OPEN BANKING

Helping ASPSPs implement PSD2 and take advantage of Open Banking

January 2019

Version 1.36
We make it easier for ASPSPs to implement PSD2 and take advantage of Open Banking

We have developed a comprehensive suite of Standards and services in partnership with nine of Europe's largest financial institutions. This has been achieved with extensive input from ASPSP and TPP communities, PSD2 and consumer stakeholder groups.

A proven standard

Our Standards are open to all ASPSPs and, during 2018, have been implemented across 90% of the UK payment accounts market, with circa 100 regulated TPPs and ASPSPs enrolled in the ecosystem, a number that is growing fast.

Through this process we have learned the importance of good implementation. We have therefore developed a suite of Conformance Tools and Implementation Services to support our Standards. We believe this approach can enable regulatory compliance and provide a strong foundation for an innovative and successful market that you can take advantage of.

Supporting PSD2 compliance

ASPSPs can be confident that if they implement our Standards correctly they should be PSD2 compliant. The Standards map to EBA guidelines and are supported by Conformance Tools and a Certification option. These are designed to simplify the application for an exemption from the contingency mechanism.

Driving adoption

Our optional Implementation Services facilitate the secure and smooth running of the PSD2 ecosystem. For example, the OBIE Directory provides participants throughout the EEA with the ability to easily connect, identify and validate each other, without creating an obstacle for TPPs.

The Open Banking journey

August 2016
- Open Banking Standards Framework published

September 2016
- Open Banking Implementation Entity formed

March 2017
- First Open Data API Standards published

October 2017
- Open Banking Directory enrolment starts

January 2018
- PSD2 comes into effect. Open Banking begins Managed Roll Out and first AISPs authorised

September 2018
- Open Banking Standards v3.0 and Customer Experience Guidelines published

March 2019
- All ASPSPs required to provide technical specifications, support and testing facility

September 2019
- Regulatory Technical Standards take effect
Our end-to-end proposition helps ASPSPs comply with PSD2

We believe API Specifications alone will not deliver a functioning PSD2 ecosystem. Our end-to-end proposition of Standards, Conformance Tools, Certification and Implementation Services are designed to help ASPSPs implement PSD2 with confidence and provide high quality APIs for TPPs. The components are modular. Some are open and free, others are optional and paid-for.

### Standards
ASPSP adopts the OBIE Standards (Technical, Customer Experience or Operational) that it requires.

- API Specifications
- Customer Experience Guidelines (CEG)
- Operational Guidelines (OG)

### Conformance Tools
ASPSP uses the OBIE Conformance Tools to check that Standards have been implemented correctly.

- API Conformance Tools
- CEG Checklist
- OG Checklist

### Certification Services
ASPSP receives independent validation of their implementation from the OBIE, which can be used to support their application to the NCA for an exemption from the contingency mechanism.

- API Conformance Certifications
- CEG Checklist Certification
- OG Checklist Certification

### Implementation Services
ASPSP uses the optional OBIE services to facilitate smooth implementation, meeting regulatory requirements and supporting commercial objectives.

- Directory
- Support Services
- Dispute Management Services

<table>
<thead>
<tr>
<th>Standards</th>
<th>Conformance Tools</th>
<th>Certification Services</th>
<th>Implementation Services</th>
</tr>
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Open and free

Optional and paid-for
Our Standards are extensible, enabling PSD2 compliance as well as supporting commercial success

Regulatory Standards

Our Standards are designed to ensure any European ASPSP can meet their PSD2 and RTS requirements, supporting their application for an exemption from the contingency mechanism.

These market-enabling Standards are built in an optional modular format to most effectively meet consumer and market needs.

These Standards go beyond simple Technical Specifications and also include Customer Experience Guidelines and Operational Guidelines.

Commercial Standards

We recognise market demand for additional functionality and have created Standards for optional APIs that go beyond PSD2 requirements. These market-enhancing Standards enable TPPs to develop more compelling propositions, while encouraging ASPSPs to add functionality that can provide smoother, richer and more profitable customer experiences. Commercial APIs may allow ASPSPs to earn a return on their PSD2 investment.

Unlike the Regulatory Standards, the Commercial Standards may involve a contract between the ASPSP and TPP. Examples of Commercial API Standards will include options such as additional information fields (e.g. location or merchant category codes), as well as access to mortgages and savings accounts and the ability to initiate ‘customer not present’ payments.
Our Regulatory Standards map directly to PSD2 and RTS requirements and are made up of three components.

**API Specifications**
Our API Specifications include documentation, usage examples and swagger files for Account and Transaction Information, Payment Initiation, Confirmation of Funds, Event Notification, and MI Reporting.

We have partnered with the Open ID Foundation to develop security profiles for re-direct flows, decoupled flows, and TPP on-boarding. These include the Financial Grade API (FAPI), Client Initiated Backchannel Authentication (CIBA) and Dynamic Client Registration (DCR) profiles.

**Customer Experience Guidelines**
The Customer Experience Guidelines ensure that customer journeys deliver a great customer experience and avoid any unnecessary delay or friction as required under PSD2.

**Operational Guidelines**
Our Operational Guidelines have been designed to support ASPSPs in meeting relevant operational and service requirements, thereby facilitating regulatory compliance with obligations relating to performance and availability, design and testing, problem resolution and management information.

Journey Wireframes
ASPSP refers to the relevant journey which is accompanied by CEG Checklist requirement markers that demonstrate the mapping to PSD2, RTS and CX considerations.

These Standards are open and can be used individually or combined as determined by the ASPSP:
www.openbanking.org.uk/providers/standards/
We provide a suite of clear, accessible tools to help ASPSPs check they have correctly met our standard implementation requirements.

**API Conformance Tools**
Our experience shows these tools contribute significantly to seamless integration with TPPs.

**Functional Conformance Tools**
These allow an ASPSP to test functionality and data elements of their API implementations to ensure conformance with the Technical Specification for each of Account and Transaction API, Payment Initiation API and Confirmation of Funds API.

**Security Profile Conformance Tools**
These allow an ASPSP to test their API implementation for conformance with OpenID Foundation security profiles for redirect (FAPI profile), decoupled (CIBA profile) and TPP onboarding.

**Customer Experience Guidelines Checklist**
Our comprehensive checklist ensures that the Customer Experience Guidelines have been implemented correctly. Checklist questions are tracked back to Regulatory References to give ASPSPs and NCAs full transparency. See an example below.

**Operational Guidelines Checklist**
Our comprehensive checklist ensures that the Operational Guidelines have been implemented correctly. Checklist questions are tracked back to Regulatory Requirements to give ASPSPs and NCAs full transparency. The checklist supports ASPSPs in meeting required service levels for performance, availability, testing, problem resolution and management information.

**Example question**
At any point during the Open Banking customer journey, do you ask the PSU for consent for the TPP to access account information or initiate a payment?

**Answer must be**

- **No**
- **Required**

**Regulatory reference(s)**
- EBA Opinion paragraph 13
- EBA Draft Guideline 5.2 (c) and paragraph 34 (c)
- RTS Art. 32(3)
- FCA Approach Document paragraph 17.48

Each requirement on the Checklist Requirements table links to the relevant question on the Customer Experience Checklist, an example of which appears above.

ASPSPs can use our Conformance Tools to check they have implemented the Standards correctly.
Certification Services allow ASPSPs to demonstrate independent validation of their implementation by the OBIE

Our Certification Services help ASPSPs demonstrate how they have met our implementation requirements. This enables an ASPSP to provide the NCA with an independent validation against a recognised market initiative when they request an exemption from the contingency mechanism.

Features of the OBIE Certification process:

- **Defined process**
  Clearly documented end-to-end process for certification can support an application for exemption.

- **Modular certificates**
  ASPSPs can choose to demonstrate their adherence to the Standards by obtaining certificates for individual aspects of the OBIE Standard.

- **Ongoing engagement**
  Continued dialogue throughout the implementation process helps ASPSPs certify successfully.

- **Clear information**
  Certificates allow all participants to fully understand the extent to which an ASPSP conforms to Standards.

- **Compliance checks**
  Caters for changes to Standards and supports ongoing wishes for ASPSPs to showcase improvements.

### OBIE Certification Process

1. **ASPSP prepares conformance tests/completes checklists**
2. **ASPSP applies for some / all Certificates for each brand**
3. **ASPSP submits Checklists and supporting evidence**
4. **OBIE validation process**
5. **OBIE issue OB Certificates by brand, type and component**
Implementation Services are designed to facilitate smooth implementation and market adoption

We have learned from experience how important good implementation is to ensuring PSD2 and open banking is a success for the ASPSP, TPP and TSP ecosystem.

This led us to develop a suite of Implementation Services that help all participants lower the cost and risk of implementation and deliver better end-user experiences. All our implementation services are optional, which means they can be used with or without the OBIE Standards, Conformance Tools or Certification Services.

**Directory**

An identity and access management platform which provides additional optional capabilities to make it easier and more secure for TPPs to onboard with ASPSPs, and to reduce the risk and cost for ASPSPs in validating identity and regulatory status of a TPP.

**Support**

Participants can benefit from our team providing market leading business, technical and communications expertise, both during the onboarding process and on an ongoing basis.

**Dispute Management**

A streamlined communication platform that helps end-user and market participants raise and manage enquiries, complaints and disputes in a way that’s clear, consistent, transparent and ethical.
Directory

We facilitate a vibrant, connected ecosystem through a comprehensive directory already used by circa 100 participants. The Directory will be fully compatible with PSD2/RTS eIDAS requirements and offers the following functionality:

**Organisation Authorisation Validation**
Checks regulatory status of organisations in real time, across 31 National Competent Authorities.

**Software Identity**
Allows organisations to create identities for multiple brands and ensures these are visible to PSUs under the correct brand name, which will enable better adoption and reduce the volume of PSU queries.

**Sandbox**
Gives participants confidence in the onboarding and integration of open banking tools.

**API Endpoint Directory**
Accessible, consolidated place to help organisations easily find the API endpoints that an ASPSP supports through both Regulatory and Commercial APIs.

**Security Management**
Allows organisations to support their multiple brands by easily creating and managing multiple software statements, and facilitating re-cycling of keys, which provides significant security enhancements.

**Discovery and Notification**
Central address book of contact details which enables ASPSPs and TPPs to discover each other, and facilitates a central notification service.

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### Standout functionality for a stronger infrastructure

<table>
<thead>
<tr>
<th>Feature</th>
<th>Available</th>
</tr>
</thead>
<tbody>
<tr>
<td>eIDAS lookup</td>
<td>✓</td>
</tr>
<tr>
<td>Regulatory Status check</td>
<td>✓</td>
</tr>
<tr>
<td>Trust Service Provider (alternative to eIDAS)</td>
<td>✓</td>
</tr>
<tr>
<td>Software Identity Management</td>
<td>✓</td>
</tr>
<tr>
<td>Software Identity Self Service Management</td>
<td>✓</td>
</tr>
<tr>
<td>Identity Self Service Management</td>
<td>✓</td>
</tr>
<tr>
<td>Participant Operational Information</td>
<td>✓</td>
</tr>
<tr>
<td>Participant Contact Information</td>
<td>✓</td>
</tr>
<tr>
<td>Regulatory Status Call / Cache capability</td>
<td>✓</td>
</tr>
<tr>
<td>Regulatory revocation notification</td>
<td>✓</td>
</tr>
<tr>
<td>Test version of the Directory</td>
<td>✓</td>
</tr>
<tr>
<td>Testing capability for unregulated entities</td>
<td>✓</td>
</tr>
<tr>
<td>Supports functionality beyond regulatory needs</td>
<td>✓</td>
</tr>
</tbody>
</table>
Support

We manage service desks and offer expert, impartial advice to ensure smooth implementation and integration between ASPSPs and TPPs. Our objective is to help all participants take full advantage of open banking opportunities.

<table>
<thead>
<tr>
<th>Business support</th>
<th>Technical support</th>
<th>Communications support</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expert support for open banking services, reducing time to market, cost and ensuring a more mature engagement.</td>
<td>Close collaboration with ASPSPs and TPPs to enable rigorous testing and seamlessly resolve any problems related to technical standards.</td>
<td>Helps participants promote their open banking activities to a wider audience through extensive public relations expertise.</td>
</tr>
<tr>
<td>• Live access to experienced support team</td>
<td>• Best in class testing platform</td>
<td>• Press release support</td>
</tr>
<tr>
<td>• Enrolment support</td>
<td>• Issue tracking and ecosystem engagement</td>
<td>• Communication strategy</td>
</tr>
<tr>
<td>• User Access</td>
<td>• Building and implementing standards</td>
<td>• Stakeholder engagement</td>
</tr>
<tr>
<td>• Buddying connections</td>
<td>• Onboarding to Directory</td>
<td>• Events</td>
</tr>
<tr>
<td>• Launch support</td>
<td></td>
<td>• Communication and engagement processes</td>
</tr>
<tr>
<td>• API downtime reports</td>
<td></td>
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</tr>
</tbody>
</table>
Dispute Management Services

Our optional Dispute Management Services help all participants efficiently and effectively deal with end-user complaints and work in the best interest of the customer.

Dispute Management

The Dispute Management System (DMS) is a communication process for ASPSPs and TPPs that helps organisations manage PSU enquiries, complaints and disputes among themselves, fairly and effectively.

It’s a voluntary system built around best practice standards that enables:

• Requests for information or exchange of information
• Requests for a redress repayment (for example, where a party has paid out in response to a complaint or dispute, but believes the liability lies with another party)
• Complaints forwarding

The DMS is a streamlined communication platform that helps participants manage these issues in a way that is clear, consistent, transparent and ethical. It provides:

• An open communication process for ASPSPs and TPPs
• Codification of end user complaints to enable these to be addressed efficiently
• A solution to allow two or more previously unknown parties to engage with each other
• Support to ASPSPs and TPPs in the collection of information from other necessary parties
• Support to ASPSPs and TPPs in delivering an improved customer experience
• Governance around management of payment initiation and account information service transaction-related enquiries, complaints or disputes
The Open Banking Standards can help you implement PSD2 and take advantage of Open Banking

**Facilitate your exemption process**
Our Regulatory Standards and Conformance Tools can help implement PSD2 in a compliant way whilst minimising the cost and risk of rework. Our Certificates can become supporting evidence for your application from an exemption from the contingency mechanism.

**Create opportunities**
Our Commercial Standards can help you monetise your PSD2 investment by offering commercial APIs to TPPs.

<table>
<thead>
<tr>
<th>Nine reasons to partner with Open Banking to facilitate PSD2 compliance</th>
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<tbody>
<tr>
<td>✓ Standards can be used by any ASPSP across Europe</td>
</tr>
<tr>
<td>✓ Goes beyond technical requirements to offer the world's most extensive Standards</td>
</tr>
<tr>
<td>✓ ASPSPs can 'pick and choose' from Standards that are most relevant to them</td>
</tr>
<tr>
<td>✓ Commercialise API opportunities with the UK’s world leading and globally innovative FinTech sector</td>
</tr>
<tr>
<td>✓ Built with backing from major international financial institutions</td>
</tr>
<tr>
<td>✓ Engagement with governing bodies all around the world is helping to create a truly international network</td>
</tr>
<tr>
<td>✓ Comprehensive user experience considerations to provide standout customer engagement and market adoption</td>
</tr>
<tr>
<td>✓ The first market initiative to launch open banking in Europe</td>
</tr>
<tr>
<td>✓ Live ecosystem since January 2018 now with circa 100 participants</td>
</tr>
</tbody>
</table>

To join the OBIE ecosystem, get involved in shaping our Standards, or simply get more information contact us at: http://www.openbanking.org.uk/contact-us/
Together we can make PSD2 a regulatory and commercial success