAmount FeeChargeDetail(ID)/ Notes	For some FeeTypes, the corresponding FeeAmount fields may be blank because:
Other Fees Charges		Conditions may apply which determine what price is charged for a particular transaction.
		The price of a particular transaction may vary depending on Customer and/or Account behaviour.
		The price of a particular transaction may be controlled/determined by a third party (i.e. not Lloyds Banking Group).
		Prices for a particular non-standard transaction are available via a discussion with the Customer.
		Anywhere where the FeeAmount field is blank will be explained/supported within the corresponding Notes field, linked via the corresponding FeeChargeDetail (ID) value.
Mapping of Account		Transactional data made available via the Account Information API can only be linked/mapped to the Open Data API for front book (on sale) products only; these include products which may have elements within them which are no longer offered (e.g. discontinued overdraft offerings no longer available for new lending).
Information API (Transactional Data) to the Open Data API (Product Information)	BCA(ID)/Identification	Where a Product Identifier is returned for a particular customer account (following a call to Account Information /accounts/{AccountId}/product) it means that the account is on a product for which the terms and conditions, features and benefits, and pricing information can be found in the Open Data API content. This Product Identifier can be used to locate that product within the Open Data BCA API content.
		Exceptions to the above will be where an underlying product may be shared by different customer segments (e.g. which have distinct Terms and Conditions which will apply) each of

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	which is published via the Open Data API, but where customer and/or segment level (in addition to Account-level) information would be required to determine the correct mapping; this complexity for specialist BCA products is not supported at this time. Examples of these products would be the Schools Account, Treasurers' Account and Credit Union Account.
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9.4 SME BUSINESS CURRENT ACCOUNTS (BCAS) - TURNOVER £1M-25M

No.	Exception	Description
1	Mandatory / optional fields	Most optional fields have been left unpopulated due to either (a) being not applicable for the product (b) having variations depending on the customer type.
2	Products	All Lloyds Bank products currently are identical to those for Bank of Scotland with the exception of brand, product identifiers, product naming and the Unauthorised Borrowing Rate for overdrafts which is different for each brand.
3	Marketing State	No products have promotional marketing states – only one single regular state per product.
4	Credit interest	Only one product (School Banking Account) currently pays credit interest as standard. It has no tiers or banding just a single gross rate applicable for balances of £1 and above.
5	Overdrafts	Only customers with Business Extra or Electronic Business Tariff products can currently have an overdraft facility. Identical overdrafts rates (with the exception mentioned above) and fees are applicable for all tiers/bands. Unauthorised Borrowing and Unpaid Item fees are represented in the Overdraft section not under Other Fees and Charges section.
6	Eligibility	Only the entity yearly turnover (£1m-25m) is specified as a requirement for opening or managing accounts. Other eligibility requirements are handled at account opening and may vary depending on the customer – they are optional fields and are left blank.
7	Fees and Charges	Several fees have been bundled under the 'Other' FeeCategory as the codelist supplied did not sufficiently represent the type of fee (description). Fees and charges are generally unsorted. It was unknown whether they should be sorted according to FeeCategory, how we as a bank should wish to sort them or how a TPP would approach sorting and display to the customer. In addition, if sorted by FeeCategory the fees under the 'Other' FeeCategory may be badly 'positioned' in a list. Criteria for sorting or presentation of data may also apply equally to features and benefits. Where fees have been represented under the 'Other' FeeCategory the description of the fee will reside under the 'OtherFeetype' construct.

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9.5 SME LOANS (SMELS) - £0 - £1M TURNOVER

API Section	Field(s)	Usage Notes
Eligibility	ResidencyIncluded	Regex pattern for this field insists on four characters, although it ought to be defined as up to four characters. Values provided state "UK" which would be highlighted as a fail.

9.6 SME LOANS (SMELS) - £1M - £25M TURNOVER

No.	Exception	Description
1	Product Maximum Loan Amount	The largest standard loan amount is £25,000 however in exceptional circumstances if the client's situation and financial stability is sufficient a loan of up to £50,000 may be considered. This is covered in the notes section.
2	Eligibility Financial Holdings	It is necessary for a customer to hold a current account with Lloyds Banking Group in order to facilitate the business loan. Customers reviewing data may also therefore be interested in viewing Lloyds Banking Group business current accounts on offer.
3	SIC Codes	Lloyds Banking Group has opted to leave the SIC code section blank as there are no industries which would be considered automatically ineligible for a business loan. Customers should be encouraged to contact the bank if they would like additional details.
4	Fixed Rate APR	Our fixed rate business loan product only utilises a single rate and as the current product is set up this would not change. A new product would be created if we ever chose to change this aspect of our business loans.
5	SME Loan Segment	Our Base Rate Business Loans provide additional flexibility to our business customers however our Fixed Rate Business Loans will be restricted to clients with sufficient collateral to cover the loan.

9.7 BUSINESS CREDIT CARDS

No.	Exception	Description
1	Eligibility Financial Holdings	It is necessary for a customer to hold a current account with Lloyds Banking Group before we will issue a business credit card. Customers reviewing data may also therefore be interested in viewing Lloyds Banking Group business current accounts on offer.
2	Eligibility MinMax	Business Credit Cards are split by turnover however there are no functional differences to these products by design. Similarities are not an error and should be presented as directed.

9.8 DATA LATENCY IN LLOYDS BANKING GROUP OPEN DATA API

TPPs should be aware that on the initial release of Open Data v2.1.1, in some circumstances (for example Bank of England rate changes), the Open Data API may be up to 18 hrs out of sync with equivalent data presented via the bank's public website. TPPs can expect full synchronicity at the latest by 18:00 each day.

TPPs are advised to consider the possibility of this latency in the design of their services, communications with PSUs and, in the case of price comparison uses, take steps to advise the PSU that in exceptional circumstances the product available at the point of application may differ from that at the point of comparison.