



Department for  
Business & Trade

# The Smart Data Roadmap

Action the government is taking in 2024 to 2025

April 2024

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## Foreword

Data continues to play a pivotal role in our society and economy. This government recognises that our data economy is integral to the UK's growth and future prosperity. We want to harness the opportunities for data to create efficiencies, tailor products and services, improve decision making, and empower customers to make better use of data that belongs to them. Through championing Smart Data – a form of data portability – we are facilitating the data economy to drive growth and innovation, and to enable services that ensure businesses and consumers get more for their money.

In the 2023 Autumn Statement, the Chancellor set out his ambition for the government to kickstart a Smart Data big bang. It is estimated that wider data mobility could increase GDP by £27.8 billion per year. Data portability, through Smart Data, will be instrumental in unleashing this growth.

Open Banking has shone a spotlight on the spectrum of opportunities available to consumers and businesses when customers are put in control of their data. 330 innovative firms are actively using Open Banking regulations to empower consumers and businesses to make better use of their data, many of which have benefited from a magnitude of investment into UK fintech. Research shows 77% of people using the technology found it easier to keep track of spending and 76% of people have benefited from better opportunities to save.

We know that consumers want greater choice and deserve improved services in sectors beyond retail banking – and cutting-edge businesses are poised to attract investments to meet this demand. From being able to make greener decisions, to having a more holistic view of their essential spending, Smart Data could underpin a host of tools to put customers back in control of their data.

This document sets out our plans to explore the use of the Smart Data powers in the Data Protection and Digital Information Bill in the following sectors: energy, banking, finance, retail, transport, homebuying and telecommunications. Our ambition is to build upon and learn from Open Banking, extending the principles that underpin its international success across the UK economy. In each of these sectors we will identify where regulatory intervention may be necessary, consult on the use of the Smart Data powers in the Data Protection and Digital Information Bill and, if necessary, design a potential scheme and proceed with implementation.

We will continue to ensure that this work is coordinated through the work of the Smart Data Council, to enable an efficient and interoperable Smart Data ecosystem to emerge. This ecosystem will provide businesses and customers with the vibrant and empowering services they need to navigate today's growing data economy.



A handwritten signature in black ink, appearing to read 'Kevin'.

Kevin Hollinrake MP

Minister of State for Enterprise, Markets and Small Business  
Department for Business and Trade

## About the Roadmap for Smart Data

1. The wider data economy is a large and growing part of the economy, with the OECD estimating that it drives investments worth 3.0 to 6.7% of UK economic activity.<sup>1</sup> Smart Data is integral to enabling greater investment and innovation, as demonstrated through Open Banking. Unlocking further investment and encouraging this innovation will drive an increase in UK productivity and long-term economic growth.
2. To unlock the potential for Smart Data to drive the wider data economy, the government wants to see similar and interoperable schemes in sectors beyond retail banking to realise a world-leading Smart Data economy, which will empower consumers and small business customers, turbo charge competition, innovation, and growth.
3. In the 2023 Autumn Statement, the government committed to kickstarting a Smart Data Big Bang and to set out the UK's ambition for using the new Smart Data powers created in the Data Protection and Digital Information (DPDI) Bill. The Chancellor set out seven sectors that the government will explore: energy, banking, finance, retail, transport, homebuying and telecommunications.<sup>2</sup> These sectors have been chosen due to existing progress with Smart Data, or because of the impact that schemes in these sectors could have on the cost of living.
4. The Chancellor followed this in the recent Spring budget, with the announcement of an additional total of £1 million funding for the Department for Transport (DfT) and £500,000 funding for the Department for Energy, Security and Net Zero (DESNZ) to undertake the necessary consultations and calls for evidence to identify and design schemes to take forward in transport and energy.
5. In line with this commitment, this Roadmap sets out a cross-government vision for a Smart Data economy and a set of specific actions we will take to achieve it. It highlights the government's ambition for Smart Data scheme identification and development in specific sectors. It provides commitments and actions for the government to accelerate and coordinate the development of Smart Data schemes. In parallel, through the work of the Smart Data Council and the Smart Data Challenge Prize, we will continue to support industry-led work, and consider how tailored regulations can continue to foster innovation, cultivate investment, and drive growth.
6. Each sector will progress through four stages; identification, consultation, design, and implementation (set out further on page 10). **Below is a summary of the agreed actions in each sector and their stage of delivery:**

### **Banking** (implementation)

- HM Treasury will use the Smart Data powers to provide Open Banking with a long-term regulatory framework by laying secondary regulations.

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<sup>1</sup> As measured by Gross Value Added. OECD (2023) <https://www.oecd.org/unitedkingdom/what-is-the-role-of-data-in-jobs-in-the-united-kingdom-canada-and-the-united-states-fa65d29e-en.htm>

<sup>2</sup> Gov.uk (2023) <https://www.gov.uk/government/publications/autumn-statement-2023>

### **Finance** (identification)

- The Centre for Finance, Innovation and Technology (CFIT) has recently published a blueprint for driving Open Finance forward in the UK. This included recommendations for industry and government. HM Treasury will carefully consider CFIT's recommendations, alongside wider industry engagement, as it develops its strategy for Open Finance.

### **Energy and Road Fuels** (identification and consultation)

- The Department for Energy Security and Net Zero (DESNZ) consulted on a statutory Open Data scheme for road fuel prices (PumpWatch). Following analysis of the consultation and Royal Assent of the DPDI Bill, regulations will be laid to establish the scheme.
- DESNZ will publish a sector-wide call for evidence by end of Summer 2024 and will set out the next steps in a government response by March 2025.
- DESNZ will progress priorities complementary to Smart Data objectives, including:
  - Delivering the commitments from the Energy Digitalisation Strategy and the joint response to the Energy Digitalisation Taskforce.
  - Exploring the feasibility of creating a smart meter data repository through the £1 billion Net Zero Innovation Portfolio (NZIP).
  - Publishing further detail on the implementation of proposals for a secure and smart electricity system.

### **Telecommunications** (consultation)

- A consultation on Smart Data in telecommunications closed on 13 November 2023. The Department for Science, Innovation and Technology (DSIT) will set out next steps in Spring 2024.

### **Transport** (identification)

- The Department for Transport will progress work to support Smart Data objectives, including:
  - Taking forward discovery work to develop transport use cases for Smart Data.
  - Using the outcomes of the discovery to shape the evidence for a Call for Evidence in Autumn 2024, along with potential questions.
  - Publishing further detail on the opportunities for Smart Data in the transport sector in 2025.

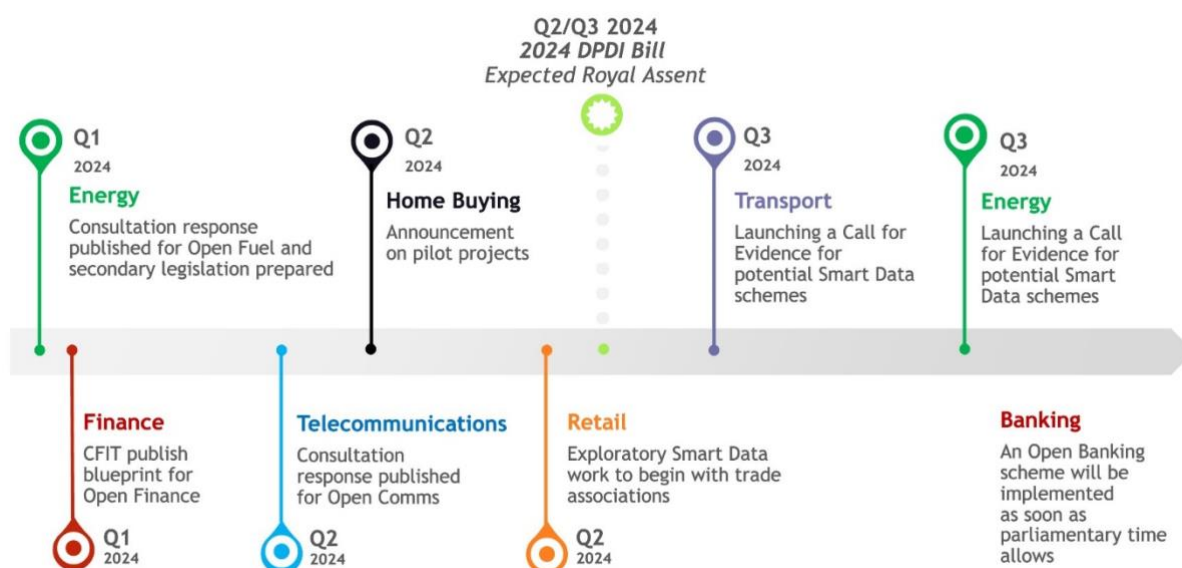
### **Retail** (identification)

- The Department for Business and Trade (DBT) will engage formally with the Retail Sector Council and other trade associations in the summer to discuss opportunities for Smart Data, before agreeing to next steps to progress Smart Data in Retail in the Autumn.

## Home Buying (identification)

- By Summer 2024, The Department for Levelling Up, Housing and Communities (DLUHC) will launch a number of pilot projects to inform future digitalisation of the home buying and selling process. This is an important first step towards Smart Data Scheme development.

### 7. The timeline below maps the different actions that the government will take to progress Smart Data scheme development in 2024.



## What is Smart Data?

### 8. Smart Data is the secure sharing of customer data, upon the customer's request, with Authorised Third-party Providers (ATPs). The ATPs can then enhance the customer data with broader, contextual 'business' data, which may be provided directly to ATPs or may have been made 'open'. Customers may be individual consumers or business customers. Smart Data:

- Relates to customer data & business data (e.g. related to products, transactions, service usage).
- Is shared in specific formats (e.g. data standards, time frames).
- Is accessible by ATPs with permission of customers.
- Enables customer data to be actionable by ATPs (e.g. payments can be made on behalf of the customer).

### 9. The Competition and Markets Authority (CMA) have suggested that Smart Data schemes (i.e. the implementation of Smart Data in a specific sector or group of sectors) require:<sup>3</sup>

- A regulatory framework to govern how data is shared.

<sup>3</sup> Gov.uk (2023) <https://www.gov.uk/government/publications/cma-response-to-dsit-consultation-a-smart-data-scheme-for-the-uk-telecoms-market>

- Common and open data standards that reflect the dynamics of the market and minimise the risk to competition and consumer.
- Participation of data holders, third parties and regulators.
- Effective representation of consumers and other end users.
- A funding model that reflects consumer interests.
- Interoperability with other Smart Data schemes.
- A practical framework for the delivery of schemes.

10. In Open Banking, these elements were brought together in 2017, following the CMA's investigation into retail banking. The UK continues to lead the way globally with Open Banking, with over 8 million consumers and businesses benefitting from it in the UK. The benefits are not limited to individual customers, with some 750,000 SMEs using innovative Open Banking enabled products and services to manage their money and to make payments.<sup>4</sup>

11. Open Banking has also been a critical component of the UK's thriving fintech sector. A survey of 82 UK based fintechs, all active in Open Banking, found that they have raised £2.2 billion since 2010, with 92% of this raised since the introduction of Open Banking.<sup>5</sup>

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<sup>4</sup> Gov.uk(2023)

[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/1150988/JRO\\_C\\_report\\_recommendations\\_and\\_actions\\_paper\\_April\\_2023.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1150988/JRO_C_report_recommendations_and_actions_paper_April_2023.pdf)

<sup>5</sup> Startup Coalition (2023) <https://startupcoalition.io/news/the-4bn-open-banking-ecosystem/>

# A Smart Data Economy

## The strategic framework for Smart Data

12. The delivery of Smart Data will be underpinned by regulations, which are likely to be specific and tailored to each sector. To ensure sector-specific delivery enables a Smart Data economy, the government has taken three steps:

- **Introduced Smart Data legislation** via the DPDI Bill to provide the legislative framework for future regulations.
- **Launched the Smart Data Council** to build momentum and direct coordination of future Smart Data Schemes, including by developing practical understanding of interoperability and how to achieve it.
- **Developed a Smart Data Challenge Prize** to identify cross-sector use cases from across the economy, building a network of innovators to inform the development of Smart Data schemes.

### Legislation – The Data Protection and Digital Information Bill

13. In July 2019, the government published the Smart Data Review, which consulted on how to advance Smart Data, put consumers in control of their data, and enable innovation.<sup>6</sup> Respondents to that consultation agreed that it is important to have a strong mechanism to incentivise industry to deliver Smart Data initiatives.<sup>7</sup> Respondents also highlighted how government's existing powers were not sufficient in delivering the full benefits and safeguards required for Smart Data. We therefore set out our plan to create the power to mandate industry involvement in Smart Data initiatives via **primary legislation**.

14. The government introduced the DPDI Bill on 8 March 2023 and it is currently progressing through the Parliament. Part 3 of the Bill will extend the government's ability to establish and mandate participation in Smart Data schemes via regulations. The government intends to use these powers to create a regulatory framework for data sharing in Open Banking, as well as an Open Data scheme for road fuel pricing. Where the government identifies the need for regulatory intervention in other sectors, we expect these powers to be used to develop the appropriate regulations for the implementation of a scheme.

15. Regulations will identify what data should be shared, by who (the 'data holders'), and how the data should be shared (e.g., with reference to Application Programming Interfaces (APIs), which provide the way for two or more computer programmes or components to communicate with each other). This will be underpinned by the identification of relevant sector actors to provide enforcement, accreditation, and interface functions.

### The Smart Data Council

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<sup>6</sup> Gov.uk (2023) <https://assets.publishing.service.gov.uk/media/5cffd3ba40f0b609601d100f/Smart-Data-Consultation.pdf>

<sup>7</sup> Gov.uk (2020) <https://www.gov.uk/government/consultations/smart-data-putting-consumers-in-control-of-their-data-and-enabling-innovation>



16. The government established the Smart Data Council in April 2023, in line with a recommendation from the 2021 Smart Data Working Group Report. The report concluded that further work will be necessary to pinpoint where true cross-sector commonalities exist and to establish how they can be capitalised upon to support Smart Data.<sup>8</sup> The aim of the Council is thus to ensure a coordinated approach to Smart Data Scheme development.<sup>9</sup> The Council is formed of key government departments, regulators, industry bodies, and consumer groups. Its objectives are to:

- Establish coordination and collaboration across government departments, regulators, industry bodies, and consumer groups.
- Drive knowledge sharing and interoperability across sectors and encourage shared approaches to delivery.
- Engage new sectors to encourage participation in and gauge readiness for Smart Data.
- Assess the impact of Smart Data on different industries, consumers and other stakeholders to ensure positive outcomes.
- Support the building and maintaining of data infrastructure to enable Smart Data to be as open as possible.
- Inform the evolution of Smart Data policy and implementation, to ensure the ecosystem remains responsive to changing user attitudes and technological developments.

17. We have established three working groups to support the core Smart Data Council. The working groups are looking to deliver products that will contribute to the development of consistent and interoperable Smart Data schemes. The three working groups are:

Subgroup	Aims
Technical Infrastructure	<ul style="list-style-type: none"> <li>• To define common data standards</li> <li>• To ensure that there is consistency in the technical architecture of all schemes, to enable interoperability.</li> </ul>
Trust, Compliance and Consumer Protection	<ul style="list-style-type: none"> <li>• To agree core principles of sector-wide trust frameworks, including authentication, transparency, control, accountability, and redress.</li> </ul>
Economic Models and Understanding Value	<ul style="list-style-type: none"> <li>• To understand potential charging and funding structures for future Smart Data schemes.</li> <li>• To share information on the evolving costs and benefits of Smart Data schemes in given sectors to inform decisions on future schemes.</li> <li>• To explore efficiencies to minimise cost of scheme development and implementation.</li> </ul>

<sup>8</sup> Gov.uk (2021) <https://assets.publishing.service.gov.uk/media/60c72e058fa8f57ce3773c2d/smart-data-working-group-report-2021.pdf>

<sup>9</sup> Gov.uk (2023) <https://www.gov.uk/government/news/new-smart-data-council-to-drive-forward-savings-for-household-bills>

18. We will publish an update on Smart Data Council progress and research findings over the coming months.

### **The Smart Data Challenge Prize**

19. We have commissioned research into the design of a possible Challenge Prize to build a deeper understanding of the potential barriers to cross-sector data sharing.<sup>10</sup> The research centred on how to incentivise innovators to share examples of detailed cross-sector use cases. Its findings have been used to design a Challenge Prize process – the outputs of which will enable the government and the Smart Data Council to understand better the technical and regulatory requirements for facilitating a broad range of use cases and ensuring the development of interoperable schemes.

20. The Challenge Prize aims to:

- Encourage the generation of ideas on potential Smart Data solutions and use cases.
- Provide an appropriate data source (or sources) for Challenge Prize participants to work with.
- Incentivise and facilitate participants to test detailed use cases that would benefit consumers and businesses in real-world scenarios.
- Reward Challenge Prize participants appropriately including the declaration of an overall winner.

21. The Smart Data Discovery Challenge was launched on 26 October 2023 to encourage the generation of ideas on potential Smart Data solutions and use cases.<sup>11</sup>

22. DBT, Challenge Works, the Open Data Institute (ODI) and Smart Data Foundry invited individuals, innovators, entrepreneurs, academia, and civil society to share ideas for ambitious and feasible solutions that could harness Smart Data across different sectors of the economy to benefit individuals and small businesses in the future.

23. The open call for ideas closed on 8 December 2023, and a longlist of use cases was selected, based on published assessment criteria.<sup>12</sup> The most promising ideas were supported to refine the solutions, which included expert mentorship. An event, held on 21<sup>st</sup> March 2024 brought together the emerging Smart Data community to hear ‘pitches’ for the most innovative cross-sector use case ideas that have been entered into the prize. After assessment, the four best ideas were awarded with cash prizes.<sup>13</sup>

24. Following the Discovery Challenge, we are launching a full Challenge Prize in June 2024. Participants will be offered access to a bespoke data sandbox to support use case prototyping and testing, as well as expert mentoring, and grants to support development. At the end of the prize, a share of grants up to £750,000 will also be available for those

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<sup>10</sup> Gov.uk (2023) <https://www.gov.uk/government/publications/unlocking-smart-data-design-research-into-a-possible-challenge-prize>

<sup>11</sup> Gov.uk (2023) <https://www.gov.uk/government/news/government-led-coalition-launches-open-call-for-bold-and-innovative-ideas-using-smart-data>

<sup>12</sup> Smart Data Challenges (2023) <https://smartdata.challenges.org/about-the-smart-data-discovery-challenge/>

<sup>13</sup> Gov.uk (2024) <https://www.gov.uk/government/news/government-led-coalition-launches-open-call-for-bold-and-innovative-ideas-using-smart-data>

with the most innovative and bold Smart Data solutions to spend on Smart Data related innovation.<sup>14</sup>

25. In exchange, the government will have access to a range of in-depth, tested use cases across a variety of priority sectors. This will give the government a clear picture of the potential barriers to development, and exactly what data would need to be unlocked to bring the most innovative ideas in the Smart Data space to life. We also hope to build a community of cutting-edge innovators and connect them with relevant industry experts.
26. The Discovery Challenge presented an opportunity for the government and regulators to better understand interest in Smart Data innovation across different sectors, and the considerations required to build the appropriate regulatory and technical landscape to facilitate innovation. The Challenge Prize will build on that understanding to maintain momentum in developing the Smart Data ecosystem.

## Smart Data Scheme Development

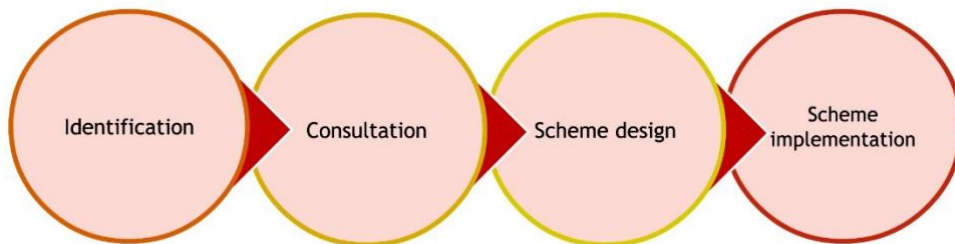
27. To deliver Smart Data schemes, the government must explore the opportunities and challenges in each sector. At a sector level, the government has already:
  - Committed to creating a long-term regulatory framework to secure the existing achievements of Open Banking.
  - Consulted on Open Communications and Open Fuel to develop understanding of how Smart Data can enhance competition, growth, and innovation in these sectors.
  - Introduced regulations for Pension Dashboards, including a connection deadline of 31 October 2026, by which time all relevant schemes should have completed connection.
  - Launched the Centre for Finance Innovation and Technology which has explored Open Finance use case development as its first project.
28. DBT will continue to focus on the cross-economy actions needed for successful Smart Data schemes, to ensure these and other future schemes are interoperable, inclusive, and benefit the economy by turbo charging competition and innovation. The table below sets out some actions to achieve this.

Principle	Action
<b>Smart Data schemes should be interoperable</b>	To ensure that schemes, where appropriate, are interoperable, the Smart Data Council will look to procure research projects across data standards and trust frameworks to help guide the design of regulations and implementation of each scheme.
<b>Smart Data schemes will turbo charge competition, innovation, and growth</b>	The Smart Data legislation stipulates that in designing regulations, the Secretary of State or HM Treasury must have regard to the impact of the regulations on competition, innovation, consumers, and SMEs.

<sup>14</sup> Ibid.

<p><b>Smart Data schemes will improve consumer outcomes through inclusivity.</b></p>	<p>In the identification and development of Smart Data schemes, the government will ensure that all consumers are able to benefit from the introduction of each scheme, with vulnerable consumers being placed at the centre of each initiative.</p> <p>In the development of Smart Data schemes, the government will ensure that the four pillars of inclusivity are incorporated into scheme design (as identified in research into design principles for inclusive Smart Data schemes)<sup>15</sup> – while the Smart Data Council will ensure these schemes develop coherently.</p> <p>The four pillars are: trust, consent, consumer choice and support and redress.</p>
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29. The government is keen to make fast progress on Smart Data, whilst ensuring that each sector’s specific needs and circumstances are taken into account. This means that any new scheme will need to progress through various stages from initial scoping to scheme implementation, as detailed in HM Treasury’s guidance in the Green Book.<sup>16</sup> The remainder of this document provides information on each priority sector and its progress through the lens of these stages.



30. The **Identification** stage is the first step towards developing a Smart Data scheme. In this stage, government departments and regulators will explore how Smart Data could look to impact on competition in their sector, in addition to identifying how Smart Data could empower consumers.

31. The **Consultation** stage will involve the government department, and where appropriate, the sector regulator, working together to consult on the potential design of a Smart Data scheme in their sector. Schemes will be ready for this stage once the identification stage is complete and a Theory of Change has been developed, that sets out how Smart Data can address competition or consumer outcomes. We would expect the consultation to be

<sup>15</sup> Gov.uk (2023) <https://www.gov.uk/government/publications/design-principles-for-inclusive-smart-data-schemes>

<sup>16</sup> Gov.uk (2018) [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/1063330/Green\\_Book\\_2022.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1063330/Green_Book_2022.pdf)

accompanied by an Impact Assessment that seeks to estimate the costs incurred in setting up, operating, and maintaining a Smart Data scheme for the relevant sector.

32. The consultation will enable government departments to better understand the potential benefits and challenges of introducing a Smart Data scheme in their sector, which will inform policy decisions on the scope of a scheme and roles and responsibilities for decision makers, enforcers and interface bodies.
33. Progression to the **Scheme Design** stage will depend on the outcome of the consultation process. The launch of a consultation does not mean that the scheme will be implemented.
34. Sector specific regulations will need to be drafted, before being laid before parliament. The regulations will be subject to affirmative scrutiny and specify the scope of a scheme, including (but not limited to):
  - Consumer and/or Business Data sets that fall under the scheme remit, and how it should be collected, used, and provided.
  - If and how third parties may act on behalf of customers.
  - The use of specified services, including APIs and data standards.
  - Roles and responsibilities for decision makers, enforcers, and interface bodies.
  - The funding of the scheme.
  - How consumer complaint and redress will be supported.
35. At the **Scheme Implementation** stage, the scheme will be operational, with data holders in scope being able to provide the data sets in line with the requirements and technical standards as set out in the relevant regulations. Consumers will be able to provide consent to ATPs to access the data in scope and provide services as permitted within the scheme(s).
36. The lessons learned from the success of Open Banking and the Consumer Data Right in Australia have shown that schemes can start from the basis of a Minimum Viable Product (MVP), in which there might initially only be a limited number of data sets opened up.
37. At scheme implementation stage, it may be that only a small number of data sets are in scope for each scheme. Where appropriate, schemes may set out a timetable for when additional data sets will need to become available. In the case of Open Banking, this began with an initial API, before personal customer transaction data was included, initially on a read-only basis. The full scope, including business, customer and transactional data, followed later.

## Priority Sectors

38. In this section of the Roadmap, we set out the progress being made in **priority sectors alongside retail banking**, and the actions that the government will take to accelerate scheme implementation in each sector. The next chapter discusses further sectors of interest.
39. In April 2023, the Economic Secretary to the Treasury committed to using the Smart Data powers in the DPDI Bill to provide Open Banking with a long-term regulatory framework. The design of these regulations will be rooted in the recommendations of the Joint Regulatory Oversight Committee (JROC). The JROC, comprising the Financial Conduct Authority (FCA) and the Payment Systems Regulator (PSR) as co-chairs and the HM Treasury and the CMA as members, was established in March 2022 to design and oversee the next phase for Open Banking.
40. JROC is continuing to work with industry to identify key elements of a new regime and we are prioritising the development of a successor implementation entity which will secure a basis for future Open Banking initiatives.
41. **Finance** will also be a priority sector. In February 2024, the Centre for Finance, Innovation and Technology published its findings on how Open Finance can unlock financial data to benefit SMEs and consumers.<sup>17</sup> The design of Open Banking regulations under the Smart Data powers will provide a framework that is scalable and adaptable to future technologies.
42. The government is also considering schemes within **energy, telecommunications and transport** in line with its vision for regulatory reform that will ensure regulators help push down the cost of living and drive economic growth.<sup>18</sup>

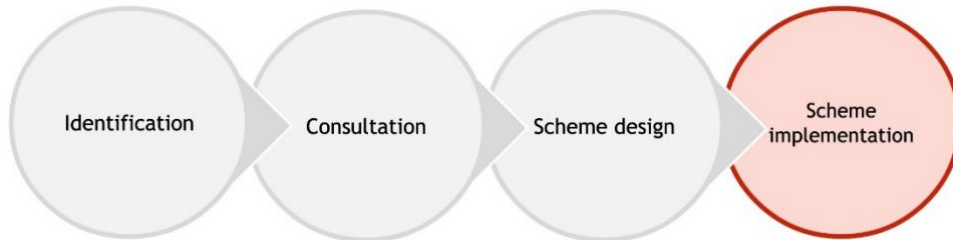
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<sup>17</sup> Cfit.org.uk (2024) [Open Finance - New - The Centre for Finance, Innovation and Technology \(CFIT\)](#)

<sup>18</sup> Gov.uk (2023) <https://www.gov.uk/government/publications/smarter-regulation-to-grow-the-economy>

# Banking

## Current stage of Smart Data Scheme Development: Scheme Implementation



### Context

43. Open Banking is an existing and well-developed data sharing scheme, that allows consumers and businesses to give regulated third-party providers (TPPs) access to their payment account data and to initiate payments. Open Banking has come a long way since the conclusion of the CMA's retail banking market investigation in 2016, the introduction of the Retail Banking Market Order 2017 (CMA Order), and the implementation of the Payment Services Regulations 2017 (PSRs 2017). The UK pioneered Open Banking and established itself as a leader in the field.
44. Today, in the UK, over 8 million consumers and businesses (of which 750,000 are small to medium-sized enterprises (SMEs)) are using innovative Open Banking enabled products and services to manage their money and to make payments. Open Banking payments have more than doubled, with over 68 million Open Banking payments in 2022 (up from 25 million in 2021)<sup>19</sup> and over a billion successful Application Programming Interface (API) calls a month.
45. The UK fintech sector is successfully leveraging Open Banking technology, contributing to the UK's leadership in innovation and providing tangible benefits to consumers and businesses. Open Banking helps users make better-informed decisions and improves access to financial services. It also facilitates the creation of new products and services that benefit consumers, including those in vulnerable circumstances, and offers a greater choice of payment methods.
46. The UK's approach mandating all Account Servicing Payment Service Providers (ASPSPs) to provide access to ATPs and enforcing a single Open Banking standard for the largest ASPSPs through an implementation entity has allowed the ecosystem to overcome challenges faster than in other jurisdictions, establishing the UK's international standing as a leader in Open Banking. While significant progress has been made, there

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<sup>19</sup> OBL (2023)

<https://www.openbanking.org.uk/insights/new-impact-report-sees-significant-growth-in-open-banking-payments-and-increased-business-use/>

is more to be done to deliver the full benefits of Open Banking within retail banking markets, and beyond.<sup>20</sup>

47. The JROC is committed to enabling Open Banking to thrive, building on this success and moving Open Banking safely forward. In April 2023, the JROC published an ambitious roadmap for the future development of Open Banking,<sup>21</sup> and the government has stated its intention to support these plans, and its wider vision for Open Banking, through the development of a long-term regulatory framework which includes a Smart Data scheme.

### **Opportunities for Smart Data in Banking**

48. JROC has set out a detailed vision for the next phase of Open Banking development<sup>22</sup> one offering more products and services – acknowledging that the ecosystem needs to scale and become more economically sustainable, while remaining reliable, resilient, and efficient. In practice, this means creating an ecosystem that, through industry action and strong regulatory direction, builds commercial arrangements that are fair and proportionate for a multitude of new products and services, and that has a broad-based and equitably funded Open Banking entity.

49. While the existing baseline of regulatory-led free access has been and remains pivotal to democratising access to data as well as to supporting innovation and competition, a new phase is needed to allow the ecosystem to scale up.

50. JROC identified three priorities to deliver on this vision for Open Banking:

- To establish a sustainable and competitive footing for the ongoing development of the Open Banking ecosystem so that it can grow beyond the current functionalities and bring further benefits to end users.
- To unlock the potential for Open Banking payments.
- To adopt a model that is scalable for future data sharing propositions.

### **Benefits to Consumers**

#### **Existing Benefits**

51. UK Open Banking has been a great success story for consumers. Over 1 in 9 (11%) British consumers are active users of Open Banking, as are nearly 1 in 5 (17%) small businesses.<sup>23</sup> It has empowered individuals and businesses to make payments, manage their budgets, and understand their finances better during a challenging macroeconomic period when many are facing significant concerns around the cost of living.

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<sup>20</sup> Gov.uk (2023)

[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/1150988/JROC\\_report\\_recommendations\\_and\\_actions\\_paper\\_April\\_2023.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1150988/JROC_report_recommendations_and_actions_paper_April_2023.pdf)

<sup>21</sup> Ibid.

<sup>22</sup> Ibid.

<sup>23</sup> Openbanking.org.uk (2023) <https://www.openbanking.org.uk/news/open-banking-impact-report-october-2023/>



52. Research from Open Banking Limited (OBL) shows that 77% of people using the technology found it easier to keep track of spending – and 76% of people found it easier to save.<sup>24</sup>
53. Open Banking has enabled SMEs to more effectively control their finances by providing real-time data, enabling businesses to make better financial decisions, manage cash flow and reduce operating costs. OBL found that 77% of small businesses using the technology found it provided better insights into their financial position and 59% found it helped reduce internal costs.<sup>25</sup>

### **Future Benefits**

54. The JROC has identified priority areas for development, notably in data and payments.<sup>26</sup>

#### Data

55. Data and data sharing are the cornerstones of Open Banking. JROC's priority of adopting a model that is scalable for future data sharing propositions includes both the secure collection and sharing of data. Collecting data is crucial for the smooth running of the ecosystem as it helps in identifying and mitigating risks to businesses and consumers. Enhanced and safe data sharing can help create better and more tailored products for end users.
56. Putting consumers at the centre, JROC is considering ways to promote use cases and propositions that would create the most value to end users and businesses, particularly those with vulnerable characteristics.

#### Payments

57. JROC's priority is to unlock the potential for Open Banking payments, providing consumers and businesses with greater choice and better services when making payments. Open Banking presents an additional payment method which has the potential to support a wider range of use cases.
58. One of JROC's ambitions is to enable Open Banking payments to support retail transactions as an alternative to card payments. To do this, a commercially sustainable model and dispute resolution processes must be in place. By fostering innovation and driving competition in this way, businesses and consumers could benefit from improved customer payments journeys and lower costs.
59. Published alongside the 2023 Autumn Statement, Joe Garner's Future of Payments Review explores the current payments landscape and sets out recommendations to successfully deliver world leading retail payments in the UK. The Future of Payments

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<sup>24</sup> Openbanking.org.uk (2021) <https://www.openbanking.org.uk/wp-content/uploads/Open-Banking-third-party-provider-customer-survey-Nov-2021-Marketing-Means-v1.pdf>

<sup>25</sup> Openbanking.org.uk (2022) <https://www.openbanking.org.uk/news/obie-new-impact-report-shows-cloud-accounting-allowing-smes-to-run-businesses-more-efficiently/>

<sup>26</sup> Gov.uk (2023) [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/1150988/JROC\\_report\\_recommendations\\_and\\_actions\\_paper\\_April\\_2023.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1150988/JROC_report_recommendations_and_actions_paper_April_2023.pdf)

Review identified Open Banking as the key to improving the account-to-account payments experience in the UK:

*[...] Open Banking is starting to enable much improved bank transfer journeys – in some cases using QR codes or unique URLs. Therefore, the recommendation is that we focus on Open Banking as the route to improve the UK consumer account-to-account payment journey.<sup>27</sup>*

60. The expansion of Variable Recurring Payments (VRP) to non-sweeping use cases has been identified as a pilot scheme for improving account-to-account payments using Open Banking technology. VRP is a payment instruction that lets customers safely connect authorised payments providers to their bank account to make payments on their behalf in line with agreed limits. Sweeping VRPs are known as ‘me-to-me payments’ and are typically used to manage funds across multiple accounts, for example, a customer authorising regular monthly payments from their main current account to a secondary savings account.<sup>28</sup>
61. The current VRP infrastructure could allow for future non-sweeping use cases to be developed along commercial arrangements, enabling ‘me-to-business’ Open Banking payments. An early use case could see VRPs offered as an alternative to direct debit payments for subscription services, allowing consumers to set payment parameters and notifying them when a payment exceeds this, giving the customer more transparency, control and flexibility over their cashflow. This could empower customers and SMEs to better manage their regular bills and subscriptions.

### **Impact on Competition**

62. The government set out in the Payments Landscape Review its intention to ensure that Open Banking enabled payments are unlocked safely and securely, to allow consumers to pay for goods and services in shops and online directly from their accounts, rather than using a debit or credit card.
63. In the UK, debit and credit cards are the dominant payment method in shops and online. Whilst there has been considerable innovation in payments services, these innovations have tended to rely on cards, for example enabling payments to be made by cards held in digital wallets and card processing making it easier for businesses to accept card payments. Whilst there have been some examples of services in the UK seeking to provide payments methods that do not rely on card, such as Pay by Bank, these to date have been slow to be adopted.
64. Unlocking Open Banking enabled payments safely and securely could allow consumers to pay for goods and services in shops and online directly from their accounts, rather than using a debit or credit card. This would create competition and choice between payments networks, enabling exciting opportunities for fintechs to build the next

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<sup>27</sup> Gov.uk (2023)

[https://assets.publishing.service.gov.uk/media/6557a1eb046ed400148b9b50/Future\\_of\\_Payments\\_Review\\_report.pdf](https://assets.publishing.service.gov.uk/media/6557a1eb046ed400148b9b50/Future_of_Payments_Review_report.pdf)

<sup>28</sup> Currently, the nine largest UK banking providers are required by the CMA to maintain a VRP open banking API to facilitate sweeping use cases only.

generation of payments with new innovative services offering cheaper and more tailored payments. The government supports the PSR's view that having a viable alternative to cards is necessary to address long-term risks to competition in payments networks.

65. Additionally, the Future of Payments Review found dissatisfaction amongst UK merchants about a lack of choice or digital alternatives to existing card schemes. It also noted the potential for Open Banking to create a viable alternative payment method.

66. The Review makes several other Open Banking-related recommendations including about future commercial arrangements. The government is carefully considering the recommendations made in the Review and will set out its response in the form of a National Payments Vision as soon as possible later this year.

### **Next Steps for Smart Data in Banking**

66. The April JROC report<sup>29</sup> included an ambitious roadmap for the next phase of Open Banking, setting out a phased delivery approach over the next two years. The roadmap identified actions across five key themes to ensure the benefits of Open Banking are fully realised.

67. In December 2023, JROC published an update on progress made since April<sup>30</sup>, and will publish its final recommendations on the next phase of Open Banking soon.

### Long-term regulatory framework

68. Alongside this, the government has committed to creating a long-term regulatory framework to secure the existing achievements of Open Banking, unlock its future potential and ensure a sustainable economic model is in place.

69. The April 2023 JROC report set out HM Treasury's intentions for this framework to be based on joint regulatory oversight by the FCA and PSR and backed by the Smart Data provisions in the DPDI Bill. An Open Banking Smart Data scheme established under the DPDI Bill will provide clarity on the regulatory oversight over the Open Banking ecosystem and its participants and help realise further benefits for consumers, businesses, and the wider economy.

70. In the 2023 Autumn Statement, the government confirmed its intention to legislate to unlock the full potential of Open Banking-enabled payments in 2024 and intends to implement the legislation necessary for a Smart Data scheme as soon as is practicable.<sup>31</sup>

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<sup>29</sup> Gov.uk (2023)

[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/1150988/JROC\\_report\\_recommendations\\_and\\_actions\\_paper\\_April\\_2023.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1150988/JROC_report_recommendations_and_actions_paper_April_2023.pdf)

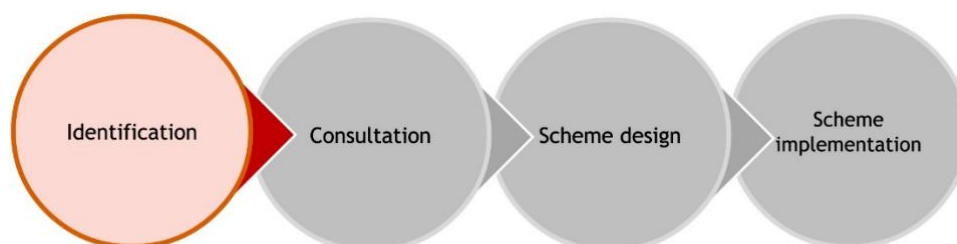
<sup>30</sup> Gov.uk (2023)

[https://assets.publishing.service.gov.uk/media/65806cb8e305f0001342e25b/JROC\\_Q4\\_Statement\\_on\\_Progress\\_Update\\_Dec\\_2023.pdf](https://assets.publishing.service.gov.uk/media/65806cb8e305f0001342e25b/JROC_Q4_Statement_on_Progress_Update_Dec_2023.pdf)

<sup>31</sup> Gov.uk (2023) <https://www.gov.uk/government/publications/autumn-statement-2023>

# Finance

## Current stage of Smart Data Scheme Development: Identification



### Context

71. Financial services have traditionally been closed data systems with financial institutions having a high degree of control over consumer financial data.
72. Open Banking has made it possible for bank customers to share their financial transaction data far more easily with third parties and allows third parties to initiate payments directly from a person's account as an alternative to credit/debit card payments. The UK was the first country to develop uniform Open Banking standards and continues to be the leader in the field, with many other countries looking carefully at the British experience as they develop their own models. Open Banking has empowered individuals and businesses to make payments, manage their budgets, and understand their finances better.
73. Since March 2022, the government has been working with the regulators, through the JROC, to design and implement the next phase of UK Open Banking.<sup>32</sup> The new arrangements will include a long-term regulatory framework and a new industry-led standards body to succeed the current Open Banking Implementation Entity.
74. In April 2023, the JROC published an ambitious roadmap for the future development of Open Banking.<sup>33</sup> The roadmap sets out the path to an economically sustainable, scalable and competitive Open Banking ecosystem. The April report also included HM Treasury's plans for the long-term regulatory framework for Open Banking in the UK, based on joint regulatory oversight by the FCA and PSR and backed by the Smart Data provisions in the DPDI Bill.
75. The government's immediate priority is the development of more permanent arrangements for Open Banking which will secure a basis for future financial services Smart Data initiatives.

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<sup>32</sup> Comprised of the Financial Conduct Authority (FCA) and the Payment Systems Regulator (PSR) as co-chairs, alongside the Competition and Markets Authority (CMA) and HM Treasury

<sup>33</sup> Gov.uk (2023)

[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/1150988/JROC\\_report\\_recommendations\\_and\\_actions\\_paper\\_April\\_2023.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1150988/JROC_report_recommendations_and_actions_paper_April_2023.pdf)

76. The completion of this work will put the UK in a strong position to develop Open Finance standards, building on the foundations of Open Banking to open access to data sets across a wider range of financial services. Opening up these data sets could improve access to innovative financial services products for consumers and businesses, increase competition in the market and increase levels of financial capability and inclusion.

### **Opportunities for Smart Data in Finance**

77. The FCA has reported that some market players will have greater access to data and technological ability as the market in data grows, and new challenges arise as a result of the wider application of machine learning. This may lead to behaviours that are not always in the interest of competition and, as with Open Banking, consumers may benefit from firms being required to share data more openly.<sup>34</sup>

78. Open Banking has demonstrated the benefits of data sharing and the importance of empowering consumers by putting them at the centre of data initiatives. The government believes that there are opportunities for enhanced data sharing to make a huge positive impact in other financial services sectors.

79. Currently, access to customers' financial data is limited to account information and payments through Open Banking. Open Finance is the extension of Open Banking-like data sharing and ATP access to a wider range of financial sectors and products, such as savings, investments, pensions and insurance.<sup>35</sup>

80. Work has already been undertaken by the regulators and industry exploring what a future Open Finance scheme might look like. In 2021, the FCA published their response to a Call for Input on Open Finance UK which identified the potential benefits to consumers and competition and set out the regulator's draft principles that might underpin an Open Finance scheme.<sup>36</sup>

81. Respondents to FCA's Call for Input highlighted a number of potential benefits of an Open Finance scheme or schemes, including:

- Increased competition – innovation to offer compelling customer services would flourish, driving competition between firms.
- Improved financial advice – Open Finance would make it easier for an adviser to quickly get a financial picture of a new or existing customer.
- Product innovation – including greater tailoring of products to suit individual circumstances and needs. Several respondents saw a future where tailoring could then work across sectors by combining modular products to build up a portfolio of products that worked best for a customer.

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<sup>34</sup> FCA.org.uk (2019) <https://www.fca.org.uk/publication/business-plans/business-plan-2019-20.pdf>

<sup>35</sup> Openbanking.org.uk (2023) <https://www.openbanking.org.uk/glossary/>

<sup>36</sup> FCA.org.uk (2021) <https://www.fca.org.uk/publication/feedback/fs21-7.pdf>

## Benefits to Consumers

82. International research shows that enhanced data access can allow the development of new innovative products that could improve customer choice in finance. This relates to a greater variety of products, enhanced personalisation and tailor-made solutions, less expensive products and the extension of services to previously underserved parts of the population (for example, credit scoring for SMEs). In such cases, data access can effectively promote financial inclusion for the financially excluded and underserved.<sup>37</sup>

## CFIT

83. The Centre for Finance, Innovation and Technology (CFIT) was launched in February 2023, backed by £5 million of government seed funding. CFIT is bringing together time-limited ‘coalitions’ of industry experts (e.g., business leaders, policymakers, and academics) to address issues facing the UK fintech sector and come up with practical, actionable solutions.

84. CFIT’s first coalition was focused on Open Finance. The coalition brought together over 60 organisations from across the ecosystem to develop use cases for Open Finance, with a particular focus on improving credit decisioning for SMEs and automating debt advice services for consumers.

## Impact on Competition

85. A so-called loyalty penalty can be seen in some financial markets. Evidence suggests that many longstanding customers are paying much more than newer customers, with businesses repeatedly increasing prices year on year.<sup>38</sup>

86. The FCA have noted the significant increase in the number of consumers not switching their mortgage deal when they could save money by doing so.<sup>39</sup> The FCA have also previously noted that millions of customers tend to stay with the same provider of home and motor insurance and implemented a package of remedies to reduce this ‘loyalty penalty’, such as easier methods of cancelling autorenewals.<sup>40</sup>

87. However, we consider that data portability could unlock easier switching in a range of markets. Increased competition within financial services forces firms to provide better services in order to retain and grow their customer base. This makes financial services providers more efficient and productive, which is good for the economy.<sup>41</sup>

88. Opening financial data relating to higher margin financial services products such as investments and mortgages could incentivise new fintech firms to enter the market, and

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<sup>37</sup> Oecd-ilibrary.org (2023) [https://www.oecd-ilibrary.org/finance-and-investment/open-finance-policy-considerations\\_19ef3608-en;jsessionid=sZu82KiZZqxUEsSCGKfPLfSOOiPp2W3rswTKhQ3C.ip-10-240-5-150](https://www.oecd-ilibrary.org/finance-and-investment/open-finance-policy-considerations_19ef3608-en;jsessionid=sZu82KiZZqxUEsSCGKfPLfSOOiPp2W3rswTKhQ3C.ip-10-240-5-150)

<sup>38</sup> Gov.uk (2018) [https://assets.publishing.service.gov.uk/media/5c194665e5274a4685bfbafa/response\\_to\\_super\\_complaint\\_pdf.pdf](https://assets.publishing.service.gov.uk/media/5c194665e5274a4685bfbafa/response_to_super_complaint_pdf.pdf)

<sup>39</sup> FCA.org.uk (2022) [FCA issues an update on switching in the mortgage market | FCA](#)

<sup>40</sup> FCA.org.uk (2021) [FCA confirms measures to protect customers from the loyalty penalty in home and motor insurance markets | FCA](#)

<sup>41</sup> Bankofengland.co.uk (2019) <https://www.bankofengland.co.uk/explainers/why-is-competition-important-for-banks>

encourage growth of, and innovation within, these sectors as new entrants compete for consumers. Data sharing frameworks can also result in greater and closer cooperation between incumbent financial institutions and technology and fintech firms.<sup>42</sup>

### **Next Steps for Smart Data in Finance**

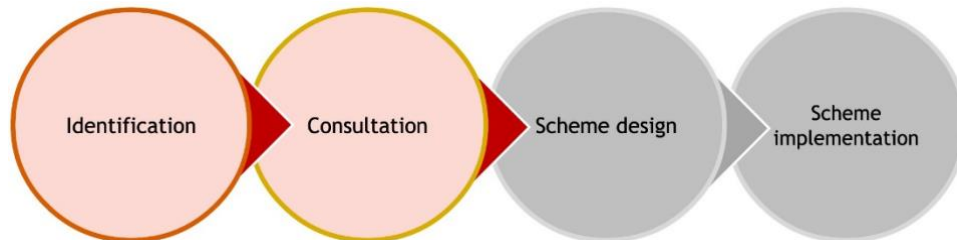
89. Initial work by the FCA has highlighted a range of considerations that need to be taken into account in relation to Open Finance and identified some areas in which industry-led solutions may develop. It is clear that Government, regulators and the private sector will need to work together to ensure that the UK continues to be at the forefront of developments in this space.
90. In February 2024, CFIT published a report from its first coalition on Open Finance, setting out a strategy for better data sharing to improve outcomes for consumers. The report set out the key findings from the coalition and made several recommendations aimed at advancing Open Finance in the UK, including the development of a multi-year roadmap and a commercial model to incentivise firms to securely share financial data.
91. CFIT also developed several 'proofs of concept' over the course of its open finance coalition to demonstrate how credit decisioning can be improved for SMEs and how automating debt advice services can lead to better outcomes for consumers. This work will give a firm foundation for and evidence of the benefits of opening up additional financial datasets that can be extended to help consumers and SMEs across the UK.
92. The government will carefully consider CFIT's report on Open Finance, alongside wider industry engagement, as it develops its strategy for Open Finance.

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<sup>42</sup> Oecd-ilibrary.org (2023) [https://www.oecd-ilibrary.org/finance-and-investment/open-finance-policy-considerations\\_19ef3608-en;jsessionid=sZu82KiZZqxUEScGKfPLfSOOiPp2W3rswTKhQ3C.ip-10-240-5-150https://www.oecd-ilibrary.org/docserver/19ef3608-en.pdf?expires=1702986083&id=id&accname=quest&checksum=F19C98705F065FE4C1AA6A084A41C87A](https://www.oecd-ilibrary.org/finance-and-investment/open-finance-policy-considerations_19ef3608-en;jsessionid=sZu82KiZZqxUEScGKfPLfSOOiPp2W3rswTKhQ3C.ip-10-240-5-150https://www.oecd-ilibrary.org/docserver/19ef3608-en.pdf?expires=1702986083&id=id&accname=quest&checksum=F19C98705F065FE4C1AA6A084A41C87A)

# Energy and Road Fuels

## Current stage of Smart Data Scheme Development: Identification and Consultation



### Context for the Energy sector

94. The energy sector is undergoing a period of considerable change to achieve a fully decarbonised electricity system by 2035 subject to security of supply, and net zero by 2050. This will require a rapid shift away from fossil fuels to cleaner, renewable forms of energy generation to balance the grid and provide flexibility, coupled with the electrification of much of our heat and transport demand.
95. Digitalisation of the energy system is becoming increasingly necessary, to maintain energy security, maximise the energy sector’s contribution to decarbonisation, and to manage the transition to an increasingly complex system at lowest cost to consumers and citizens. Better energy data visibility and access is a foundation upon which digitalisation is built. The Energy Digitalisation Strategy, and the response to the Energy Digitalisation Taskforce, set out the actions that Government, Ofgem and Innovate UK are taking to progress the area.<sup>43 44</sup>
96. Smart meters are an example today of how digitalisation is empowering consumers to change their behaviour to support decarbonisation; and in the future will enable consumers to access a broader range of products and services, better tailored to their needs. An independent review of energy supplier evidence on the impacts of the smart metering roll-out on household energy use found that smart meters are enabling consumers to reduce energy consumption by ~3%, in particular due to the feedback provided through provision of In-Home Displays and energy efficiency advice.<sup>45</sup>

### Context for Road Fuels

97. The CMA conducted a market study into the road fuels sector and found that competition at a national and local level has steadily weakened since 2019.<sup>46</sup> This was predominantly due to a decision by the historic price-leaders to take a less aggressive approach to

<sup>43</sup> Gov.uk (2021) <https://www.gov.uk/government/publications/digitalising-our-energy-system-for-net-zero-strategy-and-action-plan>

<sup>44</sup> Gov.uk (2022) <https://www.gov.uk/government/publications/digitalising-our-energy-system-for-net-zero-strategy-and-action-plan/energy-digitalisation-taskforce-report-joint-response-by-beis-ofgem-and-innovate-uk>

<sup>45</sup> Gov.uk (2023) <https://www.gov.uk/government/publications/impacts-of-smart-metering-roll-out-on-household-energy-use>

<sup>46</sup> Gov.uk (2023)

[https://assets.publishing.service.gov.uk/media/64a280e845b6a200123d46e7/Supply\\_of\\_road\\_fuel\\_in\\_the\\_United\\_Kingdom\\_market\\_study\\_Final\\_Report.pdf](https://assets.publishing.service.gov.uk/media/64a280e845b6a200123d46e7/Supply_of_road_fuel_in_the_United_Kingdom_market_study_Final_Report.pdf)



pricing by significantly increasing their internal margins for fuel. On top of this, other retailers have also maintained largely passive pricing policies, such as pricing by reference to local competitors rather than responding promptly to cost movement and/or trying to win market share. As a result, consumers have been left paying generally higher prices than would otherwise have been the case.

98. Estimated financial impacts of an increased average supermarket fuel margin has resulted in a combined additional cost of £900 million for consumers of the four supermarket retailers in 2022 alone. Regional discrepancies have also led to inflated prices, with a longstanding pattern of variable pricing between different local areas leaving consumers in some areas paying significantly more for fuel than others. Consequently, the CMA recommended that the government introduce an Open Data scheme to improve price transparency within the road fuels market.

### **Opportunities for Smart Data in Energy and Road Fuels**

99. There is increasing evidence of the benefits of better use of data in the energy sector, and Smart Data initiatives could potentially accelerate the use of data-driven technologies and innovative services, improving consumer outcomes and supporting economy-wide decarbonisation.
100. Smart Data innovations are already enabling consumers access to more personalised energy services and products, helping to bring down consumer energy bills and cut down household carbon emissions. Loop by Trust Power is an energy-saving app that helps energy consumers with smart meters to monitor their energy consumption.<sup>47</sup> The app presents energy usage data (both electricity and gas) in an easy-to-understand format, supporting users to track their energy usage and costs more easily, with the average Loop user reducing their energy usage by 15%.
101. Loop provides smart, personalised insights such as price comparisons to previous weeks and months, how they compare to similar households, actionable suggestions to save on energy bills, and analysis on the impact of getting solar photovoltaics and a home battery. Users can also be paid for using less electricity during peak times this winter through Loop's Turn Down and Save scheme, which is part of National Grid ESO's Demand Flexibility Service. Loop currently has a user base of over 130,000 households.
102. The Department for Energy Security and Net Zero's recent Call for Evidence on Innovation in the Energy Retail Market set out how a more innovative retail market will bring with it the opportunity to make better use of consumer data and digital tools, with most responses highlighting the better use of data (particularly half-hourly consumption data) as a key enabler of retail market innovation. The summary of responses to this Call for Evidence, setting out next steps for retail reform, was published on 23 February 2024.<sup>48</sup>

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<sup>47</sup> Loop.homes (2024) <https://loop.homes/>

<sup>48</sup> Gov.uk (2023) <https://www.gov.uk/government/calls-for-evidence/towards-a-more-innovative-energy-retail-market-a-call-for-evidence>

103. In the road fuels sector, there is an opportunity for the creation of an Open Data scheme for road fuel prices using the Smart Data powers in the DPDI Bill. Currently, fuel price data set is collected from fuel card purchases and then aggregated by Experian, which then sells it to both fuel retailers wanting to understand their competitors pricing and price comparison sites. These tools give consumers valuable information, helping them to make a more informed choice about where to buy road fuel. However, the current dataset and consumers' ability to access the data has some limitations in terms of cost, coverage, timeliness. In some cases, there are also restrictions on usage.
104. The creation of a statutory Open Data scheme in road fuel will provide for a comprehensive, real-time dataset, underpinned by Smart Data powers, to enable comparative road fuel pricing. Being able to observe prices more easily and in real-time – such as on a comparison website or via an app - would empower consumers to seek out and buy road fuel from the best-priced retailer nearest to them, encouraging innovation and increasing competition to the market whilst reducing consumer costs.

### **Benefits to Consumers**

105. There are a wide range of opportunities for consumers to benefit from Smart Data, including better use of data. There are also broader impacts that are beneficial to all citizens: an energy system underpinned by data exchange and digitalisation is critical to ensure our energy security, support energy sector decarbonisation and reduce overall system costs.
106. The Energy Digitalisation Strategy set out the importance of improved data quality and data sharing to decarbonise the energy system at least cost to consumers.<sup>49</sup> This was reiterated in the joint response to the Energy Digitalisation Taskforce, where the Government, Ofgem and Innovate UK recognised that without concerted action, we risk increased industry costs, delay to the transition to a net zero energy system and limits to the choices for consumers to use their devices and data.<sup>50</sup>
107. Energy consumers must be in control of how their data is shared and have clarity of who their data has been shared with. In 2023, Ofgem published a 'call for input' seeking industry views on new mechanisms to obtain consent from consumers to share their energy data.<sup>51</sup> Improving consent mechanisms may unlock energy data which is not readily available through other mechanisms. Consumers may be able to share their data more easily and securely with trusted market participants, who can provide them with energy services to lower their bills and carbon footprint. This should also support innovation and development of new flexibility products. Ofgem are looking to launch a new consultation in 2024 to progress the area further.
108. Smart meters are also playing a key role in unlocking consumer choice through cutting system costs, stimulating innovation and encouraging the development of new services. Through different monitoring devices, including In-Home Displays (IHDs),

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<sup>49</sup> Gov.uk (2021) <https://www.gov.uk/government/publications/digitalising-our-energy-system-for-net-zero-strategy-and-action-plan>

<sup>50</sup> Gov.uk (2022) <https://www.gov.uk/government/publications/digitalising-our-energy-system-for-net-zero-strategy-and-action-plan/energy-digitalisation-taskforce-report-joint-response-by-beis-ofgem-and-innovate-uk>

<sup>51</sup> Ofgem.gov.uk (2023) <https://www.ofgem.gov.uk/publications/data-sharing-digital-future>

Consumer Access Devices (CADs) and mobile apps, consumers can better understand their consumption patterns, make changes to their behaviour, and receive tailored advice on energy savings.

109. The Department for Energy Security and Net Zero will explore the feasibility of creating a smart meter data repository which maintains user control of personal data and privacy protections as part of phase two of the £1 million Smart Meter Energy Data Repository innovation programme.<sup>52</sup> The project is due to end in August 2024. The implementation of a data repository could in turn make it easier for Smart Data schemes to progress by ensuring that the necessary data is accessible.
110. For road fuels, the incentive for Petrol Filling Stations (PFSs) to compete relies on consumers being able to compare prices reasonably and easily. As outlined earlier in this Chapter, there is an information asymmetry between PFSs and consumers. Increased transparency, via an Open Data scheme, will rebalance this asymmetry, and provide consumers with better information to make more informed choices which should in turn lead to increased competition between PFSs who will need to be work harder to attract consumers by lowering prices.

### **Impact on Competition**

111. Making better use of data would have a positive impact on competition in the energy sector. The government has made clear that sustainable competition in the energy retail market must be the primary driver of good outcomes for the majority of consumers, and that where possible, we will remove regulatory barriers to competition that are not in the interest of consumers.
112. Improved access to higher quality and quantity of data would help consumers to understand their own consumption and how their needs would be served by the options in the market. At the same time, retailers would be better able to tailor products to the diverse individual needs of consumers; and new market entrants will be encouraged to develop innovative service offerings to attract consumers. Ultimately, better use of data will mean consumers are more likely to engage with choices they face in the market, which should in turn contribute to healthier competition.
113. For the road fuel sector, as set out earlier on in the chapter, increased transparency, via an open data scheme, will rebalance the information asymmetry between PFSs and consumers. Providing consumers with better information to make more informed choices should in turn lead to increased competition between PFSs who will need to be work harder to attract consumers by lowering prices.

### **Next Steps for Smart Data in Energy and Road Fuels**

114. There is a growing body of evidence suggesting that opportunities could be taken to make better use of energy data, and the government has already committed to taking steps with regards to road fuel prices. We will continue to assess the evidence to consider the potential benefits and opportunities of a Smart Data scheme in road fuels,

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<sup>52</sup> Gov.uk (2022) <https://www.gov.uk/government/publications/smart-meter-energy-data-repository-programme-successful-projects>

and how it could contribute to the government's objectives alongside other developments in the energy sector.

115. Over the coming months, we will carry out the following actions:

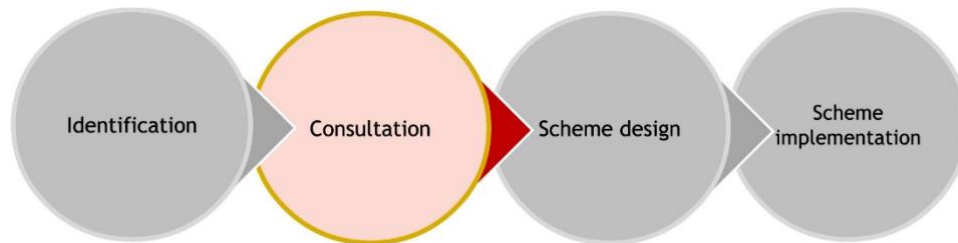
- The Department for Energy Security and Net Zero consulted on the design of a statutory Open Data scheme for road fuel prices, this closed on 12 March. Following review of the consultation responses, publication of the Government response and Royal Assent of the DPDI Bill, secondary legislation will be made using the Smart Data powers to set up the statutory Open Data scheme for fuel prices.
- The Department for Energy Security and Net Zero published a response to its recent Call for Evidence on Innovation in the Energy Retail Market on 23 February 2024, setting out the next steps for our ongoing programme of energy retail market reform.
- The Department for Energy Security and Net Zero will issue a call for evidence by Summer 2024 to gather information on the best Smart Data opportunities in the energy sector.
- The Department for Energy Security and Net Zero will publish further detail on implementation of our proposals for a smart and secure electricity system early in 2024, building off measures taken in the Energy Act 2023.<sup>53</sup> One area of focus will be on how tariff information might be standardised, removing a barrier to smart energy appliances accessing different products. Tariff interoperability is a key example of a Smart Data opportunity and, as per the previous consultation, the aim is to implement as soon as possible.
- Ofgem will launch a consultation in 2024 to explore consumer consent mechanisms, following on from their 2023 call for input.

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<sup>53</sup> Gov.uk (2023) <https://assets.publishing.service.gov.uk/media/6425a2d23d885d000fdadfc0/smart-secure-energy-system-government-response.pdf>

# Telecommunications

## Current stage of Smart Data Scheme Development: Consultation



### Context

116. Access to fast, reliable, and secure connectivity is increasingly essential for full participation in society, with lockdowns made necessary to address the Covid-19 pandemic, accelerating the adoption of hybrid working, remote learning and telehealth.
117. However, the pace of change that has taken place in the telecommunications sector over the past decade has meant that some consumers have struggled to keep up. In 2018, an Ofcom-commissioned research paper suggested that the perceived complexity of the market was actively deterring some consumers from engaging with providers to obtain a better deal, either by switching or negotiating with their current provider.<sup>54</sup>
118. Also in 2018, Citizens Advice filed a ‘super complaint’ to the Competition and Markets Authority (CMA) stating that consumers in key regulated sectors (including telecommunications) were collectively paying by around £4 billion per year for their services due to the ‘loyalty penalty’ (the price difference between an existing customer – whose introductory offers have elapsed due to the end of their contract – and the price a new customer, with introductory offers now receives).<sup>55</sup>
119. In response, the CMA acknowledged that the loyalty penalty existed in regulated markets and stated that the best ways to address the loyalty penalty was through ‘Smart Data using intermediaries and collective switching’.<sup>56</sup>
120. The government launched the Smart Data review in 2018 and a consultation with Smart Data proposals in 2019. In response to the consultation on the question of whether a regulated approach is needed for Open Communications, several

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<sup>54</sup> Futuresight.co.uk (2018) [https://www.ofcom.org.uk/data/assets/pdf\\_file/0022/113458/Engagement-Qualitative-Research-Report,-2017.pdf](https://www.ofcom.org.uk/data/assets/pdf_file/0022/113458/Engagement-Qualitative-Research-Report,-2017.pdf)

<sup>55</sup> Citizensadvice.org.uk (2020) <https://www.citizensadvice.org.uk/policy/publications/the-loyalty-penalty-in-essential-markets-two-years-since-the-super-complaint/>

<sup>56</sup> Gov.uk (2018) <https://www.gov.uk/cma-cases/loyalty-penalty-super-complaint>

stakeholders highlighted their preference for voluntary industry led Smart Data schemes. However, no voluntary schemes have been set up since.

121. To promote consumer engagement in the market, Ofcom has introduced measures such as End of Contract Notifications (ECNs) (which requires operators to notify consumer that their contract is due to expire) and One-Touch Switching (OTS) (to simplify the switching of fixed line residential connections).<sup>57</sup> Open Communications may complement these existing measures.

122. The Department for Science, Innovation and Technology (DSIT) has published a consultation and Impact Assessment to examine whether a Smart Data scheme would be right for the UK telecommunications market. We will review the consultation responses and undertake further economic analysis before considering any potential next steps.

### **Opportunities for Smart Data in Telecommunications**

123. DSIT recognises that data portability schemes (such as Open Communications) may have the potential to help support consumers and increase competition in the sectors in which they run. Research by Citizen Advice indicates that around 29% of broadband customers stay with their provider despite incurring a loyalty penalty.<sup>58</sup> <sup>59</sup> Equally we are aware that the experience from Open Banking suggests that the data unlocked by Smart Data schemes might lead to broader benefits, by joining with data unlocked by other Smart Data schemes in other sectors and allowing innovation.

### **Benefits to Consumers**

124. Ofcom estimated that around 7 million broadband customers are affected by a loyalty penalty at the cost of just under £500 million per annum (around £5.80 per month, per household).<sup>60</sup> In mobile, it is estimated to affect 1.5 million people leading them to overpay by £182 million a year (around £10 per month, per contract).

125. While price is the dominant consideration point for most telecommunication consumers, a potential future Open Communications could aid households to identify value for money by showing information about their connections including upload speed, reliability, and bundled extras. This will mitigate the need to possess high levels of technical knowledge or understanding to successfully navigate the market. Ofcom research found that 71% of those surveyed, who had changed their mobile provider in the previous 12 months had not considered signal strength when switching. Of those, 20% said it had not occurred to them, 9% said they were unable to find this information and 7% said it was too much hassle.<sup>61</sup>

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<sup>57</sup> One-Touch Switching is expected to launch in early 2024.

<sup>58</sup> Citizensadvice.org.uk (2022) <https://www.citizensadvice.org.uk/about-us/about-us1/media/press-releases/one-in-seven-customers-still-paying-the-loyalty-penalty-despite-cost-of-living-crisis/>

<sup>59</sup> Ibid.

<sup>60</sup> Ofcom.org.uk (2020) <https://www.ofcom.org.uk/consultations-and-statements/category-2/helping-consumers-get-better-deals>

<sup>61</sup> Ofcom.org.uk (2020) <https://www.ofcom.org.uk/consultations-and-statements/category-1/open-communications>

126. Ofcom's Open Communications consultation similarly highlighted that for some consumers, using the telecommunications market felt like a 'hassle'. Data portability may reduce the time spent by consumers to navigate the market, by providing them with them with clear and accessible information.

### **Impact on Competition**

127. The UK broadband and mobile markets are competition driven, and the government - working closely with Ofcom - have taken steps to ensure competition exists both at the network and retail level.

128. However, the way customers choose, switch and ultimately purchase broadband and mobile services also affects competition.<sup>62</sup> There are over 200 Digital Infrastructure Operators (DNOs), Internet Service Providers (ISPs), Mobile Network Operators (MNOs) and Mobile Network Virtual Operators (MNVOs) operating in the UK, but consumers need to be able to engage in the market to ensure the market delivers competitive outcomes, such as reducing the loyalty penalty.

129. Open Communications could potentially help drive that engagement, aiding their decision-making and increasing competition but it is important to recognise that an Open Communications scheme may have broader consequences, including for market dynamics, so it is important these are considered.<sup>63</sup>

### **Next Steps for Smart Data in Telecommunications**

130. The consultation closed on 13 November 2023. DSIT will review the responses to the consultation and will set out next steps in Spring 2024.

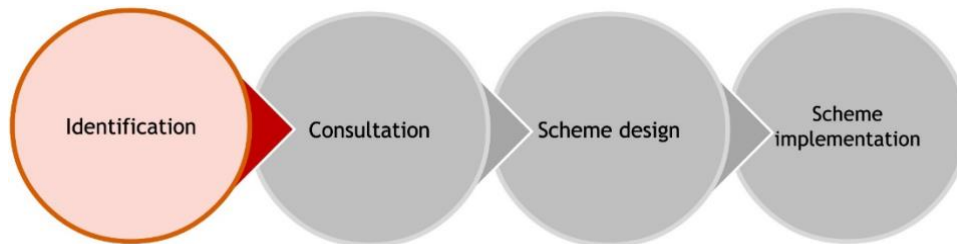
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<sup>62</sup> Regulation.org.uk (2016) [https://www.regulation.org.uk/library/2016-CCP-Demand\\_Side\\_Remedies.pdf](https://www.regulation.org.uk/library/2016-CCP-Demand_Side_Remedies.pdf)

<sup>63</sup> Gov.uk (2023) <https://www.gov.uk/government/publications/cma-response-to-dsit-consultation-a-smart-data-scheme-for-the-uk-telecoms-market>

# Transport

## Current stage of Smart Data Scheme Development: Identification



### Context

131. In the 2023 Transport Data Strategy, the Department for Transport (DfT) set out how the government will work with and support the transport sector to harness the benefits of data to help grow and level up the economy, reduce environmental impacts and improve transport for the user.<sup>64</sup>

132. The Transport Data Strategy set out principles to govern the government's approach to improving access to open data:

- Data should be open by default and using open standards.<sup>65</sup>
- Data should be protected and appropriately governed, maintaining public trust, while not using security and privacy as blockers to innovation where privacy protecting solutions can be found.
- Data and algorithms should be used ethically.
- Data generated through public investment should be used for public benefit.
- Data from new mobility services should be shared where appropriate.
- Government should test the market before commissioning new services and solutions.

### Opportunities for Smart Data in Transport

133. Transport policy is typically considered by mode of transport and is devolved to varying extents (to devolved administrations and to local government authorities). This approach has led to some success at a local level. For example, the 'Bee Network' has been established by local authorities in Greater Manchester, with the first Bee Network buses running for the first in 2023.<sup>66 67</sup> The Bee Network smartphone app provides near real-time live departure times for local bus, tram, and trains, including with relevant travel alerts, and allows users to buy tram and bus tickets. The bus network is set to expand,

<sup>64</sup> Gov.uk (2023) <https://www.gov.uk/government/publications/transport-data-strategy-innovation-through-data>

<sup>65</sup> Gov.uk (2023) <https://www.gov.uk/guidance/the-technology-code-of-practice>

<sup>66</sup> Implemented by a public body, The Transport for Greater Manchester, with oversight provided by the Bee Network Committee - a joint committee of the Greater Manchester Combined Authority, Mayor of Greater Manchester, and the ten Greater Manchester local authorities.

<sup>67</sup> TfGM.com (2024) <https://tfgm.com/the-bee-network>



and from 2023 local trains will join. From early 2024, the app will include a cross-mode journey planner.

134. Currently the Department for Transport is sponsoring the Future Transport Zones (FTZ) Evaluation, which includes four participating local authorities (FTZ Zones) who are in the process of designing, procuring and implementing a Mobility as a Service (MaaS) solution. The national evaluation is primarily comprised of process evaluation and MaaS case study; it draws together evaluation findings from the participating local authorities alongside stakeholder interviews, and a survey on transport use of and perceptions of MaaS.

### **Benefits to consumers**

135. Information about how passengers make journeys and use services is needed to evolve services in ways that best meet users' needs. This information can be made more available through open data initiatives which can, in turn, enable innovative services like MaaS solutions.
136. The current manifestation of MaaS usually includes conventional modes of transport such as bus, tram, rail, light rail and cycling. In some instances, we are seeing emerging modes such as micromobility and car club schemes, but there is an expectation that this might increase in the medium term.
137. There are also opportunities for SMEs in addition to individual customers. The Department for Transport published a long-term plan for the future of the UK freight transport sector in 2022.<sup>68</sup> The report recognises that technology and better use of data is core to improving operational and fuel efficiency, for example, connected vehicles and data sharing have the potential to support SMEs with increased efficiency of freight and load consolidation, reducing congestion and harmful emissions.
138. The report commits to a long-term goal (2025 onwards) of testing with industry agreed 'proofs of concept' for improving data exchange to identify data sources that will help to create many of the digital and connected services in the future for freight and logistics.
139. Furthermore, a report that explored SME green freight found that smaller companies in the freight sector find administration to be a significant burden.<sup>69</sup> Similarly, 'reducing the regulatory (and cost) burdens on industry' was the fourth most important policy action for the government in an FTA survey. Smart Data can be a key enabler here in terms of understanding Freight Environmental impact, and consequent Freight planning services.<sup>70</sup>

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<sup>68</sup> Gov.uk (2022) <https://www.gov.uk/government/publications/future-of-freight-plan>

<sup>69</sup> Gov.uk (2020) <https://assets.publishing.service.gov.uk/media/5fd766fce90e07663ad6842c/sme-green-freight.pdf>

<sup>70</sup> Catapult.org.uk (2022) <https://cp.catapult.org.uk/news/transforming-the-use-of-freight-and-logistics-data-to-inform-investment-and-policy-decisions/>

## **Impact on competition**

140. The 2019 Future of Mobility: Urban Strategy set out a principle that data from new mobility services must be shared, where appropriate, to improve choice and the operation of the transport system. The benefits in doing so were detailed as ensuring a competitive market, integrating journeys across different modes and improving how local authorities understand and manage the transport network.<sup>71</sup>

## **Next Steps for Smart Data in Transport**

141. The Department for Transport will progress work to support Smart Data objectives, including:

- Taking forward discovery work to develop transport use cases for Smart Data.
- Using the outcomes of the discovery to shape the evidence for a Call for Evidence in Autumn 2024, along with potential questions.
- Publishing further detail on the opportunities for Smart Data in the transport sector in 2025.

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<sup>71</sup> Gov.uk (2019) <https://assets.publishing.service.gov.uk/media/5dcd8417ed915d071ca239e9/future-of-mobility-strategy.pdf>

## Other Sectors of Interest

142. Beyond the priority sectors, the government is also considering Smart Data schemes in **retail** and **home buying**. These sectors have been selected by the government as there are significant opportunities to unlock the value of data in both sectors, enabling consumers to benefit from tailored services. An overview of potential opportunities will be detailed in the following sector specific chapters.
143. Smart Data schemes will not be limited to the schemes and sectors identified in these chapters. For example, there may be value in considering schemes in the digital sector, which contributed over £150 billion to the UK economy in 2019 and accounted for 1.8 million jobs in 2021.<sup>72 73 74</sup> Beyond their contribution to the economy, digital technologies play an increasingly important role in our everyday lives.
144. The Digital Markets, Competition and Consumers Bill will establish a new pro-competition regime for digital markets to increase competition and drive more dynamic markets.<sup>75</sup> New tools will be given to a new Digital Markets Unit (DMU) within the Competition and Markets Authority (CMA). The DMU will designate those firms which exert significant control over digital markets as having ‘Strategic Market Status’ (SMS) in respect of specific digital activities.
145. The DMU will be able to impose a range of obligations on SMS firms to prevent harms and to promote competition using two new tools: conduct requirements and pro-competition interventions (PCIs), which could include a range of data interventions. For example, where the DMU identifies a competition problem related to an SMS firm following an investigation, it could use a PCI to require the SMS firm to make some of the consumer data it holds available to competitors in a portable format, so they can improve their services and compete more effectively. The DMU may recommend actions, including data and data-sharing interventions, for other regulators or public bodies to take where they would be better placed to remedy a competition problem.

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<sup>72</sup> Gov.uk (2020) <https://www.gov.uk/government/statistics/dcms-sectors-economic-estimates-2018-gva>  
DCMS Sectors Economic Estimates 2018 (2020), p11, defines the ‘digital sector’ in accordance with the definition developed by the OECS using the UN Standard Industrial Classifications (SICs). The definition includes a series of sub-sectors that mainly create value through the direct use of digital technologies.

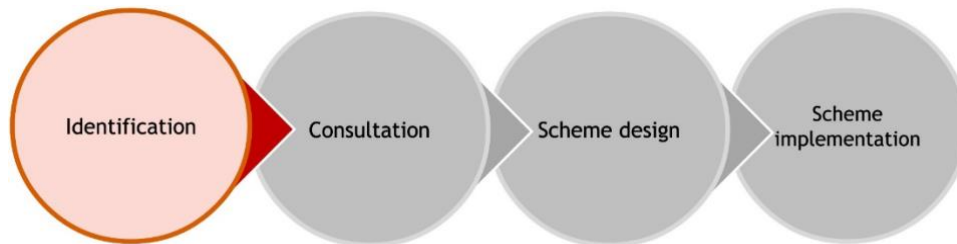
<sup>73</sup> Gov.uk (2020) <https://www.gov.uk/government/statistics/dcms-economic-estimates-2019-gross-value-added/dcms-economic-estimates-2019-provisional-gross-value-added>

<sup>74</sup> Gov.uk (2022) <https://www.gov.uk/government/statistics/dcms-sector-economic-estimates-workforce-2021/dcms-sectors-economic-estimates-workforce-january-to-december-2021>

<sup>75</sup> Gov.uk (2023) <https://www.gov.uk/government/publications/digital-markets-competition-and-consumers-bill-supporting-documentation/a-new-pro-competition-regime-for-digital-markets-policy-summary-briefing>

# Retail

## Current stage of Smart Data Scheme Development: Identification



### Context

146. The Retail sector is a key contributor to the economy in providing employment, social functions, and vibrancy, employing approximately 3.6 million people in the UK and contributing 5% of Gross Value Added (GVA).<sup>76 77</sup> The Retail sector covers many different sub-sectors including grocery, fashion, home and DIY and millions of products offered online.
147. Retail also supports a strong UK supply chain in the consumer goods manufacturing sector, which includes textiles, clothing, domestic appliances, and consumer electronics. This sector employs a further 240,000 individuals in order to add a further £13 billion to UK GVA.<sup>78 79</sup>
148. The wider groceries supply chain is highly complex and comprises thousands of businesses and supply relationships. The sector is driven by consumer demand, and healthy demand is critical to the wellbeing of the sector. Changes in consumers' behaviour in embracing online shopping habits over time has had an important impact on retail businesses, encouraging competition and driving the sector to transition to omni-channel offerings that has been further accelerated during the pandemic.
149. In the wake of the COVID-19 pandemic, the price of food and some other groceries in the UK have risen sharply, added to pressure to household finances that are already constricted due to inflation. On 15 May 2023, the Competition and Markets Authority (CMA) announced their intention to explore whether failure in competition was contributing to prices being higher than they would be in a well-functioning market.<sup>80</sup>

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<sup>76</sup> Gov.uk (2024): [EMP13: Employment by industry - Office for National Statistics \(ons.gov.uk\)](https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/employmentandemployeetypes/datasets/employmentbyindustryemp13)  
<https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/employmentandemployeetypes/datasets/employmentbyindustryemp13>

<sup>77</sup> Gov.uk (2024): [GDP output approach – low-level aggregates - Office for National Statistics \(ons.gov.uk\)](https://www.ons.gov.uk/gdp/output-approach-low-level-aggregates)

<sup>78</sup> Gov.uk (2023): [Labour market overview, UK - Office for National Statistics \(ons.gov.uk\)](https://www.ons.gov.uk/labour-market-overview)

<sup>79</sup> Gov.uk (2024): [GDP output approach – low-level aggregates - Office for National Statistics \(ons.gov.uk\)](https://www.ons.gov.uk/gdp/output-approach-low-level-aggregates)

<sup>80</sup> Gov.uk (2023): [CMA update on action to help contain cost of living pressures - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/news/cma-update-on-action-to-help-contain-cost-of-living-pressure)

150. The CMA published their findings on 20 July 2023 concluding that the evidence they had seen did not support the suggestion that recent high price inflation for groceries had been driven at an aggregate level by weak or ineffective competition between retailers.<sup>81</sup> As part of their work, the CMA also considered whether there were consumers who missed out on the benefits of competition between retailers.

### **Opportunities for Smart Data in Retail**

151. Trends show that an increasing number of consumers are undertaking research on, and shopping for products online.<sup>82</sup> Providing consumers with key information about their current shopping habits, and preferences, could allow them or nominated ATPs to research a wider range of options, and to find tailored goods and services at a better price.

152. There are also wider societal and health benefits that could be realised in enabling greater access to consumers' shopping data. A recent study, funded by Cancer Research UK found that analysis of loyalty card data, from two UK-based high street retailers, enabled researchers to find correlations between purchases of pain and indigestion medicines as a potential early indication of the onset of ovarian cancer.<sup>83</sup> Further access to consumers' shopping habits could help to identify a much wider range of positive outcomes – whether in relation to health, climate impact or other issues.

### **Benefits to Consumers**

153. Better and clearer access to information will help consumers overcome blind spots where they are unaware of cheaper or promotional pricing as businesses compete to keep existing customers and attract new ones. This will help consumers avoid the “loyalty penalty”.

154. Money management apps like Snoop aim to support consumers by tracking spending, setting budgets, and cutting bills. Consumers can provide consent for Snoop to estimate aggregate spending across different sectors. A Smart Data scheme in retail would enable Snoop and other ATPs to access more granular, specific shopping habits to provide greater, more tailored support relating to budgeting and shopping habits. Similarly, this level of data portability and/or openness could improve carbon footprint tracking services for SMEs, such as CoGo, which are currently reliant on Open Banking data to analyse transactions.<sup>84</sup>

155. An example of a Retail Smart Data use case can be seen in Dubai, where a loyalty programme called “Tickit” uses card linking technology to allow consumers to earn and redeem as they shop and visit varied venues within the Emirates. App members simply link their payment card to an app, and they automatically receive points as they shop. It's

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<sup>81</sup> Ibid.

<sup>82</sup> Internetretailing.net (2022) [Online shoppers conducting more research before they buy, Google data shows – Internet Retailing](#)

<sup>83</sup> Imperial.ac.uk (2023) - [Loyalty card data could help to identify ovarian cancer symptoms sooner | Imperial News | Imperial College London](#)

<sup>84</sup> CoGo.co (2023) [Business Carbon Management for Small Businesses | Cogo](#)

an innovative, simple way to connect retailers with consumers and offer them more value without adding unnecessary complexity.<sup>85</sup>

### **Impact on Competition**

156. For retailers, Smart Data could enhance data analytics and business intelligence tools, and help businesses to further understand the customer behaviour, encouraging healthy competition as pricing strategies and operational efficiencies become optimised. Facilitating a greater number of businesses to access this data will help them make data-driven decisions and identify trends to stay ahead of market demands.

157. At present larger retail businesses utilise customer data on spending patterns to target sales and develop marketing strategies. Smart Data will enable retailers to offer more effective targeting when spending money on promotions. Smart Data will reveal what products are selling best, in which store, in which region and with which consumer segment. When enhanced data sets are coupled with analytics for price, promotions and assortment analysis, retailers will be able to get a better understanding of how they and their suppliers can best support their consumers.<sup>86</sup>

### **Next Steps for Smart Data in Retail**

158. Retail is currently in the “Identification” stage of Smart Data scheme development. The value and commercial sensitivity of customer data to retailers is understood and so extensive engagement with sector representatives, industry experts, and academics will be required to fully explore the opportunities and benefits that could be realised with any scheme.

159. We will work with the Retail Sector Council and the Retail Trade Associations to further our understanding of the opportunities for Smart Data in the retail sector. We aim to conclude an initial round of engagement and assessments over the Summer, before developing a plan to further progress the work in the Autumn.

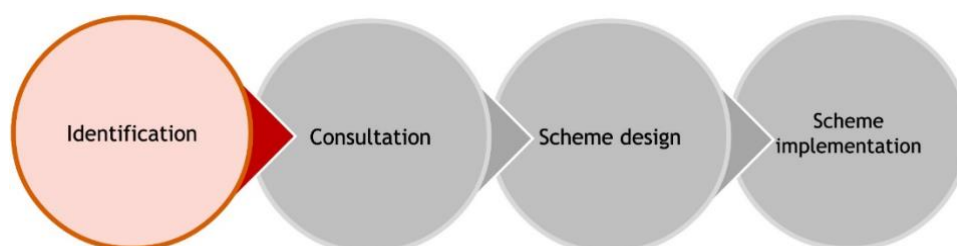
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<sup>85</sup> Dubaiholding.com (2023) <https://dubaiholding.com/en/business-highlights/ticket/#:~:text=A%20first%2Dof%2Dits%2D,with%20its%20unmatched%20digital%20features.>

<sup>86</sup> Gma.com (2017) <https://www.the-gma.com/big-data-smart-data>

# Home Buying

## Current stage of Smart Data Scheme Development: Identification



### Context

160. The home buying and selling sector comprises a range of different professions and service providers including estate agents, conveyancers, proptech firms, removal firms, and more. Competition varies in each of these parts of the sector – for example, competition is fierce among conveyancing firms, but is less so among estate agents (buyers in particular are tied to using the estate agent their chosen property is listed with).
161. Consumer power in the sector is relatively weak. This is primarily because consumers lack experience with the home buying and selling process – the average person moves only once every 19 years, and this lack of familiarity often leaves consumers bewildered when faced with what is a highly complex process involving a large number of professionals. Consumers do not therefore always benefit from choice when choosing services and given their lack of experience, often choose the lowest priced option rather than the one which best suits their needs.

### Opportunities for Smart Data in Home Buying

162. Data is currently fragmented and can be difficult for both consumers and professionals to access. Relevant data is spread between a number of sources including local authorities, HM Land Registry, utility providers and individual homeowners. Much of the data is stored in a way which makes it difficult to access and therefore interrogate – for instance, local transport information is still often held spatially in PDF format.
163. Accessing key data, for example property titles, currently involves making applications to a number of different information-holding bodies and sometimes requires the conveyancer or property search agent to visit the local authority to examine the information. There is also a real lack of consistency and reliability across buying and selling data which means that professionals have to carry out repeated verification, lengthening the time of the transaction. This makes information gathering a laborious and time-consuming process. Finally, when the data is gathered and passed onto the consumer, it is often difficult for them to interpret.
164. Work is underway to digitise parts of the system. Most significant is HM Land Registry's Local Land Charges programme; a ten-year programme to bring together and

digitise local land search information.<sup>87</sup> Some proptech firms are innovating with ways to gather home buying and selling information into a single consumer-friendly platform, but these products remain small in scale and are often not well-known by consumers. Overall, the sector remains overwhelmingly paper-based (with the average transaction generating 130 documents) and with very little automation in place.

165. We have set out our intention to work with industry to make key information available to consumers upfront and in a digital format.<sup>88</sup> Being able to access essential information in this way will help consumers make more informed decisions about whether to make an offer on a property.

166. Beyond 2024, the digitisation of home buying and selling data could create opportunities for the development and implementation of a variety of Smart home buying and selling schemes. Through the development of regulations, the government would be able to establish schemes where consumers can access innovative services that streamline property-related processes, reducing the cost and time associated with aspects of the home buying process. An example of this could be through the mortgage application process, in which a “Smart Mortgage” scheme could have the potential to recommend mortgage options to buyers, using their individual financial data and wider market data. Overall, the potential for Smart Data schemes across the home buying sector feeds into the longer-term vision for the potential for how more open and accessible data could be used, offering innovative products and solutions to improve competition in the market, whilst reducing costs and time for home buyers and sellers.

### **Benefits to Consumers**

167. Consumers presently lack information about the home buying and selling process, largely due to how infrequently individual consumers move house, meaning there is little opportunity for consumers to develop an in depth understanding of the complex process. This means that consumers are unclear what they need to do, uncertain about the roles of professionals in the sector, and unsure about how to choose the right professional for them.

168. Better informed consumers will also be more empowered, altering the power balance in the sector which is currently in industry’s favour. By knowing more about the role and performance of professionals in the sector, consumers will be able to make better decisions about which are right for them and how to hold them to account. New services which emerge from greater access to data will further improve consumer’s knowledge of the process and confidence in their transaction.

169. Improving the availability and standard of data will also reduce the number of transaction fall-throughs which occur as a result of this information coming to light post-offer. Fall-throughs cost consumers £260 million per year. Within industry, estate agents and conveyancers alone lose £1 billion, and around 4 million working days each year;

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<sup>87</sup> Gov.uk (2023) <https://www.gov.uk/government/publications/hm-land-registry-local-land-charges-programme/local-land-charges-programme>

<sup>88</sup> Gov.uk (2022) <https://www.gov.uk/government/publications/levelling-up-the-united-kingdom>



this could be reduced through better interoperability of systems, enabling more efficient data flows between professionals.<sup>89</sup>

### **Impact on Competition**

170. At present, conveyancing firms compete primarily based upon price, as a consequence of consumers not having the requisite knowledge to select services based on any other metric. This competition has become so intense that it is becoming unsustainable; prices are now barely covering costs and smaller conveyancers who provide a personalised service are struggling to compete with the bigger, volume providers.<sup>90</sup> More competition based on service would give customers more choice on the service they buy, as well as enabling small conveyancers offering personalised service to compete in the market. A Smart Data scheme for home buying could potentially enable consumers to find the most appropriate conveyancing service, based on their specific needs.

171. We also expect there would be an increase in competition in the proptech sector. More widely available data could mean that proptechs create new products, potentially creating new markets with a greater potential for new providers to join and compete.

### **Next Steps for Smart Data in Home Buying**

172. At Autumn Statement 2023, £3 million of funding was allocated to deliver a number of pilot projects to inform future digitalisation of the buying and selling process. The pilot projects will be a necessary precursor to help inform the development of a future Smart Data scheme. We will launch the Pilot Projects by Summer 2024.

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<sup>89</sup> 2023, TPX Impact research on the home buying and selling process, completed on behalf of DLUHC (unpublished)

<sup>90</sup> 2022, Futuregov research on the home buying and selling system completed on behalf of DLUHC (unpublished)

## Conclusion and next steps

173. The government is committed to ensuring that Smart Data schemes are being considered and explored across the economy. We will continue to support the identification and development of new schemes by:

- Progressing the DPDI Bill, providing the regulatory framework for future schemes.
- Promoting the generation of use cases via the Smart Data Challenge Prize.
- Directing co-ordination of future Smart Data schemes via the Smart Data Council.

174. The table below summarises the range of actions that the government will take in the identified sectors in order to progress Smart Data scheme development in 2024.

Sector	Next steps
Banking	HM Treasury have committed to using the Smart Data powers to provide Open Banking with a long-term regulatory framework when parliamentary time allows.
Finance	The Centre for Finance, Innovation and Technology (CFIT) has recently published recommendations for delivering an Open Finance strategy in the UK. This included recommendations for industry and government. HM Treasury will carefully consider CFIT's recommendations, alongside wider industry engagement, as it develops its strategy for Open Finance.
Energy and Road Fuels	<p>The Department for Energy Security and Net Zero (DESNZ) consulted on a statutory Open Data scheme for road fuel prices (PumpWatch). Following analysis of the consultation and Royal Assent of the DPDI Bill, regulations will be laid to establish the scheme.</p> <p>DESNZ will publish a sector-wide call for evidence by end of Summer 2024 and will set out the next steps in a government response by March 2025.</p> <p>DESNZ will progress priorities complementary to Smart Data objectives, including:</p> <ul style="list-style-type: none"> <li>• Considering responses to the Call for Evidence on Innovation in the Energy Retail Market.</li> <li>• Exploring the feasibility of creating a smart meter data repository.</li> <li>• Publishing further detail on the implementation of proposals for a secure and smart electricity system.</li> </ul>
Telecommunications	<p>The Department for Science, Innovation and Technology (DSIT) will review the responses to the consultation on Open Communications: a Smart Data scheme for the UK telecoms market.</p> <p>(closed on 13 November 2023) and will set out next steps in Spring 2024.</p>

Retail	The Department for Business and Trade (DBT) will formally engage with the Retail Sector Council and other trade Associations in the Summer to discuss opportunities for Smart Data, before agreeing to next steps to progress Smart Data in Retail in the Autumn.
Transport	The Department for Transport will progress work to support Smart Data objectives, including: <ul style="list-style-type: none"> <li>• Taking forward discovery work to develop transport use cases for Smart Data.</li> <li>• Using the outcomes of the discovery to shape the evidence for a Call for Evidence in Autumn 2024, along with potential questions.</li> <li>• Publishing further detail on the opportunities for Smart Data in the transport sector in 2025.</li> </ul>
Home Buying	By Summer 2024, DLUHC will launch a number of pilot projects to inform future digitalisation of the buying and selling process.

173. The government will aim to publish a progress update against the actions identified above in 12 months' time. The update will point to progress made in the priority and identified sectors, whilst also highlighting where progress has been made in the wider economy.

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