Can artificial intelligence (AI) enable the delivery of new open banking and open finance services in the UK?

In the first of a new series of green papers, we assess the state-of-play of AI in the open banking ecosystem and pose four key questions to the industry about its current and future use.
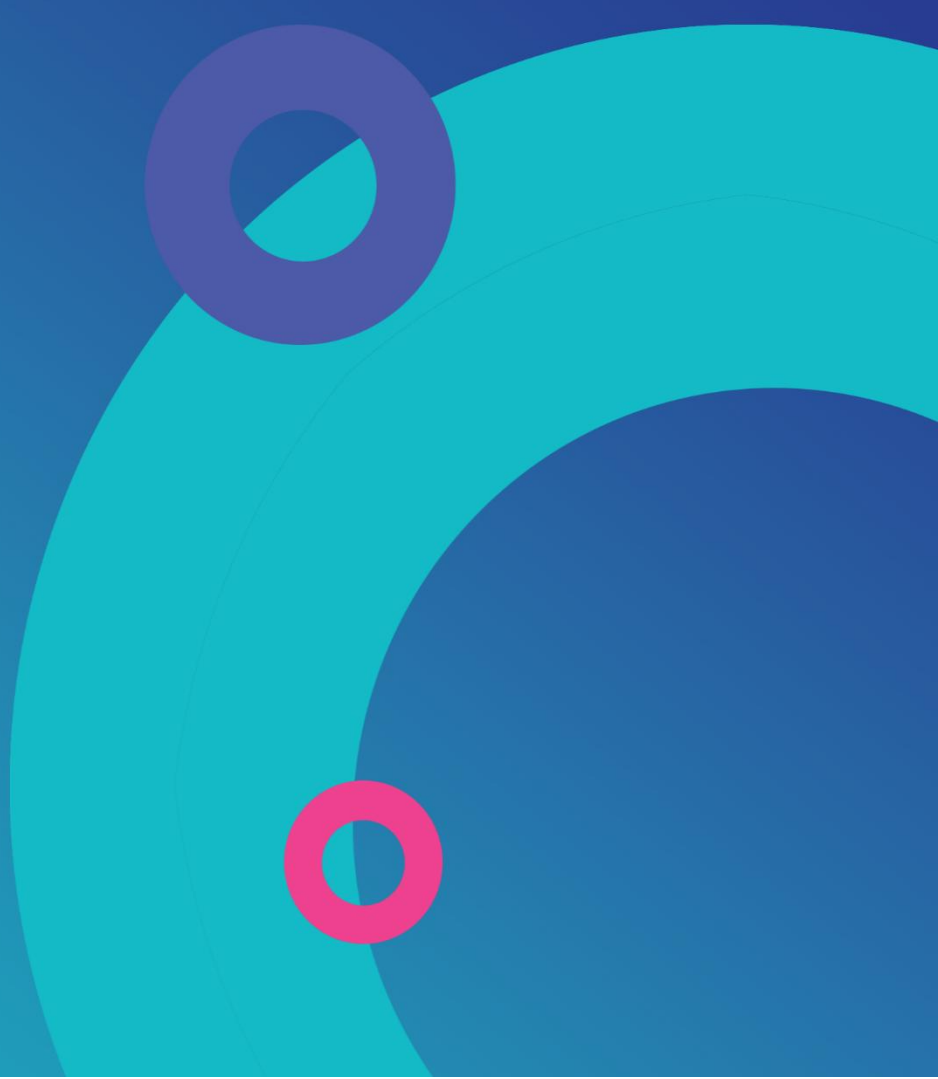
Sharing your insights and expertise will help determine the future approach to the delivery of open finance and smart data and support the evolution of the Open Banking Standard.

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OPEN BANKING

Introduction

1. The discussion and your views

This is the first in a new series of green papers on key areas of competition and innovation that can impact and enhance the open banking and smart data ecosystems. **Here, we ask how the wider open banking and open finance[1] ecosystems can use AI to change the dynamics of data provision.**

We understand that industries are harnessing the power of different AI models, to create greater efficiencies, lower costs and to produce new innovative and competitive products and services.

For open banking today, and open finance in the future, we ask:

- o **1. Can the cost and complexity of API data provision be streamlined and reduced, especially where data is housed in legacy systems and where there are multiple systems using different technologies and architecture?**

- o **2. Does the Open Banking Standard provide sufficient input for AI to help provide open banking and open finance data? And does it enable the provision of services that connect to the APIs to use that data for customer and business-facing products and services?**

- o **3. Where AI is integrated into customer - and business-facing products and services that already use open banking data and payments, can it be used to create those products and services from scratch?**

- o **4. Is there anything specific to AI and open banking and open finance that we have not considered but that we should?**

Tell us what you think...

The purpose of a green paper is to gather expert views. We want to hear from a wide range of stakeholders and experts from the open banking ecosystem including account servicing payment service providers (ASPSPs), account information service providers (AISPs), Payment Initiation Service Providers (PISPs) and technical service providers (TSPs). We also want to hear from people in open finance sectors such as investments and insurance, as well as data scientists, and AI experts in finance and other fields.

Your answers will help us all to make the best use of AI in the open banking ecosystem today – and in the future – including in other smart data ecosystems as they evolve.

Please submit written responses by Friday 24 October 2025.

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[1] We outline concepts of Open Finance in Annex 1.

2. **The current state-of-play on data provision**

We want to support the ecosystem to build, and share, specific expertise in how AI could be deployed within open banking or open finance data journeys. We think this could benefit fintechs, banks and third-party providers (TPPs), as well as the consumers and businesses who use these products and services.

Ecosystem stakeholders, alongside initiatives such as the 2025 FCA Sprint on Open Finance, have also highlighted the importance of evaluating whether AI, and other tools, could cut the cost of data supply.

We want to find out whether AI could be used to reduce the cost and complexity of supplying open finance and smart data, specifically where it benefits consumers and businesses, especially use cases in other sectors that could illustrate cost and resource efficiencies.

If so, how could the industry achieve consensus on this, while still meeting the security and ethical requirements associated with AI in financial services.

We also want to understand the market for private AI provision to firms for some of the potential scenarios listed below. This includes whether there can be cost efficiencies for small, specialist financial firms using 'off the shelf' products that have been trained on common platforms and processes and targeted for this audience.

Data provision

Opening up data sources, as open banking has done, historically uses banks' own programmes or relies on trusted third parties. This process involves cleaning and consolidating data to a consistent standard before providing access, through APIs, to TPPs. However, this approach typically requires significant time and resources to implement.

TPPs need to develop useful products and services for consumers and businesses. They need to connect to APIs and automate functions, but even with standardised processes, data formats can vary.

How can AI help in data provision? (subject to regulatory requirements)

AI models access large amounts of data from various sources and formats to generate useful outputs. They could streamline the cleaning and consolidation of organisational data, making it accessible via APIs. As AI continues to advance, it could help reduce costs and complexity in both current and future data provision, including initiatives like open finance.

What kind of firms could benefit from AI?

We are also interested in the dynamics between larger organisations with complex IT systems and smaller, specialist financial firms that may have less complex, and sometimes outsourced, systems. We ask key questions on these topics to understand more about the benefits of AI in the supply of smart data.

3. Consumption of the Open Banking Standard and data within AI

Banking is an innovative sector, and UK Finance's response to the Treasury Committee on AI in financial services noted that that banks and other financial institutions have been using AI for 10 years or more.

There are a wide variety of AI models, each designed for different purposes and tasks, and these can be broadly categorised according to their functionality, structure, and application.

OBL's Open Banking Standard and opportunities for AI

The Open Banking Standard is open source and is available in most free or commercially available (financial) AI chatbots, or other AI, models. This should enable open banking users to harness AI technology to help provide both open banking and open finance APIs and data.

It could also be used to provide code directly using information from the Open Banking Standard and other relevant files. To produce accurate outputs, however, the AI must be able to access the information it needs, including understanding *all versions of the Standard*.

We have explored different AI Large Language Models (LLMs) such as ChatGPT, Co-Pilot, and Grok and noticed that there is a discrepancy between which version they consider the latest. There are also some discrepancies in the information regarding the OBL Standard, so we want to understand how we can ensure greater accuracy and consistency.

But can we do more to provide AI-ready information from enhancements to the current Standard?

Finally, we would like to explore whether the types and models of AI make a difference in how the Standard is consumed, and if there are specific AI models that are more likely to be used in the future with open banking and open finance standards. This would allow us to be able to better target standard-setting and publication.

4. Additional questions and clarifications

As part of the broader conversation around AI use, stakeholders have raised the following hypotheses about potential benefits from AI within the open banking ecosystem:

- o **Could AI be used within a data provider's IT estate to draw in pre-existing data sources, and aggregate and clean it, to provide high-quality data. This could eliminate a significant amount of development for data providers.**

- o **If AI is not part of the IT estate, could it still work between the API and the TPP to eliminate differences in format? TPPs would not need to understand any unique data traits.**

- o **Are there any parallels to these use cases in other industries or territories?**

- o **How can AI support code generation and automated IT development, either under the current Open Banking Standard or with future updates?**

Underpinning this is the regulatory treatment of AI within the financial sector. Do any existing regulations support or restrict the use of AI that would be otherwise be beneficial to the continued development of open banking and open finance?

We don't examine technical aspects of different AI models or development in this paper. Topics like AI ethics, agentic AI, and agent consent remain outside our scope but are relevant to current and future open banking and open finance ecosystems.

During the consultation period, we may publish additional technical information and engage with stakeholders on specific related topics.

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As well as the four questions above, we are keen for respondents to also consider the following points within responses:

- o **Is AI now, or likely to be, an enabler for the provision of open banking and open finance data? If so, what role does/will AI play and what are the associated pros and cons?**

- o **Is AI now, or likely to be, a user of the Open Banking Standard to create outputs such as advice, guidance, or code? Are there any barriers to AI being used in this way and/or improvements that could deliver beneficial outcomes?**

- o **Are there any types of AI model, or specific AIs, that are likely to be more important for the open banking and open finance ecosystem? How do we prioritise which AI models to 'design' to?**

- o **Do financial services regulations support the use of AI within open banking journeys, or do they play a more restrictive role?**

5. Join the conversation

The most important thing about this green paper will be your responses. You can reply to the four questions set out in our online survey, or email your responses to any of the questions raised in the paper to consultations@openbanking.org.uk **by Friday 24 October 2025.**

We will summarise the responses, along with any key insights that will help develop and deliver the use of AI to expedite the rollout of open finance.

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Annex 1:

Smart data provision and open finance

Open banking is the UK's first smart data scheme and has made significant progress in making smart data accessible, but its benefits have primarily been limited to current accounts and credit applications.

Open finance will enable and expand data sharing, primarily in mortgages, investments, savings, and insurance. In turn, applying the same principles to other key sectors, such as energy, property and transport, will pave the way to a truly data-driven economy.

The FCA's Roadmap on Open Finance is expected to be published before April 2026.