

Bank of England and HM Treasury

Bank of England



HM Treasury

Response to the Bank of England
and HM Treasury Consultation Paper:
The digital pound: a new form of
money for households and businesses?

Consultation Response

January 2024





Response to the Bank of England and HM Treasury Consultation Paper: The digital pound: a new form of money for households and businesses?

Presented to Parliament by the Economic Secretary to the Treasury
by Command of His Majesty

January 2024



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Foreword

Money is central to our daily lives and is at the heart of how the economy works.

Last year, the Bank of England and HM Treasury took a major step in the national conversation on the future of our money, with a [Consultation Paper](#) on a proposal for a UK retail central bank digital currency (CBDC). This would be a new form of digital money for use by households and businesses in the UK, known as the digital pound and issued by the Bank of England.

The UK's financial services sector is world-leading, open, and technologically advanced. Our work on a digital pound is just one part of the Government and Bank of England's efforts to ensure that the UK remains at the forefront of innovation in money, payments and digital finance. The process of developing the design for a digital pound over the coming years will present enduring benefits for the UK's digital economy, fostering knowledge-sharing and technical collaboration between the public and private sectors. These efforts are valuable, regardless of whether a decision is ultimately taken to introduce a digital pound.

Today we can pay for transactions and pay each other in many different ways, and that choice is important. People choose what is best for them in that moment. A digital pound issued by the Bank of England would not replace those existing forms of money – cash and the money in our bank accounts – and the means of payments we already use, like debit and credit cards. Indeed, last year the Government enacted legislation to safeguard access to cash across the UK. That said, a digital pound would provide an additional choice for making payments in a way that is safe and secure and fit for the future, whether in person or online or to each other. And building the platform on which a digital pound would operate could unlock opportunities for companies, big and small, to develop innovative ways to pay, ensuring the public has access to leading technologies that make our lives easier. This could make day-to-day payments more convenient, while reducing costs for the businesses who accept them.

The Consultation Paper received over 50,000 responses from members of the public, businesses, civil society and academia. The volume of responses is evidence of how important questions on the future of our money are for individuals and industry alike. We are grateful to everyone who took the time to consider and submit a response. Some of those responses were about our proposed design for a digital pound, and how a digital pound would fit alongside existing and emerging forms of money and payments in the economy. Others raised concerns about important issues such as the potential impact on privacy, access to cash and freedom of choice. The feedback clearly illustrated that, just as with other forms of money, ensuring trust in a digital pound issued by the central bank would be essential.

This publication sets out how that feedback will guide the Government and the Bank of England's priorities during the design phase of our work on the digital pound, and the further steps we are taking to address the concerns that have been raised. The Government has committed to introducing primary legislation with a vote in both Houses of Parliament before any launch of the digital pound, ensuring full Parliamentary scrutiny. This legislation would guarantee both users' privacy and that neither the Bank of England nor the Government would control how you spend your money.

We are also strongly committed to maintaining an open and collaborative approach throughout this design phase. The consultation was not the only chance to have your say. Our organisations will be increasing structured engagement with experts from industry, civil society, academics and technical specialists, including open requests for input on a range of important topics, in order to inform what the best design for a digital pound would look like. The Bank of England will undertake experiments with companies to test how a digital pound could work in the real world. We are also committing to further public consultation prior to legislation being introduced.

This publication marks the latest stage in our national conversation on the future of our money – and it is far from the last. At this exciting time of innovation in money and payments, the Bank of England and HM Treasury look forward to working with the private sector, civil society, academia and the public to develop our proposals for a digital pound issued by the Bank of England, so that we stand ready should a decision to build it be taken in the future.

Bim Afolami MP, Economic Secretary to the Treasury

Sarah Breeden, Deputy Governor for Financial Stability, Bank of England

Summary

In February 2023, the Bank of England (the Bank) and His Majesty's Treasury (HM Treasury) published a [Consultation Paper](#) to seek feedback from the public on the design of a 'digital pound', a potential UK central bank digital currency (CBDC) for use by households and businesses for their everyday payment needs. The Consultation Paper set out that the Bank and HM Treasury judged it likely that a digital pound would be needed in the future, and so further preparatory work was justified.

The Bank and HM Treasury received over 50,000 responses to the consultation, demonstrating widespread interest in a digital pound and engagement with the proposals. Many respondents to the Consultation Paper raised concerns about the implications of such a digital pound for access to cash, users' privacy, and control of their money. Recognising the critical importance of building the public's trust in a digital pound, this Consultation Response seeks to assure respondents of the steps the Bank and HM Treasury are taking to put in place safeguards in the design of a digital pound before any decision is made.

Since the Consultation Paper was published, the Government has committed to introducing primary legislation before launching such a digital pound, ensuring Parliamentary input into any decision to proceed. Reflecting respondents' feedback to the Consultation Paper, this response makes clear that legislation introduced by the Government for a digital pound would need to provide protections to guarantee users' privacy and control of their money. The Bank, the Government, the [Financial Conduct Authority](#) (FCA), and the [Payment Systems Regulator](#) (PSR) will continue to safeguard access to cash, given the vital role it plays for individuals and in communities.

Respondents will have further opportunities to share their thoughts on a digital pound. In particular, there would be further public consultation prior to the introduction of primary legislation by the Government. And future work and decisions on a digital pound will continue to be informed by dialogue with the public, business, civil society, Parliamentarians, and experts, as the Bank and HM Treasury continue to develop its design. The Consultation Paper was a major milestone in the UK's national conversation on the future of money. This Consultation Response continues that conversation and sets out the steps that will follow during the design phase.

Introduction and key messages

The way payments are made, and the type of money used to make them, is changing. Cash is, and will continue to be, important for a large cross-section of society. That is why the Bank, the Government, the FCA and the PSR will continue to safeguard access to cash. At the same time, as the UK economy becomes more digital, electronic payments are increasingly widespread and are now the most prevalent payment method. And new technologies are emerging, often outside the traditional finance sector, with the potential to support new payment services and new forms of money in the future. In that context, since 2020 the Bank and HM Treasury, alongside public authorities in many other countries, have been exploring the concept of retail CBDC. In the UK this would be ‘the digital pound’, issued by the Bank. It would complement physical cash and other payment mechanisms as a new form of digital money for use by households and businesses for their everyday payment needs.

Such a digital pound would help to ensure that central bank money remains available and useful in an ever more digital economy, continuing to support UK monetary and financial stability. It would also provide a public platform for private-sector innovation, promoting further competition, efficiency and choice in payments.

In February 2023, the Bank and HM Treasury published a [Consultation Paper](#) to seek feedback from the public on a set of design proposals for a digital pound. In that paper, the Bank and HM Treasury judged it likely that a digital pound would be needed in the future. Rather than assessing that question against the status quo of payments today, it is vital to consider how a digital pound could fit into a future payments ecosystem. That ecosystem will be increasingly digital, with opportunities to harness innovation, but could also be fragmented, if users are tied into particular digital platforms. In light of this, the Consultation Paper explained that, if current trends in payments continue, a digital pound could be a ‘solution’ to two ‘problems’: first, risks to the ‘uniformity’ or ‘singleness’ of money, and second, risks to competition in payments.

To keep pace with future payment needs, such a digital pound would provide an open and flexible platform for the development of future retail payments services by the private sector. It would support continued innovation, allowing the private sector to shape future use cases that could be difficult to anticipate today, for the digital pound and other digital payments.

It is too early to decide whether to introduce a digital pound, but the Bank and HM Treasury judge that further preparatory work is justified to enable us to respond to developments in the payments landscape and to reduce materially the lead time if there is a future decision to introduce a digital pound. The publication of the Consultation Paper marked the start of the design phase of the project. Respondents’ feedback will help to inform the work on the design

of a digital pound, in both technology and policy terms. On completion of the design phase around the middle of the decade, the Bank and the Government will decide whether to proceed to build a digital pound. If the decision was taken to do so, a digital pound would only be introduced once both Houses of Parliament had passed the relevant legislation.

Ongoing work on a digital pound helps to put the UK at the cutting edge of the future payments landscape. Even if the Bank and the Government decide not to launch a digital pound, the preparatory work being undertaken during the design phase is critical to understand and prepare for future changes in the payments landscape.

The Bank and HM Treasury received over 50,000 responses to the Consultation Paper from a combination of individuals, private firms, industry representative organisations, civil society groups and academics.

The widespread interest in the digital pound project and the extent of thoughtful and considered engagement provided by the large number of respondents are welcome. Effective public engagement is essential to ensure that any future decisions for a digital pound are robust.

The majority of the responses commented on the broader societal implications of introducing a retail CBDC, such as the future of cash, and the privacy and rights of users of a digital pound.

Trust is a prerequisite for a digital pound. The Bank and HM Treasury sought to provide assurances in the Consultation Paper that measures would be put in place to ensure the public would have confidence in using a digital pound. For example, the Bank, as operator of the core infrastructure, would not have access to personal data. Private-sector digital pound wallet providers, Payment Interface Providers (PIPs), would anonymise personal data before transactions are processed and settled by the Bank. The Bank and HM Treasury would also not pursue government or central bank-initiated programmable functions.

Respondents' feedback has highlighted that concerns remain. The Bank and HM Treasury are committed to providing the public with the further reassurance they seek. To that end, this Consultation Response sets out a range of measures that would govern a digital pound, if the decision were made to introduce it:

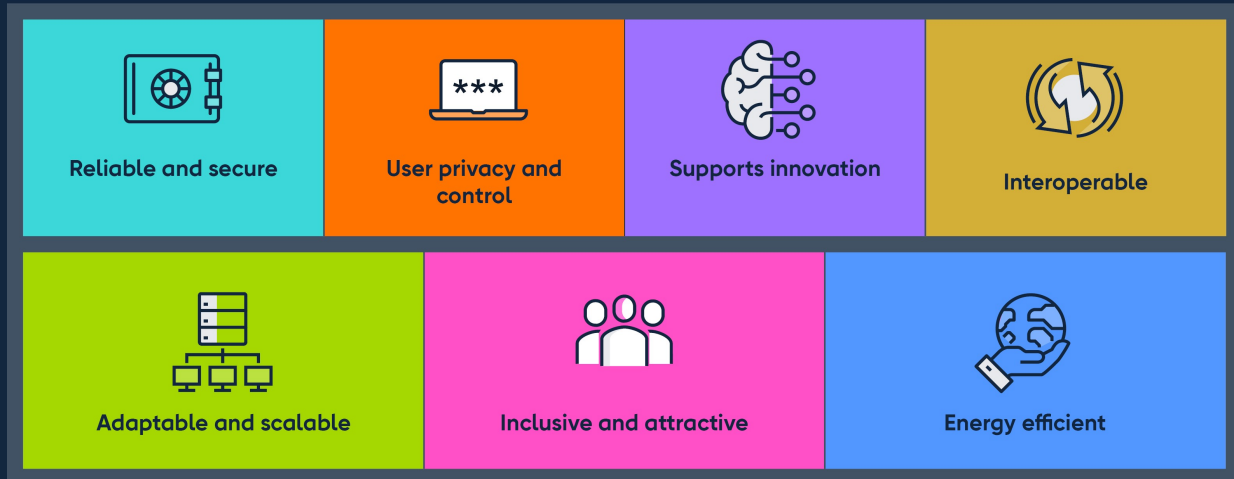
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- Before any launch of a digital pound, the Government has committed to introducing primary legislation. This means that a digital pound would only be launched once both Houses of Parliament had passed the relevant legislation.
 - Privacy would be a core design feature of a digital pound:
 - The Bank and the Government would not access users' personal data – and legislation introduced by the Government for a digital pound would guarantee users' privacy.
 - The Bank commits to exploring technological options that would prevent the Bank from accessing any personal data through the Bank's core infrastructure.
 - The Bank and the Government would not program a digital pound – and legislation introduced by the Government for a digital pound would guarantee this.
 - The Government has legislated to safeguard access to cash, ensuring that it would remain available even if a digital pound were launched.

This initial consultation has demonstrated the high level of interest in the digital pound, even at this early stage. There would be further public consultation were the Government to introduce primary legislation in the future.

The majority of feedback received to the [Consultation Paper](#) was general, providing views on a handful of aspects on the possible societal implications of a retail CBDC. Fewer respondents chose to provide feedback on a question-by-question basis. For some specific questions, there was a range of views on the design proposal for a digital pound set out in the Consultation Paper. But on balance, and as set out in this paper, these responses confirmed that the proposed design choices were seen as reasonable and well-grounded.

The Bank and HM Treasury judge that the design proposition in the Consultation Paper remains the right basis for further exploration of a digital pound during the design phase, although significant further work is required to flesh out a detailed proposition. To that end, the Bank and HM Treasury have developed a set of design principles (Diagram 1) that will guide the work in coming years, alongside continued engagement with stakeholders. These principles have been informed by the responses received to the Consultation Paper.

Diagram 1: Design principles for a digital pound



The Bank and HM Treasury acknowledge the importance of clearly articulating to the public why a digital pound might be necessary in the future. In addition, the conversation on use cases must be broadened out to consider the specific and applied benefits that a digital pound would bring to consumers, intermediaries and merchants.

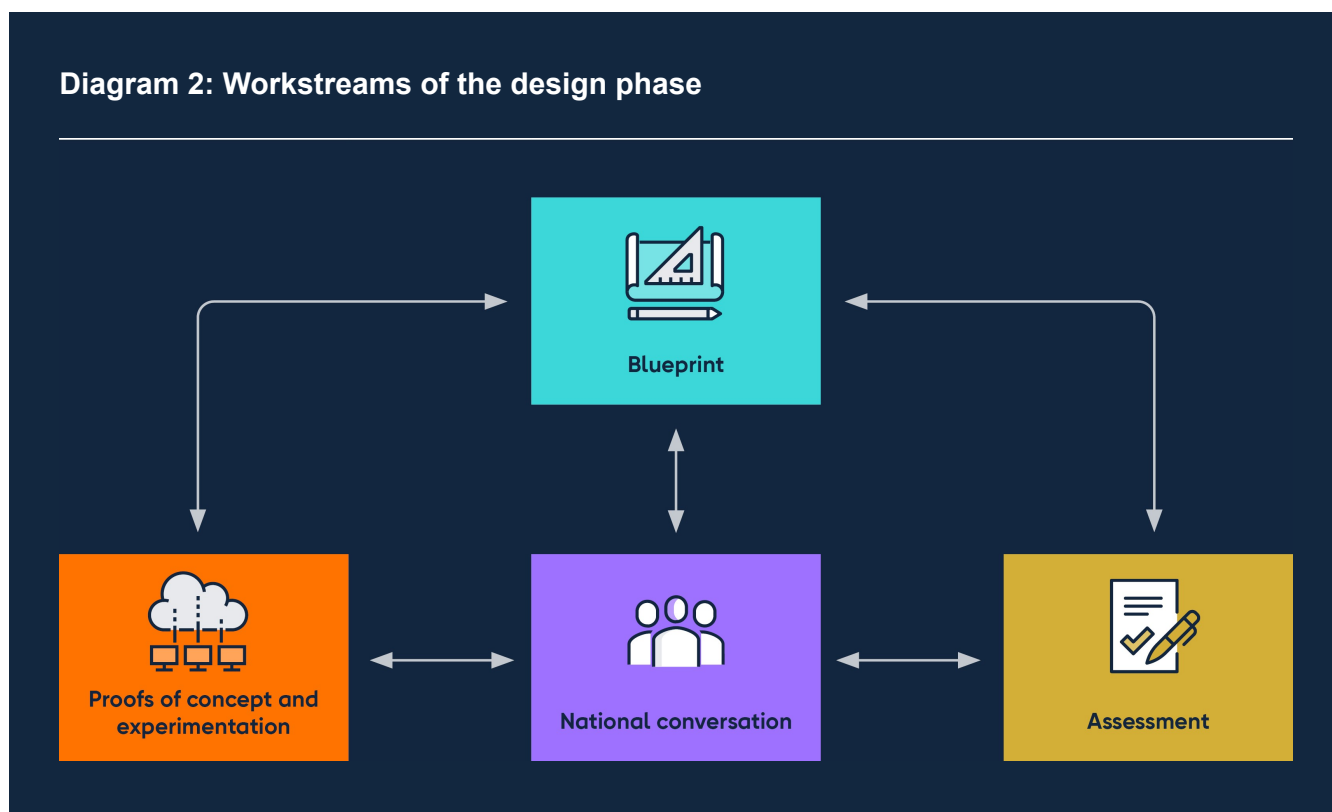
The Bank and HM Treasury have also agreed further steps to continue our engagement with stakeholders across society during the design phase, building on the [CBDC Engagement Forum](#) (with members from industry and civil society) and the [CBDC Technology Forum](#) (with technical specialists) set up in 2021. Last year, the Bank and HM Treasury set up a [CBDC Academic Advisory Group](#) (AAG) and launched [Digital pound working groups](#), following the publication of Requests for Information, to explore particular topics in detail.

This external engagement will help to guide the work and decision-making during the design phase. The design phase (Diagram 2) consists of four related workstreams:

- Building on work to date, the **blueprint** for a digital pound will be developed further, based on the design principles in Diagram 1. This blueprint will develop the core product and technology propositions for intermediaries, merchants and end-users.
- **Proofs of concept and experimentation** with private-sector support will inform this blueprint.
- As part of the **national conversation** on the future of money, engagement with the general public, businesses and wider stakeholders will continue, to ensure that debate around the digital pound considers all views, recognising the links to initiatives on protecting cash, and emerging new forms of money such as stablecoins.

- An **assessment of the costs and benefits** of introducing a digital pound will be conducted, to inform the decision on whether to proceed to the build phase.

Throughout the design phase, the Bank and HM Treasury remain committed to engaging with Parliament and reporting periodically on progress.



This document sets out a detailed summary of the responses received to the consultation and the Bank and HM Treasury's response to them.

Section 1 explains why the Bank and HM Treasury consulted on the digital pound, setting out the backdrop of a rapidly changing payments landscape, and the key points of the **Consultation Paper**.

Section 2 describes the composition and nature of the responses received, as well as the methodology used to review and assess them.

Section 3 sets out users' rights, privacy, and protections with the digital pound: safeguarding access to cash, guaranteeing user privacy, data protection, and control of their money, and committing to a robust decision-making process.

Section 4 summarises the feedback received from respondents on the design of the digital pound consulted upon in the Consultation Paper as the basis for the Bank and HM Treasury's future work.

Section 5 sets out the next steps for the digital pound project, in light of the responses received and continued engagement with stakeholders. These will focus on experimentation and proofs of concept with the private sector, developing a blueprint for a digital pound based on a set of design principles, engaging with all stakeholders in a national conversation on the future of money, and conducting an assessment of the costs and benefits of the digital pound.

1: Why the Bank and HM Treasury consulted on the digital pound

| Money and payments are changing.

Individuals and businesses in the UK use two main forms of money for day-to-day spending – ‘private money’, issued by commercial banks, and ‘public money’, issued by the Bank of England. Private money is typically a claim on a private commercial bank in the form of electronic bank deposits held by households or businesses. Private money is underpinned by the regulation and supervision of commercial banks. Public money or ‘central bank money’, by contrast, is a claim on the Bank, currently available to the public only in the form of physical cash. The words ‘I promise to pay the bearer on demand the sum of five/ten/twenty/fifty pounds’ appear on all banknotes issued by the Bank. Central bank money is financially risk-free in the sense that there is no credit, market or liquidity risk.

A core feature of the UK monetary system is the ‘uniformity’ or ‘singleness’ of money. Uniformity or singleness means that all forms of money – both public and private, bank deposits and cash – are valued equally (‘at par’ or ‘face value’), denominated in a common currency (sterling) and interchangeable with each other. Access to public money supports the uniformity of money. That ensures that households and businesses can be confident in the value of money, regardless of its form and issuer. The ability of individuals to convert their private money holdings into financially risk-free cash – central bank money – on demand, and without loss of value, is the acid test that commercial bank money is safe.

Digital innovation in payments, such as contactless technology, the use of smart phones and digital wallets, has shifted the balance of public and private money used to make payments. Around 95% of the funds held by individuals to make UK payments today are private money, held as commercial bank deposits, and typically spent electronically, such as by bank transfer or debit card. As spending has become more digital, the use of cash for payments has declined, falling from 55% of transactions to 14% over the past decade.^[1]

The Bank, the Government, the FCA, and the PSR are committed to preserving access to cash for those who wish to use it. The Government legislated to protect access to cash for people and businesses, and ensure the resilience of the UK’s wholesale cash distribution infrastructure, in the [Financial Services and Markets Act \(FSMA\) 2023](#). But cash cannot be used in electronic transactions in an increasingly digitalised world.

At the same time, new technologies are emerging that have the potential to affect significantly the nature of money and how it is used for payments – for example, blockchain technology (a network of ledgers organised in a series of ‘blocks’ containing data), smart contracts (which

carry out specific actions based on pre-defined terms and conditions), and atomic swaps (where the transfer of one asset occurs if and only if the transfer of another asset also occurs). These new technologies are often being developed by firms outside of the traditional financial sector and are allowing new entrants into the payments market. This innovation in payments means that these technologies may also promote the issuance of new forms of digital money, including by private-sector firms outside of the banking sector, such as 'Big Tech' firms.[2] These new forms of privately issued digital money might be in sterling or, if issued abroad but available in the UK, in a non-sterling currency.

Examples of new forms of private digital money might include stablecoins (which aim to maintain a stable value against existing fiat currencies or other assets, typically by holding backing assets) and tokenised bank deposits (tokens issued on the blockchain which are digital representations of bank deposits).

These new forms of money are being regulated to make them safe and suitable for day-to-day payments. Legislative changes under the FSMA 2023 allowed HM Treasury to bring 'digital settlement assets' such as stablecoins into the regulatory framework. That legislative change will allow UK regulators, including the Bank, to regulate a broad range of digital asset instruments for everyday payments. In October 2023, HM Treasury published a document that provides an update on the Government's policy concerning the regulation of fiat-backed stablecoins.[3]

In November 2023, the Bank, the FCA and the [Prudential Regulation Authority](#) (PRA) published a [cross-authority roadmap](#) on innovations in payments and money. The Bank published a [Discussion Paper](#) on the regulatory regime for systemic payment systems using stablecoins. The FCA published a [Discussion Paper](#) on its proposed regulatory framework for stablecoins that fall under its remit. And the PRA also sent a [letter to bank CEOs](#) that set out expectations for banks issuing different forms of money, including tokenised deposits.

It is difficult to predict how the digital economy and payments landscape might evolve in coming years, and what future payments needs might be. And the emergence and take-up of these new forms of private digital money is uncertain.

The Bank and the Government must be prepared for future changes in money and payments, to ensure that the UK remains at the forefront of innovation. In the future, it is possible to envisage an economy with a range of different payment methods and forms of money coexisting and complementing one another, as is the case today.

| The digital pound would be a UK retail CBDC.

In the context of a changing payments landscape, the UK, like many other countries, is exploring the potential for a retail CBDC. In the UK this would be ‘the digital pound’. It would have two core features: first, as a new form of central bank money for use in person and in a digitalised world, and second, as a new payment system delivered as a public-private partnership.

A digital pound would be issued by the Bank and denominated in sterling, for use by households and businesses. £10 of digital pounds would always have the same value as, and be interchangeable with, a £10 banknote. A digital pound would be used like a digital banknote, available to make retail payments both in-person and online. Unlike a bank deposit, a digital pound would be a direct claim on the Bank, rather than on a private commercial bank. A digital pound would be a secure and stable form of money for everyday spending, unlike the high-risk, volatile and speculative cryptoassets that are commonly traded today.

To enable a digital pound to operate as a payment system, the Bank would provide the core infrastructure, including a ledger. Private-sector companies – which could be banks or approved non-bank firms – would be able to integrate into the central digital pound infrastructure and provide the interface between the Bank and users. This means that a digital pound ecosystem would be facilitated by the private sector – while the Bank would operate the core infrastructure, it would not be actively involved in the day-to-day end-user experience of a digital pound. Private-sector firms would deal with all user-facing interactions and be able to develop and offer innovative services using the digital pound.

| The Bank and HM Treasury have been exploring the case for a digital pound since 2020.

In March 2020, the Bank published a [Discussion Paper](#) on CBDC. From mid-2021 to end-2022, the Bank and HM Treasury undertook the first phase of the digital pound project, which focused on research and exploration. A joint Bank of England-HM Treasury [CBDC Taskforce](#) was announced in April 2021 to ensure a strategic and coordinated approach to CBDC exploration by UK authorities, in line with their statutory objectives. This was complemented by engagement with a range of stakeholders. The [CBDC Engagement Forum](#) sought input from senior members drawn from financial institutions, civil society groups, merchants, business users and consumers. The [CBDC Technology Forum](#) drew input from experts on all technology aspects of CBDC.

The February 2023 Consultation Paper explained that the Bank and HM Treasury judge that a digital pound is likely to be needed in the future, such that further preparatory work is justified.

The culmination of the research and exploration phase was the publication of a joint Bank-HM Treasury [Consultation Paper](#) on the digital pound in February 2023. The Consultation Paper explained that, if current trends in payments continue, a digital pound could be a ‘solution’ to two ‘problems’: first, risks to the uniformity of money, and second, risks to competition in payments.

First, without such a digital pound, the general public’s access to, or use of, central bank money could diminish. Moreover, with the emergence of new forms of privately issued digital money, payments could become fragmented if current and future forms of money are not fully interchangeable. That would happen if money used on one digital platform could not be easily used on other platforms or converted into other forms of digital money, locking users into so-called ‘walled gardens’ or ‘closed loop systems’. Those developments could threaten the uniformity of money in the UK and pose a risk to monetary and financial stability, which could undermine trust in money.

Second, markets for digital money present several characteristics that may lead to concentration, such as network effects, economies of scale and scope, and data advantages. These features mean that the emergence of new forms of privately issued digital money could result in the payments landscape being dominated by a small number of firms. That might be benign if it reflects the efficiency of successful firms. But it could also pose a risk to competition, harming consumer choice and the ability of new firms to enter the marketplace. Over the longer term, firms with entrenched market positions might have fewer incentives to innovate.

It is too early to make a decision now on whether to introduce a digital pound because that will depend on how the retail payments landscape evolves in coming years, both in the UK and abroad. But the Bank and HM Treasury consider that a digital pound is likely to be needed in the future to safeguard the UK economy against risks to uniformity and competition in payments, as a complement to regulation.

If introduced, such a digital pound would help to maintain public access to financially risk-free central bank money, ensuring its role as an anchor for confidence and safety in the monetary system, thereby supporting monetary and financial stability, and sovereignty. And by acting as a public-private partnership (with low barriers to entry for the private sector to provide user-facing services), a digital pound could support innovation, choice and efficiency in payments (Diagram 3).

Diagram 3: The Bank and HM Treasury's primary motivations for a digital pound



| The private sector would take the lead in generating innovative use cases.

To keep pace with future payment needs, and support continued innovation, a digital pound would provide an open and flexible platform for the development of future retail payments services by the private sector. This would allow innovators to shape and accommodate future use cases for digital payments that could be difficult to anticipate today. Such innovation could drive further efficiency in the provision of transaction services to merchants and households, enhance users' payments experience and widen access to services.

Advances in technologies and how they are deployed by the private sector will determine the use cases and functionalities that a digital pound would offer. The Bank and HM Treasury do not seek to prescribe or determine what future use cases for a digital pound might be, although there needs to be confidence that they will emerge.

The experiments carried out over the past year by the London Centre of the Bank for International Settlements (BIS) Innovation Hub in collaboration with the private sector under **Project Rosalind** give some sense of the variety of functionalities that could be offered to end-users. Examples are 'Payment on Delivery', when a buyer pays for goods or services once they are received, and wallet-linking features, to facilitate payment for consumers to enable subscriptions on merchant websites or make recurring bill payments with 'one-click' checkouts.

During the design phase, ongoing collaboration with the private sector will present opportunities for business-model and technological innovation, even if a decision is taken not to introduce a digital pound.

While no decision has been taken on whether to introduce a digital pound, the development work during the design phase will allow the Bank to build the necessary skills and put in place the technical capability to introduce a digital pound in a timely manner, were the decision made to do so in the future. Importantly, even if a decision is taken not to proceed to build a digital pound, collaboration with the private sector and technology explorations during the design phase will be beneficial. They will present opportunities for business-model innovation and help to build technology capability in the UK fintech sector. Collaboration with the private sector will also help to inform authorities' regulation of private digital money, such as stablecoins and tokenised bank deposits. The technology explorations will also deepen the Bank and HM Treasury's understanding of how such technologies might be deployed in wholesale payments and settlements. Given that digital currency technologies are likely to be significant in shaping the future of finance, the benefits of the design phase can be expected to endure even if a decision is taken not to introduce a digital pound.













The Consultation Paper sought feedback on the design of a digital pound.

On publication of the [Consultation Paper](#), the digital pound project progressed to phase two, the design phase. The work in the design phase will allow the Bank and HM Treasury to evaluate comprehensively the technological feasibility of a digital pound, determine the optimal design and technology architecture, and deepen the Bank's technology capabilities.

It would not be feasible or practical to explore multiple designs for a digital pound in the current design phase. The focus of the February 2023 consultation was therefore to seek feedback on the core design of a digital pound.

To that end, the Consultation Paper set out various proposed features for a digital pound in relation to a) the platform model and public-private partnership, b) data protection and privacy and c) user experience. These are summarised below in Diagram 4, as set out in the Consultation Paper.

Diagram 4: The model for a digital pound

 Public-private partnership	 Used by households and businesses
 Public digital money issued by a central platform operated by the Bank of England	 Seamlessly exchangeable with other forms of money, including cash and bank deposits
 Wallets to hold digital pounds offered by the private sector	 Accessed by users through smartphones or cards
 Privacy protected like for cards and bank accounts, but not anonymous	 No interest paid
 Privacy-enhancing by design, so the Bank of England would not see any personal data	 Limited amount per user, at least initially
 Accessible to UK and non-UK residents	 For everyday payments online and in-store

2: Methodology

Overview of respondents

The Bank and HM Treasury received a large number of responses to the consultation, the majority of which were from individuals.

The consultation invited feedback on twelve questions. The questions generally related to the design of a digital pound that the Bank and HM Treasury would be exploring in the design phase of the project.

The Bank and HM Treasury received a total of 51,529 submitted responses to the consultation. Recognising that individuals vary in their ability and willingness to use online tools, a range of channels was set up for respondents to reply, according to their preference. Responses were received through an online questionnaire, by email and by letter.

Within that total:

- 40,885 responses were received via the online questionnaires.^[4]
- 10,603 were received by email.
- 41 were received by letter.

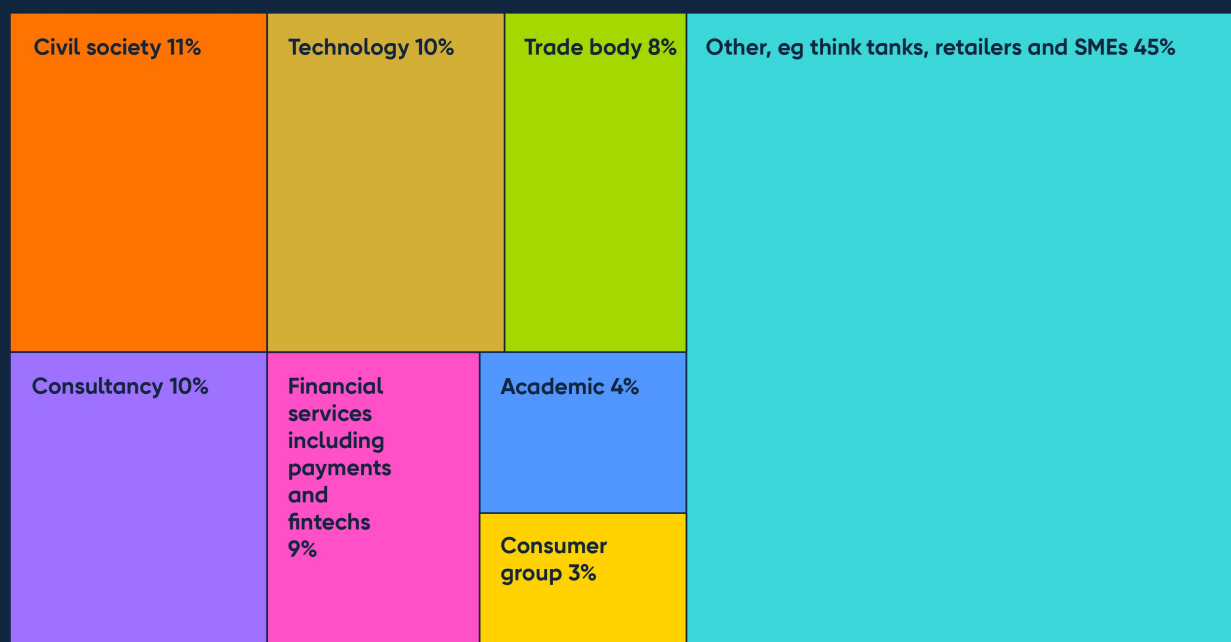
Those responding via the online questionnaire were able to identify whether they were individuals or organisations: 40,330 (99%) of those respondents identified themselves as individuals, while 555 (1%) identified as organisations.

Responses by organisations encompassed large firms, SMEs and sole traders. Organisations using the online questionnaire were able to identify their industry sub-sector. For those that chose to do so, civil society, technology, consultancies and financial services firms represented the largest portion of organisational responses (Chart 1).

Of the 40,885 online questionnaire responses submitted, 566 (1.4%) did not provide an answer to any of the questions and only provided identifier information such as name or email address.

The online questionnaire tool identified that a number of forms were not submitted. Only online questionnaire response forms that respondents formally submitted were included in the review process. Accordingly, unsubmitted forms were not included in the review process.

Chart 1: Organisations that responded to the Consultation Paper online questionnaire



The approach to reviewing responses

The Bank and HM Treasury deployed a combination of manual and computational techniques to review responses.

The Consultation Paper sought feedback on both open and closed questions. As a result, responses varied in terms of their length and complexity. A methodology was developed to meet several criteria:

- Fair and conscientious review of all feedback received
- Robust and rigorous review to capture insights in an objective and consistent way
- Efficient review to ensure a timely response by the Bank and HM Treasury

In light of these criteria, it was judged that a combination of manual and computational techniques provided the most appropriate review methodology.

Manual review consisted of a detailed reading of responses by Bank and HM Treasury specialists. Computational techniques involved the use of industry-standard computational models which process text in a systematic way. Text mining or natural language processing (NLP) techniques were deployed through the use of: (i) counting; (ii) filtering; and (iii) grouping of keywords and phrases.^[5] Additionally, techniques were also deployed to support the grouping of topics and the identification of themes and patterns.

Manual reviews were carried out on all responses received via email and letter and a large portion of online responses. Computational techniques were applied to all online questionnaire responses. At no point were the computational models used to remove or exclude responses.

Manual review and computational techniques are complementary. Using them in parallel allowed the Bank and HM Treasury to take advantage of the benefits of both techniques.

Manual review can be used to identify details and nuances in the responses. It is particularly useful to review complex responses. Manual review also serves to cross-check and validate the results of the computational techniques. This means that no interpretation of the feedback or conclusions drawn from it were solely derived from the outputs of the computational models.

Computational techniques, by contrast, can process text far more quickly than a person would be able to. They are more systematic and thorough in processing a large volume of text in a consistent manner than purely human review. Computational techniques can also extract meaning from text that may be missed by human readers due to error or subjectivity. Computational techniques help to ensure that data is analysed in a fair and objective manner and enable the processing of a large volume of data in an optimal way. The findings from computational review were validated by manual review.

The computational models were subject to thorough scrutiny and challenge internally. An independent external review was also commissioned, and the models deployed were found to be fit for purpose.

3: Users' rights, privacy, and protections

If a decision is taken to introduce a digital pound, protections would be put in place to guarantee the public's rights and privacy. The Government has committed to introducing primary legislation with a vote in both Houses of Parliament before launching a digital pound. Legislation would be preceded by a further public consultation, and would guarantee users' privacy, data protection, and control of their money. The Bank and the Government, along with the FCA and the PSR, will continue to safeguard access to cash.

The extent of engagement during the consultation period is a testament to the public's interest and concern about the possible implications of the introduction of a digital pound. All of the feedback provided is valuable and will support further work in the design phase, by helping the Bank and HM Treasury to identify the issues that matter to the public.

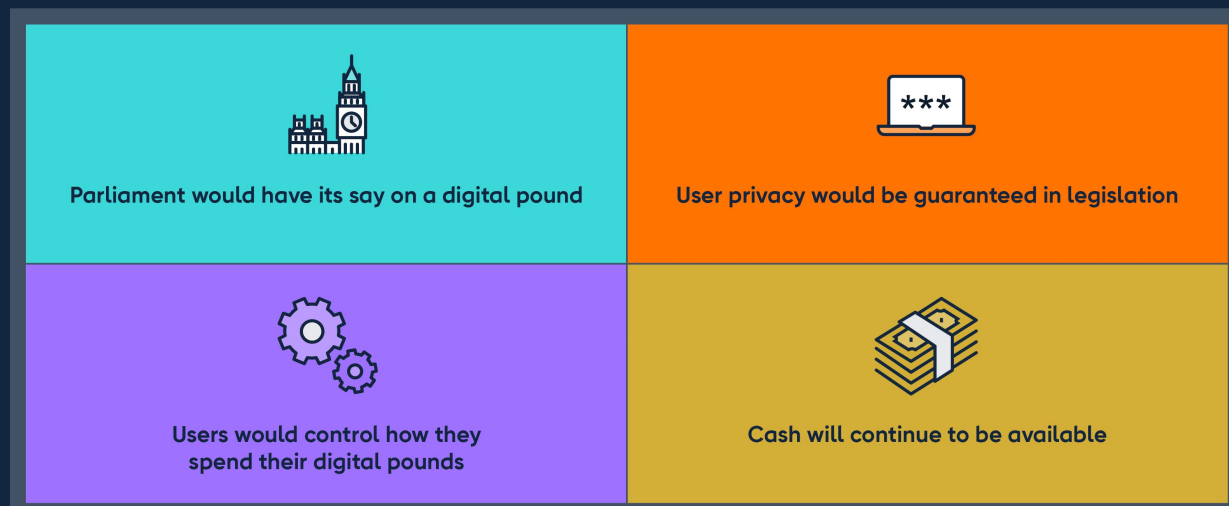
Most of the responses described general sentiment towards a retail CBDC, and perspectives on its perceived impact by the public, rather than detailed feedback on the proposed design for a digital pound set out in the [Consultation Paper](#). This detailed feedback is summarised in the next chapter 'Feedback on the design of the digital pound'.

Many respondents expressed concerns that a digital pound could encroach on their rights. The Bank and HM Treasury recognise the strength of feeling on these matters and the need to build public trust in a digital pound.

This chapter covers the actions and commitments to deliver that guarantee for users' privacy and control in the following areas (Diagram 5):

- Decision-making and the role of Parliament
- Privacy and data protection
- Programmability and user control of their money
- Safeguarding access to cash

Diagram 5: Users' rights and privacy



Decision-making and the role of Parliament

Parliament has a central role in scrutinising the Bank and HM Treasury's work on a digital pound.

While the Consultation Paper did not seek views on the role of Parliament, many respondents agreed that Parliament should have the opportunity to consider and scrutinise the decision to introduce a digital pound. This is consistent with feedback received from Parliamentarians.

Working with Parliament has been a priority for the Bank and the Government throughout the first phase of work on a digital pound, which has been subject to numerous discussions in the chambers and committees, including during the passage of the FSMA 2023.

The [Consultation Paper](#) noted that issuing a digital pound would require deep public trust in this new form of money. To build that trust, the Bank and HM Treasury have initiated a national conversation on the future of money – a dialogue involving a wide range of stakeholders, experts, and the public. The introduction of a digital pound, should a decision be taken to proceed, would be a significant undertaking, so it is crucial that Parliament plays a major role in any decision to launch a digital pound.

Last year, the Government committed to introducing primary legislation before the launch of a digital pound.

In May 2023, the Chancellor committed to introducing primary legislation in both Houses of Parliament before launching a digital pound. Parliamentary scrutiny is an essential part of assessing the case for a digital pound. If a decision were taken to proceed, Parliament would

have the opportunity to vote on the design and regulatory framework of a digital pound, during the passage of primary legislation.

Important questions regarding the design of a digital pound still need to be answered before legislation could be introduced. However, the consultation feedback demonstrated that strong safeguards will be required to command users' trust around key issues such as privacy and programmability. That is why the Government is now committing to enshrining objectives for privacy and programmability into legislation it would introduce for a digital pound.

The Bank and HM Treasury will continue to engage with Parliament as work progresses during the design phase. The introduction of primary legislation would be preceded by a further public consultation.

There will be continued open and transparent engagement with Parliament during the design phase as work progresses towards a decision on whether to introduce a digital pound. There would be further consultation with the public on a digital pound before introducing primary legislation.

Privacy and data protection

There is a difference between anonymity and privacy. The Consultation Paper described the commitment to making a digital pound private. Given laws to fight financial crime, it would not be anonymous.

Cash and anonymity

The physical nature of cash means that there is no digital record when it is used for payment, so it can be an anonymous means of payment. Many people value the anonymity of cash and prefer cash transactions for this reason, among others.

The anonymity of cash transactions means that, in some instances, criminals can seek to hide behind it for money laundering and other forms of financial crime.

The UK Anti-Money Laundering (AML) and Combating the Financing of Terrorism (CFT) Regimes take a risk-based approach to managing these potential harms, so that the appropriate balance is struck between tackling any criminal activity and preserving freedom to use cash.^[6] For example, businesses making or receiving large value cash payments in exchange for goods are subject to additional regulatory requirements, such as the undertaking of due diligence to understand the nature of the transaction and identity of those involved.

Digital payments and privacy

Unlike cash, digital payments, for example all debit and credit card purchases, generate personal data when used for transactions. Digital payments leave a digital footprint and so cannot be anonymous like cash.

The AML and CFT regimes also apply to digital payments. And because the ability to identify users is necessary to prevent financial crime, there are requirements for certain information to be sent alongside payments, with the amount of information required reflecting the value and perceived risk of the transaction.

Although digital payments are not anonymous, the privacy of the user's identity and the data generated by transactions are stringently protected through data protection laws passed by Parliament.

It means that digital payments have built-in privacy safeguards, whereby law enforcement only have access to users' personal information in limited circumstances where there is a fair and lawful basis.

The approach for the digital pound

The Consultation Paper committed to making a digital pound at least as private as the regime that applies to digital payments today. In addition, neither the Bank nor the Government would have access to users' personal data. A digital pound would not be anonymous given the need to support enforcement against financial crime. But personal data for that purpose would be held by the Payment Interface Providers (PIPs) and would not be visible to the Bank and the Government.

The [Consultation Paper](#) set out that a digital pound would be subject to rigorous standards of privacy and data protection, and that it would be at least as private as current forms of digital money, like money in a commercial bank account or e-money.

The digital pound would not be anonymous because, just like bank accounts, the ability to identify and verify users is necessary to prevent financial crime. This puts the digital pound on a level playing field with digital payments today. A digital pound would not replace cash, so the public would continue to have access to an anonymous payment option.

The Consultation Paper explained that anyone who chose to use the digital pound would not engage directly with the Bank, but instead manage their digital pounds in wallets provided by PIPs.

PIPs would be required to identify users to protect consumers against fraud and financial crime, as is the case with commercial banks today. Just like opening a bank or other payment account, some level of identity verification would be required when opening a digital pound

wallet. These requirements would be consistent with those that legally apply today and in the future for financial and payments institutions. The **UK Digital Identity and Attributes Trust Framework**, including the confidence levels outlined in **Good Practice Guide 45**, could be used by PIPs and users to support access to a digital pound.[7]

The Consultation Paper also proposed that PIPs explore ways to allow users to choose from a range of digital pound wallet services, based on tiered access with varying levels of identification, to ensure the digital pound is accessible to all. The next chapter on ‘Feedback on the design of the digital pound’ sets out respondents’ views on tiered access to digital pound wallets.

All firms that process personal data within a digital pound system would be subject to robust regulation and have to comply with UK data protection laws, such as **UK General Data Protection Regulation (GDPR)**.

The Bank and the Government would not have access to users’ personal data. The Bank would be responsible for ensuring that payments between accounts are processed and settled. To perform this function, the Bank would only require anonymised settlement data. To run the core ledger, the Bank would not need to access users’ personal data, such as users’ names or what their digital pounds were spent on (Diagram 6). Law enforcement agencies would only have access to users’ personal information in limited circumstances and where there is a fair and lawful basis – as is the case today.

Diagram 6: Users’ privacy for a digital pound



The Bank and the Government would not access users’ personal data. Only anonymised data needed to settle payments would be seen by the Bank. This would not include who you are or what you bought.

Feedback and the Bank and HM Treasury's response

Many respondents expressed concerns about privacy, which the Bank and HM Treasury take very seriously. Legislation introduced by the Government for a digital pound would guarantee users' privacy.

The involvement of central banks and governments in the provision of digital money has understandably led to questions around whether a digital pound could be used for surveillance and control of payments. The Bank and HM Treasury understand that privacy is critical to preserving the freedom of how the public use money. Maintaining people's right to privacy is a top priority.

Respondents were in strong agreement with the proposal that neither the Bank nor the Government should have access to personal data but were concerned that this would not be adequately enforced.

In light of respondents' feedback, the following actions will be taken forward:

A.1. The Bank and the Government would not access users' personal data through the Bank's core infrastructure – and legislation introduced by the Government for the digital pound would guarantee users' privacy.

A.2. The Bank commits to exploring technological options that would prevent the Bank from accessing any personal data through the Bank's core infrastructure.

A.3. A commitment to launching a working group dedicated to privacy issues as part of the design phase. This will involve an open call for information to ensure the working group is represented by a diverse group of individuals and organisations.

This guarantee of privacy will include transparency and clarity on the role of data in a digital pound ecosystem.

Privacy for digital pound users means that users will have confidence in knowing exactly what rules will govern who holds and can access their data. The Consultation Paper set out that a digital pound could be privacy-enhancing by design, giving users greater control over the use and value of the data generated by their transactions and held by PIPs, through the use of Privacy-Enhancing Techniques (PETs). The next chapter on 'Feedback on the design of the digital pound' summarises respondents' views on further exploring PETs and also sets out how the Bank is conducting experiments to assess the trade-offs of these technologies.

PIPs would operate within a robust legal and regulatory framework to support users' control of their personal data. As mentioned in the next chapter, more detail on the regulatory framework that will govern this will be set out in the design phase. The Bank and HM Treasury will also clarify the small number of scenarios where users' data – held by PIPs – may be relevant for authorities. Any scenarios where access is required will be governed by a clear and transparent data framework, which will be presented to Parliament for approval.

The limited circumstances where personal data held by PIPs will be relevant to authorities will always be for the benefit of the general public. In addition to law enforcement to fight crime (operating via law enforcement agencies engaging with PIPs under rules already approved by Parliament and not directly with the Bank), these are likely to be limited to:

- Managing the failure of a PIP so that users can be transferred to another PIP in as seamless a manner as possible and resume access to their digital pounds.
- Resolving payments disputes where they have not been solved via PIPs and as occurs with the [Financial Ombudsman Service](#) today.

The Bank and HM Treasury will work collaboratively with stakeholders to understand how to mitigate these risks through governance and technological choices, while safeguarding the principle of consent on how users' data is managed. The approach to data in a digital pound system will be subject to further consultation and designed in such a way that authorities will minimise, and wherever possible eliminate, their reliance on personal data. If there were a decision to proceed with a digital pound, the data framework would ultimately be determined by Parliament.

Programmability and users' control over their money

As set out in the Consultation Paper, neither the Bank nor the Government would program the public's money or control their spending.

Programmability is a functionality that allows the setting of rules to make payments, for example to limit spending on certain products, or to save automatically a small amount of money after each purchase. This technology builds on existing, familiar applications like Direct Debit, so most users already have some experience with programmable payments.

Programmability could enable the use of smart contracts, which carry out specific actions based on pre-defined terms and conditions. For example, a smart contract could be set up to allow a business owner to pay a supplier immediately on signed receipt of goods, rather than having to wait for an invoice to be issued and then paid. Programmability could also enable 'escrow functionality', which can earmark funds with set conditions on when the funds can be released. For example, in experiments run by the Bank with the private sector under [Project Rosalind](#), the instant refund of train tickets in the event of a train delay was shown to be feasible.

The [Consultation Paper](#) emphasised that neither the Bank nor the Government would program users' money by embedding rules on how or when they could spend it. Nonetheless, respondents raised concerns about the ability of future governments to program their money.

The purpose of a digital pound would be to provide the public with an additional means of accessing central bank money in a landscape of increasingly digital payments; this would not come at the expense of users' control of their spending.

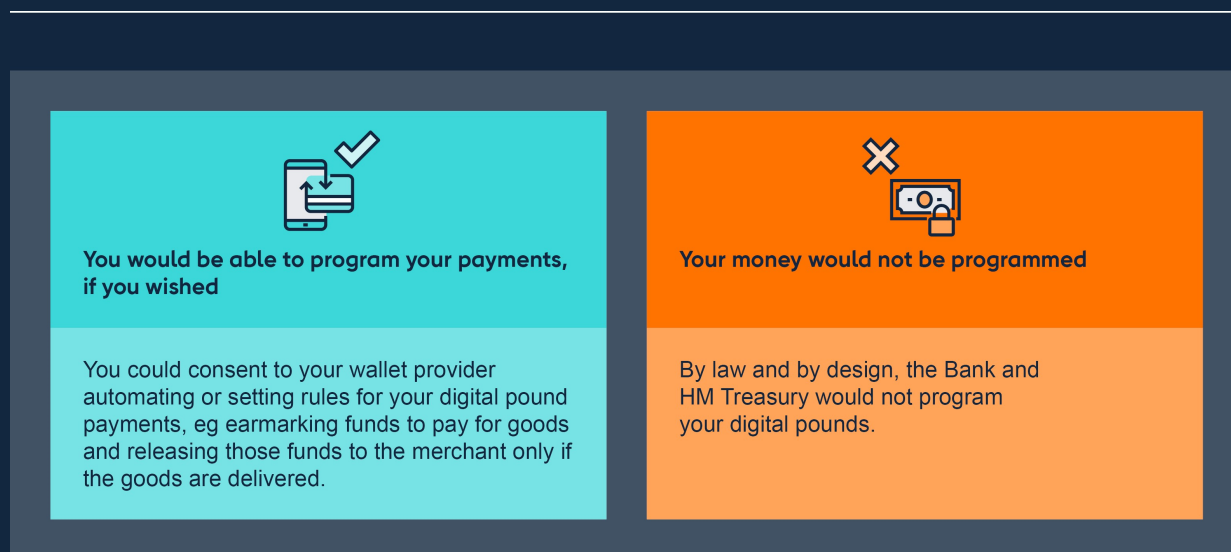
The Bank and HM Treasury are committed to continuing to discuss these concerns with the public, industry, and Parliament to provide reassurance on this point during the design phase. As explained below, actions are being taken to reassure the public, with the intention to put appropriate safeguards in place to preclude a digital pound from being made programmable by the Bank or the Government in the future.

Users would have control over whether they use digital pounds, and how they choose to spend them. PIPs could only program digital pound payments with user consent, and this would be subject to a robust regulatory framework.

The public would have the option to use the digital pound, and they would be able to decide how they spend it. For example, as set out in the Consultation Paper, users could permit PIPs to automate or set rules for their digital pound payments (Diagram 7).

The provision of automated payments by PIPs would be subject to a stringent and robust regulatory framework and always require user consent. No PIP would be able to program users' money, or limit where and when it could be spent, unless at users' request. The Bank and HM Treasury are committed to working closely with industry and regulators to create a digital pound ecosystem that is supportive of innovation, while ensuring suitable regulatory protections are in place.

Diagram 7: Users would control their money



Given the feedback received on programmability, the following actions will be taken forward:

B.1. As with privacy, legislation introduced by the Government for a digital pound would guarantee that the Bank and the Government would not program users' digital pounds.

B.2. During the design phase, the Bank and HM Treasury will explore further technological safeguards against programmability initiated by the Bank or the Government, including future-proofing any regulatory regime to keep pace with technological developments.

Safeguarding access to cash

Safeguarding future access to cash is of critical importance to the Government and the Bank. The Bank is committed to continuing to provide cash for those who want to use it. A digital pound would complement, not replace, cash.

As set out in the next chapter, respondents to the Consultation Paper raised concerns about the declining use of cash and a potential lack of support by the authorities in the future. They emphasised the critical role that cash plays in society, and the importance of continuing to safeguard and preserve access to it.

Protecting and retaining the public's access to cash is very important to the Bank and the Government. The Bank is committed to continuing to provide cash for those who want to use it. The Government and the Bank will continue to safeguard future access to cash alongside evaluating the case for a digital pound during the design phase. A digital pound would be designed such that it forms part of a diverse payments landscape consisting of cash and digital payments.

A digital pound would sit alongside cash; it would complement, not replace, cash, or other forms of digital payment.

As explained in 'Why the Bank and HM Treasury consulted on the digital pound', money and payments are changing. While cash remains central to the payment habits of some individuals and communities, its use for payments has declined, and electronic payments are now the most prevalent payment method.

While access to cash will continue to be safeguarded, the Bank and HM Treasury recognise that different forms of public money are likely to be needed in an increasingly digital economy. As set out in the [Consultation Paper](#), a digital pound would not replace cash but complement it. It would provide the public with greater choice. They would have an additional means of payment that has many of the core characteristics of cash (i.e. a direct claim on the Bank, denominated in sterling, directly equal to and interchangeable with a banknote), but also with digital functionality, for example for online payments. As is the case today, most merchants would be expected to continue to accept various forms of money, ensuring users can choose the payment method most suited to their needs.

| The Government continues to take decisive action to guarantee access to cash in law.


The Government has continued to take decisive action to protect access to cash in law: through both the [Financial Services Act 2021](#), where the Government legislated to enable cashback without a purchase, and the [FSMA 2023](#), where the Government legislated to protect access to cash. The latter legislation established the FCA as the regulator responsible for seeking to ensure reasonable provision of cash withdrawal and deposit services. It also gave the Bank the powers it needs to ensure that the infrastructure underpinning wholesale cash distribution remains effective, resilient and sustainable if cash usage continues to decline. The Government, the Bank and the FCA are now in the process of implementing this legislation, and once fully operational it will ensure that all those who want to continue to withdraw and deposit cash regularly are able to do so.

The Government's action has been complemented by several industry-led initiatives to protect access to cash in the UK. [LINK](#), the UK's cash and ATM network, has committed to protecting free-to-use ATMs more than one kilometre away from the next nearest free ATM or Post Office, and free access to cash on high streets.[8] LINK is held to account against this commitment by the PSR, which has used its powers to give a direction to LINK to maintain the broad geographic spread of the UK's free-to-use cash machine network.

Furthermore, in the context of the legislation in FSMA 2023, the UK's largest high-street banks have established a framework for providing new shared cash access services across the UK. As part of this, LINK now makes assessments of access-to-cash needs in local communities in the event of the closure of a core cash service or where LINK receives a request directly from a community. Following this assessment, LINK can recommend that an alternative service is needed, at which point the UK's largest banks have committed to providing additional cash access services.

Diagram 8 summarises respondents' feedback about users' rights, privacy, and protections, and how the Bank and the Government will respond.

Diagram 8: Users' rights, privacy, and protections

 You told us	 We will
<p>Parliament and the public should be involved in the decision-making process.</p>	<p>The national conversation on the future of money will engage the public. Parliament would vote before any digital pound is launched, and another public consultation would be held before that.</p>
<p>Users' privacy should be protected.</p>	<p>Legislation introduced by the Government for a digital pound would guarantee users' privacy. Neither the Government nor the Bank would access your personal data.</p>
<p>Users should have control over their money.</p>	<p>Legislation introduced by the Government would guarantee that the Bank and the Government would not program a digital pound. Programmable payments offered by digital wallets would be subject to regulation and require user consent.</p>
<p>Safeguarding access to cash is of critical importance.</p>	<p>The Government has legislated to protect access to cash for people and businesses, which would help to ensure cash continues to be used alongside a digital pound.</p>

4: Feedback on the design of the digital pound

In the February 2023 [Consultation Paper](#), the Bank and HM Treasury consulted on the design of a retail digital pound that will be explored during the design phase. The Consultation Paper sought feedback on twelve questions.

This chapter summarises the responses received from those respondents who provided detailed feedback on some or all of the twelve design questions. Those responses accounted for a smaller proportion of the total responses received, and came from a combination of industry representative organisations, financial services firms, technology firms, consultancies, civil society groups and academics.

For completeness, this chapter does mention, where relevant, the feedback of individual respondents who expressed concerns about the possible broader societal implications of a retail CBDC, such as access to cash, users' privacy and control of their money, without commenting specifically on the twelve design questions. The actions and commitments to address these concerns are described in the previous chapter, 'Users' rights, privacy, and protections'.

Future payments landscape

What the Consultation Paper said

The Bank and HM Treasury are exploring a digital pound because money and payments are changing. Were current payment trends to continue, the Consultation Paper explained that there would likely be a need for, and benefits from, a digital pound, to support the safety and interchangeability of money through continued access to central bank money, and to promote competition, innovation and choice in payments.

Question asked in the Consultation Paper

1. Do you have comments on how trends in payments may evolve and the opportunities and risks that they may entail?

Summary of respondents' views

There was broad agreement that the payment trends identified in the Consultation Paper would continue. But there was a range of views on where a digital pound might fit in the future payments landscape.

Many individuals expressed concern about the declining use of cash. Some individual respondents called for the Bank and the Government to protect access to cash legally. The Government has taken decisive action to protect access to cash in law and remains committed to maintaining that access.

A small number of respondents from academia and the fintech sector thought the decline of cash use reflected the public's willingness to adopt digital payment methods. Some respondents expressed concern that cash use would continue to decline, to the point it might no longer be accepted. There were mixed views about whether cash usage would be supported in the future. However, a small number of respondents thought there would always be a minimum amount of cash used for payments, due to its familiarity, a preference for anonymity, the trust of payment upon delivery, merchants' possible non-acceptance of electronic payments, and usage by the unbanked.

Some respondents stressed the risk of digital exclusion if cash use continued to decline (see 'Financial inclusion and Public Sector Equality Duty' below). Indeed, a small number of respondents thought a digital pound would accelerate the decline of cash usage. Others pointed out the potential risk to digital-payment users from exposure to online fraud, scams and cyberattacks.

Other respondents, by contrast, saw the decline of cash use as an opportunity to combat counterfeiting, money laundering and reduce terrorist funding.

In that context, some saw a digital pound as maintaining access to risk-free public money and improving payment options where cash is not readily accepted. The Bank and the Government are committed to maintaining access to cash and meeting cash demand. A digital pound would complement, not replace, cash.

Many respondents called for the Bank and HM Treasury to set out in more detail the potential use cases for a digital pound. Some respondents thought that a digital pound could improve innovation in payments, providing greater choice, speed and lower costs.

Many respondents thought that the use case for a digital pound could be made clearer to the public. Other respondents questioned the need for a digital pound, given that retail payments today are generally fast, digital, and efficient.

However, some fintech respondents and civil society representatives felt that a digital pound would help to position the UK at the forefront of payments innovation and competitiveness. Agreeing with one of the primary motivations for a digital pound set out in the Consultation Paper, they noted that a digital pound could lead to improvements in payments, including greater choice, convenience, speed, and lower cost for users.

A few fintech respondents saw a strong use case for micropayments, which are payments of extremely low value. Micropayments could enable new business models, for example paying a small amount to read a single newspaper article, rather than having to pay for a whole subscription. While in principle possible today, the financial effort required is rarely worth it for the provider. A small number of respondents from civil society and the technology sector saw a strong use case for a digital pound to support 'Internet of Things' (IoT) services, which refer to physical devices that are embedded with sensors or software to connect and exchange data with other devices and systems over the internet. A digital pound could therefore enable machine-to-machine payments, eg a connected vehicle paying for fuel, electricity or parking.

Several technology companies and a small number of consultancies emphasised the benefits of new technologies like blockchain and Distributed Ledger Technology (DLT) to support transparency, security and efficiency in payments. The Bank's [Technology Working Paper](#) discussed the technologies that could support a digital pound, noting that the use of centrally governed, distributed database, technologies might be a more efficient and appropriate approach than the use of DLT solutions. However, the Bank will continue to assess a range of approaches and monitor ongoing technology developments.

Respondents supported a mixed payment ecosystem where a digital pound co-existed with other forms of money, but some were concerned by the demands this would place on existing infrastructure.

Fintech respondents were largely supportive of a mixed payment ecosystem, where cash, a digital pound and private digital means of payment, co-existed and were used in a complementary way. Many respondents mentioned the importance of interoperability, where a digital pound could be interchanged with other forms of money.

Some of these respondents also noted the role a digital pound could play in safeguarding payments competition and mitigating the risk of 'walled gardens', where it is costly, complex or slow for users to convert or transfer digital money holdings across platforms run by different companies. However, a small number of respondents felt that adapting regulatory frameworks for emerging payment systems, like stablecoin, would be a more effective way to promote competition.

Some respondents noted challenges that might occur if a retail digital pound coexisted with private-sector digital assets. They worried about the competing demands that digital pound requirements would place on the existing payments infrastructure, as well as the payments

industry's ability to deliver initiatives such as [New Payments Architecture](#) (to support interbank payments), [Open Banking](#) (which allows customers to direct their banks to share their data with third-party providers securely), [Swift](#) (a global messaging network for financial institutions), and the [Real-Time Gross Settlement \(RTGS\) Renewal Programme](#) (see below).

Some respondents felt greater coordination would be beneficial and called for a comprehensive roadmap that prioritised initiatives and resources. That view echoed the feedback received by the recently published independent [Future of Payments Review 2023](#) led by Joe Garner. Based on that feedback, the authors of the Review recommended that the Government develop a National Payments Vision and Strategy, to bring clarity to its future desired outcomes for UK payments and simplify the landscape.[9]

The potential merits of tokenised bank deposits and those of a wholesale CBDC were also put forward by several commercial banks.

A number of respondents in the banking industry thought that private-sector alternatives to a retail digital pound, such as tokenised bank deposits (tokens issued on a blockchain which are digital representations of bank deposits), could achieve the digital pound's stated objectives, including delivering improved digital functionality. These respondents did not see clear use cases for a retail digital pound and favoured a wholesale CBDC, as a new platform for high-value payments in central bank money.

Use cases proposed for a wholesale digital pound included: facilitating cross-border payments between financial institutions, enhancing the digitisation of financial markets and infrastructures, better real-time risk management outside of traditional operating hours, and supporting interoperability with regulated private forms of money for wholesale settlement. A small number of respondents also mentioned stablecoin issuers using wholesale CBDC as reserve assets to back their liabilities.

The Bank and HM Treasury's response

The Bank and HM Treasury will continue to monitor payment trends in the UK and abroad as the blueprint for a digital pound is developed, and a decision taken as to whether to proceed to build the infrastructure.

If a decision was taken to introduce a digital pound, the Bank and HM Treasury recognise that its future success would depend on close collaboration with the private sector. The digital pound would be a joint endeavour between the public and private sectors.

In recent months, the Bank and HM Treasury have refreshed the format and memberships of the CBDC **Engagement** and **Technology** forums to ensure that a diverse range of voices across civil society, industry and the technology sector is being heard. The Bank and HM Treasury have also launched a series of industry **working groups**, where industry experts will test use cases and potential design functionalities. The first two of these groups will focus on retailer needs and offline payments.

The Bank will also continue to engage closely with the experiments being conducted internationally on technologies associated with wholesale CBDC (including establishing new platforms). The Bank currently enables wholesale settlement through its RTGS service. The Bank has been improving this service through a transformational initiative that will deliver an enhanced core settlement engine that is more flexible, efficient and with more open standards, starting this year. The Bank and HM Treasury's current assessment is that the benefits of new technologies for wholesale settlement would be delivered in the quickest timeframe via the renewed RTGS rather than a new wholesale CBDC platform.

The Bank will work closely with industry on ideas for tokenised deposits.

Platform model and public-private partnership

What the Consultation Paper said

The **Consultation Paper** set out the Bank and HM Treasury's proposal for a platform model for the provision of a digital pound. The model is based on a public-private partnership, in which the Bank would provide the core infrastructure and ledger, where users' digital pounds are issued, held and transactions are settled. Private-sector intermediaries, both financial and non-financial firms, would access this core ledger and, using 'pass-through' wallets, provide payment and other services directly to end-users. This means that the private-sector digital pound wallet providers (PIPs) would not hold customers' funds directly on their balance sheets.

By providing the digital pound wallets, PIPs, as opposed to the Bank, would have the direct commercial relationships with users. To establish and maintain these relationships, they would require identity information of wallet account holders, which would allow them to carry out Know Your Customer (KYC) checks and comply with AML regulations.

Question asked in the Consultation Paper

2. Do you have comments on our proposition for the roles and responsibilities of private sector digital wallets as set out in the platform model? Do you agree that private sector digital wallet providers should not hold end-users' funds directly on their balance sheets?

Summary of respondents' views

Most respondents agreed that the Bank should provide the core infrastructure and that PIPs should not hold end-users' funds directly. There was strong emphasis on the need for clear and fair regulation of the PIPs to ensure a level playing field.

There was broad support for the platform model, with an emphasis on the need for further detail being provided in the future, for example regarding the allocation of accountability between the PIPs and the Bank in the case of PIP failure.

The majority agreed that the Bank should provide the core infrastructure and that PIPs should not hold end-users' funds directly. However, a small number of respondents thought that keeping funds off the PIPs' balance sheets could limit some potential use cases, such as staking (the process by which users lock up their digital assets for a period of time to support the operation of a blockchain) and programmability (the ability of users to set rules around their payments).

Others felt that 'pass-through' wallets hosted by intermediaries might add a potentially unnecessary step that could increase costs, including for end-users, and make the system more vulnerable to attacks. A small number of respondents from civil society groups were concerned that the private provision of wallets would concentrate power in the hands of a few dominant payment fintech and/or card network providers. Concerns were raised that such concentration in the hands of financial incumbents would weaken competition in payment services to the detriment of consumers.

Some saw the public-private partnership as an opportunity to design a new payments regime. Active engagement and participation from the private sector in the early stages of development, including seeking input from consumer groups and representatives, was seen as important by some respondents.

There was strong emphasis on the need for clear and fair regulation of the PIPs. The majority suggested taking a 'same risk, same regulatory outcome' approach, to ensure that private-sector intermediaries compete on an equal footing and are held to rigorous standards for

operational resilience, risk management, and compliance. Some respondents from the banking sector thought greater clarity was needed about how existing legal and regulatory regimes might need to be expanded to accommodate a digital pound.

Commercial banks and fintechs emphasised the need for digital pound wallets to be interoperable with other means of payment. Several stressed the need for a seamless transfer of digital pounds across wallets from different providers. A small number of fintech firms thought the Bank should set basic requirements for digital pound wallets to ensure standardisation across PIPs. A small number of payments trade association and industry groups supported a 'basic' digital pound wallet that would provide a mandatory minimum level of essential services, to prevent user exclusion, for example by supporting the provision of less commercially attractive use cases.

Some respondents noted their support for the provision of non-payment value-added services by private providers, eg enhanced risk analytics, dispute-resolution services, and commercial digital ID services. Many suggested that innovation must be a shared responsibility between the ecosystem owner and partners.

There was emphasis on the Bank and HM Treasury ensuring that PIPs' business models would be commercially viable.

There was concern, in particular among banks, that PIPs might struggle to identify commercially viable business models. That concern generally reflected the cost of compliance with AML/KYC regulations. To several respondents it was not clear how PIPs would raise revenue without charging consumers and/or merchants. For them, the lack of financial incentives to become a PIP could reduce private-sector participation. They thought the proposal that PIPs would not hold digital pounds nor pay interest on customers' holdings could reduce user adoption and deprive providers of an associated source of revenue on the asset side of their balance sheets.

A small number of respondents noted that a lack of revenue might discourage PIPs from supporting consumer use cases that generated less value.

A small set of trade bodies representing electronic money issuers thought that the Government should set aside a fund to support PIPs' investments in a digital pound infrastructure. Some respondents suggested using the existing payments infrastructure to promote merchant adoption, as well as the existing customer bases of established payment ecosystems to support the digital pound's launch strategy.

The Bank and HM Treasury's response

In light of the feedback received, the Bank and HM Treasury judge that the platform model continues to serve best the objectives of a digital pound set out in the Consultation Paper. Therefore, the platform model will be developed further in the design phase, and the Bank will explore the possible architecture, components and solutions in depth.

As set out in the [Technology Working Paper response](#), while the platform model remains the preferred model, the Bank anticipates that the model will evolve and adapt over the course of the design phase, taking into account further research and experimentation. More detail on the proposed model for a digital pound will be confirmed in the blueprint, which is expected to be completed by the end of the design phase.

While the design phase work will focus on further elaborating the platform model, the Bank will continue to explore alternative models proposed by respondents to the Technology Working Paper. However, at present the Bank judges these models to be less suitable, given the objectives set out in the Consultation Paper, than the platform model.

The Bank and HM Treasury will also look to make progress on developing the regulatory framework for the PIPs and will also prioritise efforts to understand the costs and revenues for PIPs and the viability of their business models to support participation in a digital pound ecosystem.

Privacy and data protection

What the Consultation Paper said

In the Consultation Paper, the Bank and HM Treasury proposed that neither the Government nor the Bank would have access to users' personal data.

The Consultation Paper also noted that a digital pound would be subject to rigorous standards of privacy and data protection but would not be anonymous. For example, law enforcement agencies would have to approach the relevant private wallet provider or third party to access any data as part of an investigation, as they would have to with bank accounts today. This would require a lawful, proportionate and fair case to be made. Wallet providers would have the right to challenge any request to access the data they hold.

It was also proposed that users be able to vary their privacy preferences and make choices about the way their data is used. For example, the Bank and HM Treasury support private-sector firms exploring ways to allow users to choose from a range of wallet services, based on tiered access with varying levels of identification, to ensure that a digital pound is accessible to all. Private-sector firms could also explore building Privacy-Enhancing Techniques (PETs) into digital pound wallets to provide users with control of personal data generated by transactions.

Questions asked in the Consultation Paper

3. Do you agree that the Bank should not have access to users' personal data, but instead see anonymised transaction data and aggregated system-wide data for the running of the core ledger? What views do you have on a privacy-enhancing digital pound?
4. What are your views on the provision and utility of tiered access to the digital pound that is linked to user identity information?
5. What views do you have on the embedding of privacy-enhancing techniques to give users more control of the level of privacy that they can ascribe to their personal transactions data?

Summary of respondents' views

There was wide agreement that the Government and the Bank should not have access to personal data but many expressed concerns that this would not be adequately implemented or enforced.

The main concern was that the Bank and the Government would use the technology and processes of the platform model to breach users' privacy actively for surveillance purposes, for example to track individuals' spending habits.

There was also concern that the UK authorities would exploit existing legislation granting law enforcement agencies access to users' personal data, despite existing legal safeguards. This was a general concern about breaching existing law enforcement legislation, applied to a digital pound ecosystem.

Individuals and some civil society groups also shared the misconception that the Bank would be able to link people's identity to transaction data and that digital identification would enable government surveillance. A related misconception was that the Bank and/or the Government would be responsible for verifying users' identity. As set out in the Consultation Paper, the

PIPs would be responsible for carrying out ID checks, as is done for bank accounts. Users would therefore be identifiable to the wallet providers, but they would be anonymous to the Bank and the Government.

There was broad support for tiered access to digital pound wallets, with the ability to provide varying levels of identity information.

Tiered wallets would allow PIPs to offer less stringent ID requirements for low value digital pound holdings and transactions, supporting consumer choice and the inclusion of those who are only able or willing to provide more limited forms of ID.

Many respondents supported the benefits that tiered access could provide for financial inclusion, but others were concerned that the proposal would introduce additional barriers and control over wallet access.

Some respondents reported it was unclear how AML/KYC checks would apply to tiered wallets, and that without a uniform approach to identity verification, people may be treated differently by different PIPs.

Some suggested that developing offline payments capability could offer greater privacy for low-value payments as transactions would not be recorded on a ledger.

Respondents supported user control of their data, with a range of views on privacy-enhancing functionality. There was support for the exploration of Privacy-Enhancing-Techniques (PETs).

A majority from industry and civil society groups thought that end-users should have a proactive say in how their data is used. Some thought that users should be opted out of sharing data with third parties by default and offered benefits if they voluntarily opted in, so that any monetisation of data from transactions could be subject to informed consumer consent.

Some respondents mentioned the importance of striking the right balance between building in privacy (and data-protection-by-design at a minimum to today's standards) and complying with AML/CFT reporting requirements.

A few respondents mentioned self-custody wallets, where the PIP would not have custody of a users' digital pounds, as a privacy-protective option.

There was support for the exploration of PETs to control and/or shield users' personal data. A small number of respondents raised concerns that PETs were still immature and posed implementation risks, calling for more work, as set out in the Bank's [Technology Working Paper](#).

The Bank and HM Treasury's response

The Bank and HM Treasury understand respondents' strong feelings about privacy. The section on privacy and data protection in the previous chapter sets out how the Bank and HM Treasury commit to addressing these concerns.

The Bank and HM Treasury are committed to exploring how PIPs could offer tiered access to users, with functionality based on the amount of identification a user is willing or able to provide.

The Bank will conduct experiments to understand the benefits and trade-offs of both well-established and emerging types of PETs, and how those technologies could be applied to support privacy in a digital pound system.

As set out in the [Technology Working Paper response](#), the Bank is also exploring technologies that could potentially distribute the 'alias service' functionality across a digital pound ecosystem, such that the alias service would not be part of Bank-managed infrastructure.^[10] With these technologies, the Bank is assessing whether it is possible to design a privacy-preserving alias service which would not only prevent the core ledger from accessing personal data, but also limit the sharing of personal data between users and PIPs.

Payments in scope

What the Consultation Paper said

The [Consultation Paper](#) proposed that a digital pound initially focus on in-store, online and person-to-person payments. The focus may broaden out in the future, as the payments landscape evolves, for example to enable split, batch or micropayments. It also noted that the Bank and HM Treasury intend to explore offline and cross-border payments, and ruled out developing a digital pound that enables government or central bank-initiated programmable money. However, the Consultation Paper set out that the PIPs could explore enhanced functionality for users to set rules on their payments.

Question asked in the Consultation Paper

6. Do you have comments on our proposal that in-store, online and person-to-person payments should be highest priority payments in scope? Are any other payments in scope which need further work?

Summary of respondents' views

There was broad agreement that in-store, online and person-to-person payments should be a priority, but business-to-business and government-to-person payments were also considered valuable payment options to explore. Cross-border payments, as well as offline capability, were also mentioned as important use cases. There was a call to explore and experiment with possible future use cases for the digital pound.

There was broad agreement that in-store, online and person-to-person (P2P) payments should be a priority. Some supported a 'start small, consumer-first' approach with an initial focus on P2P payments.

But many favoured considering additional use cases, in particular business-to-business (B2B), and business-to-consumer (B2C). Consumer-to-business (C2B) was also suggested, eg mortgage and utility payments. Some mentioned government-to-person (G2P) and person-to-government (P2G) payments, eg to pay VAT directly to the authorities at the point of sale and for tax returns.

A number of respondents, from academia, the payments software industry and Non-Governmental Organisations (NGOs), envisioned G2P use cases as including:

- Government subsidies
- Stimulus pay-outs
- Pension payments
- Relief payments during natural disasters, eg Covid-related disbursements
- Support for Gift Aid, a scheme that enables charities to increase the value of donations made by reclaiming tax paid on the gift

A small number of respondents noted that the use of a digital pound by the Government for G2P payments could support a sense of trust and encourage its adoption.

Some recommended considering retailer-focused use cases, to alleviate merchants' high costs and reduce credit-card fraud.

Many respondents mentioned cross-border payments and remittances, as well as offline capability, as important use cases. Civil society representatives felt offline payments were needed. This could be for resilience, should the telecommunication networks go down, but also because the UK, like most countries, does not enjoy 100% mobile or broadband coverage on a 24/7 basis. A small number of respondents felt that failure to support offline payments might make a digital pound less attractive compared to private digital currencies and foreign CBDCs.

Technology firms and some civil society representatives pointed to the use of digital pounds in micropayments, split payments, Web3 and the Metaverse, and the Internet of Things (IoT).[11]

The majority of respondents felt that more experiments were needed and suggested that different participants be involved in the exploration of future use cases for a digital pound. Some respondents wanted more clarity on the novel use cases a digital pound would support compared to other forms of money.

Respondents expressed a range of views on programmability depending on their industry.

Some respondents acknowledged the opportunities for innovation provided by this new payment functionality. Technology firms were supportive of PIP-provided programmability, eg PIPs offering the use of smart contracts (which automate payments if pre-determined conditions are met). They suggested that the Bank set the perimeter for programmability features to clarify what could and could not be done.

Some respondents from the banking industry stressed that programmability should not be implemented on the Bank's core ledger, but instead provided as a service by the private sector. This was consistent with the proposal in the [Consultation Paper](#) that PIPs offer to program payments subject to users' consent, and the commitment that neither the Bank nor the Government would program a digital pound.

Other respondents felt that this innovation should not come at the cost of users' privacy. Some civil society groups raised concerns that programmability could be a means for the Government to restrict payments and impose controls on how digital pounds are spent. They worried that future governments could program money or pressure PIPs into programming money on their behalf. As set out in the Consultation Paper, a digital pound would not be designed to enable government or central bank-initiated programmable money.

The Bank and HM Treasury's response

As stated in the Consultation Paper, the design phase will explore offline settlement capabilities further. Following the publication of Requests for Information, the Bank and HM Treasury have set up [Digital pound working groups](#) to engage with experts, including on offline payments. Their input will be considered alongside the feedback from individuals and experts set out in this document.

The Bank and HM Treasury understand some respondents' strong feelings about programmability. The chapter on 'Users' rights, privacy, and protections' explains that legislation introduced by the Government for a digital pound would guarantee that the Bank and the Government would not program users' digital pounds.

As set out in the [Technology Working Paper response](#), the Bank will continue to engage with stakeholders to understand which innovative functionality, including for programmable payments, PIPs and users might want, and to determine what infrastructure would be needed to support those features. This will include further development of the functionalities that the Bank experimented with in [Project Rosalind](#). The Bank will continue to examine which features of its technological interface with the private sector are needed to enable the private sector to build and host smart contracts. The Bank's current position is that smart contracts would not be hosted on the core ledger.

Holding limits and access

What the Consultation Paper said

The [Consultation Paper](#) proposed setting limits on holdings of digital pounds, at least during the introductory period. These limits are intended to manage risks to financial and monetary stability associated with outflows from bank deposits, at a level that supports the usability of a digital pound. For individuals, it was judged that a limit of between £10,000 and £20,000 would likely strike an appropriate balance. The Consultation Paper also sought respondents' views on a lower limit, such as £5,000.

Corporates would also be limited in their holdings of digital pounds, but the limit would be significantly higher than for individuals, given corporates' larger balance sheets. Technology solutions could support relatively lower corporate limits, for example, if

digital pound holdings above the level of the limit were automatically 'swept' into a nominated bank account. The possibility was also raised of restricting access by type of corporate, for example financial firms, to prevent wholesale use of a digital pound.

The Consultation Paper proposed that non-UK residents would be able to hold and use digital pounds on the same basis as UK residents.

Questions asked in the Consultation Paper

7. What do you consider to be the appropriate level of limits on individuals' holdings in transition? Do you agree with our proposed limits within the £10,000–£20,000 range? Do you have views on the benefits and risks of a lower limit, such as £5,000?

8. Considering our proposal for limits on individual holdings, what views do you have on how corporates' use of digital pounds should be managed in transition? Should all corporates be able to hold digital pounds, or should some corporates be restricted?

9. Do you have comments on our proposal that non-UK residents should have access to the digital pound, on the same basis as UK residents?

Summary of respondents' views

Views on the appropriateness of limits on individuals' digital pound holdings in the transition phase varied, but on balance respondents were supportive.

While feedback to the specific question was provided predominantly by the financial services industry and academia, it is worth noting that some individual respondents suggested there should be no limits on digital pound holdings as they were seen as restrictive and preventing equitable access. They expressed concerns that they would not be able to earn or save more than £20,000. Contrary to the proposal in the Consultation Paper, some of these respondents misinterpreted the limit to be in relation to users' ability to deposit their money in general, rather than just applied to their digital pound holdings.

There was wide agreement among respondents from the financial services industry and academia with the need to impose limits at least during the introductory period, to achieve a balance between usability of a digital pound and mitigating financial stability risks from the disintermediation of bank deposits.

Several of these respondents raised the possibility of a phased, gradual approach to an agreed holding limit, recommending to 'start small', with subsequent reviews, while some associations and academics favoured further analysis.

Views on the appropriate level of limits on individuals' digital pound holdings ranged widely.

There was a wide range of views on the appropriate level of limits for individuals. Most responses focused on holding limits, but several respondents favoured the use of limits on transactions, especially in times of stress.

The majority of banks favoured limits in the £3,000-£5,000 range, citing the risk of deposit outflows in steady state and in stress (with references to the recent rapid withdrawal of deposits from Silicon Valley Bank in the United States). Some also compared a digital pound to cash, and the need to size the limit for everyday, low-value, payments. Some respondents noted other central banks' proposals, some of which envisaged a lower level than the proposal in the Consultation Paper.

Banks were mainly concerned that the loss of deposit funding and greater reliance on wholesale funding would lead to a fall in the supply of credit and/or a rise in lending costs for households and businesses. A small number of respondents, particularly building societies, mentioned they would be particularly affected by an outflow of deposits because their legislative funding limits prevented a wholesale funding ratio above 50%.

By contrast, fintech payment providers, consumer representatives and several academic respondents either agreed with the proposed £10,000-£20,000 limit or preferred no limits at all, to support widespread adoption and usability. For example, a few respondents mentioned the need to allow purchases of big-ticket items such as cars, real estate, holidays, or weddings. Some recommended lifting limits in times of emergency or natural disaster, to facilitate extraordinary disbursements to individuals in need. Others mentioned that lower limits and reduced adoption would undermine the role of a digital pound in supporting the convertibility of money across its different forms, on demand and without loss of value (the 'uniformity' or 'singleness' of money).

Some respondents noted the operational challenge of enforcing the holding limits, especially if individuals held multiple digital pound wallets. Where solutions were proposed, the majority supported reliance on the automated sweeping of excess holdings (above the limit) into bank accounts, which would help to mitigate the need for relatively higher limits. That would contain risks to financial stability while supporting usability.

The majority of respondents favoured wide corporate access and did not support restrictions by type of corporate. There was agreement that corporate holding limits should be substantially higher than for individuals.

Respondents emphasised the importance of corporates having access to a digital pound, to promote and sustain widespread adoption, and several advocated access by all corporates.

The majority did not support restrictions by type of corporate. While some respondents expressed concerns that a digital pound would be used by financial firms for wholesale activity, they suggested that financial firms' use of digital pounds be kept under consideration to support retail-like payments, eg paying wages to employees. Some also pointed to the combination of sweeping and scheme rules for corporate wallets to mitigate financial firms' engagement in wholesale activity. A few others pointed to the financial stability risks of using a digital pound in wholesale markets and thought wholesale use should be prohibited or subject to regulatory oversight.

For limits on corporate holdings, there was agreement that these should be substantially higher than for individuals, although several respondents felt it was difficult to assess the appropriate level without greater clarity on corporates' use cases for a digital pound. Some respondents favoured no corporate limit at all.

There was a range of views on whether to vary limits by corporate type or size. A small number of respondents pointed out that setting different limits may give some firms a competitive advantage over others.

Some respondents thought that sole traders should be treated as individuals, with a very low or zero limit on corporate accounts.

Most respondents thought non-residents should access a digital pound on the same basis as UK residents.

Most respondents agreed that non-UK residents should have access to a digital pound, but several felt its rollout should initially focus on UK residents.

While most thought non-residents should access a digital pound on the same basis as UK residents, a small number of respondents favoured a cautious approach and the setting of lower limits on non-resident digital pound holdings. A small number argued for varying holding limits depending on the jurisdiction.

Several use cases for non-resident access were identified: strengthening the usage of the pound globally, supporting the role of the pound as a settlement asset for international trade, facilitating cross-border payments and supporting tourism in the UK.

Many respondents stressed the need for a carefully designed legal and regulatory framework, based on the application of equivalent standards and requirements to PIPs across the UK and other jurisdictions. This would ensure a level playing field in the conduct of appropriate digital identity, KYC, AML and CFT checks, sanctions controls, consumer protection and dispute resolution.

Some respondents raised concerns about the macroeconomic implications of non-resident access to a digital pound, mentioning the risk of sterling flight abroad, or, conversely, the possibility that non-UK jurisdictions might put in place restrictions on digital pound holdings to prevent the large-scale adoption of a digital pound by their citizens, and to preserve their monetary and financial sovereignty.

The Bank and HM Treasury's response

In light of the feedback received and the absence of any materially new analysis, the Bank and HM Treasury are minded to proceed at this stage with a proposed holding limit in the range of £10,000 to £20,000, at least during the introductory period. As set out above, respondents' views on individual limits ranged widely, with three broad groups emerging. Banks generally preferred a holding limit in the range of £3,000 to £5,000 per individual to limit deposit outflows; non-banks and other fintechs either preferred the highest limit or no limit at all to support a wider range of use cases; and a third, smaller group, including some associations and academics, favoured further analysis or starting with a low limit and increasing it over time.

The Bank will undertake further analysis to refine the range, informed by continued engagement with the financial services industry. In particular, the Bank will explore further the impact of limits on deposit disintermediation in a period of banking stress, the distributional impact of limits across different types of deposit-taking institutions, the impact of limits on the viability of PIP business models, risks to usability from lower limits, and the technological and functional considerations regarding the feasibility of sweeping. This means the Bank and HM Treasury are open to revisiting the bounds of the £10,000 to £20,000 range if new information came to light.

During the design phase, the Bank will also further explore what degree of access and level of holding limits would be most appropriate for corporates. That work will be in part informed by the input gleaned from the expert [working groups](#) on retailer needs, set up last year by the Bank and HM Treasury following a Request for Information.

In light of respondents' feedback, the Bank and HM Treasury are minded to support non-UK residents' access to a digital pound on the same basis as UK residents. Any non-resident access regime will be in accordance with the G7's 2021 [pledge](#) to design any future CBDCs in such a way that would avoid the risk of currency substitution in other countries.

Recognising the need for greater clarity on the regulatory regime for non-UK private-sector wallet providers, the Bank and HM Treasury will ensure that UK standards of resilience, consumer protection, AML, KYC and any other legal requirements are upheld.

Further work will be undertaken on whether, and to what extent, non-resident corporates might have access to a digital pound.

Further public consultation would precede the introduction of primary legislation by the Government. As part of this consultation, the Bank and HM Treasury would seek public feedback on limits for both individuals' and corporates' holdings of digital pounds.

Financial inclusion and Public Sector Equality Duty

What the Consultation Paper said

Tackling financial exclusion, particularly as financial services become more digital, is a priority for the Government. This means seeking to ensure that people can access useful, affordable financial products and services whatever their income or background and at all stages in their financial lives. The Bank and HM Treasury are considering how the design of a digital pound could support financial inclusion and the needs of vulnerable people, for example by providing greater optionality and functionality for those with specific vulnerabilities and for some financially excluded groups.

In designing a digital pound, the Bank and HM Treasury will also have due regard to the equality considerations set out in the Public Sector Equality Duty (PSED).

Questions asked in the Consultation Paper

11. Which design choices should we consider in order to support financial inclusion?

12. The Bank and HM Treasury will have due regard to the public sector equality duty, including considering the impact of proposals for the design of the digital pound on those who share protected characteristics, as provided by the Equality Act 2010. Please indicate if you believe any of the proposals in this Consultation Paper are likely to impact persons who share such protected characteristics and, if so, please explain which groups of persons, what the impact on such groups might be and if you have any views on how impact could be mitigated.

Summary of respondents' views

Some respondents thought a digital pound could improve financial inclusion, although improving digital literacy and coverage was seen as key to underpin this. Respondents' proposed design choices to support financial inclusion ranged from offline availability, tiered access and in-person assistance to community-supported or public provision. Inclusive use cases were also mentioned.

Several respondents thought that a digital pound had the potential to improve financial inclusion in the UK. A few favoured making financial inclusion a primary objective. However, it was recognised that digital literacy would be a key obstacle to overcome and, as such, further work would be needed to alleviate digital exclusion. A few respondents recommended educational campaigns run by the Government and PIPs, including to reassure people that both cash and digital pounds would continue to be used.

In their general feedback, individual respondents reported feeling strongly that maintaining access to cash would be critical for financial inclusion, particularly for the vulnerable and the elderly.

Respondents mentioned a range of design features that could support financial inclusion.

Offline capability was seen by many respondents as an inclusive innovation, given the link between financial exclusion and digital exclusion. Offline settlement was seen as an alternative payment method for use in remote areas without good connectivity, for consumers with no means to afford smartphones or mobile data, or for use by consumers with no digital skills (in the form of some sort of smart card). It was also seen as a fallback option in the event of natural disasters. Some respondents also mentioned the importance of being able to make digital pound payments with a physical card.

Tiered access to digital pound wallets was mentioned by many respondents (see 'Privacy and data protection' above).

In-person or remote assistance for opening and operating digital pound wallets, as well as converting digital pounds into cash, was raised as necessary for the successful take-up by some groups, such as the elderly.

Some respondents saw a role for third-sector organisations, for example community-based not-for-profit wallet providers, to support access to digital pound services for disadvantaged users. However, they noted that those organisations would need financial support for their business model to be viable.

A few respondents favoured a public digital pound wallet that is free of charge or low cost and offers core payment functionalities. Those respondents thought that this could foster greater competition by establishing a benchmark, prompting PIPs to work harder to attract digital pound users.

Use cases seen as supportive of financial inclusion were also mentioned: using digital pounds to send low-cost remittances overseas, supporting the digitisation of small businesses that mostly rely on cash, and enabling at-scale G2P payments in times of crisis or disaster.

Respondents did not raise objections to the proposed design of a digital pound on equality grounds. Some expressed concerns about how the design and rollout of a digital pound might affect persons with protected, as well as non-protected, characteristics.

While respondents did not raise objections to the proposed design of a digital pound on equality grounds, some concerns were expressed about potential impacts on individuals with protected characteristics. The Bank and the Government will continue to take this into account as part of the PSED.

Among persons with protected characteristics, respondents identified two vulnerable groups in particular: the elderly and those with disabilities. Age was cited as the most common characteristic, with respondents typically concerned that a digital pound may exacerbate the financial exclusion of the elderly. Disabilities was mentioned by a few respondents, largely from organisations rather than individuals.

Respondents considered that low digital literacy among both the elderly and the disabled would cause difficulties with adapting to a new technology, difficulties understanding the differences between the digital pound and existing services, and poor understanding of the privacy features of the digital pound. For example, the low uptake of some existing financial

technology (eg online and mobile banking) among the elderly could mean that this group would be less likely to see a high uptake of a new financial technology such as the digital pound.

Poor accessibility was cited as an important concern for people with disabilities, as respondents thought that they may find it more difficult to integrate a new financial technology into their daily lives, especially if the interface were smartphone-based.

Regarding non-protected characteristics, some respondents expressed concerns about the socio-economic and geographical impacts of a digital pound, citing a widening of the gap between those who are unbanked or financially excluded and the rest of society, and the relative exclusion of individuals living in areas of low broadband and mobile data connectivity.

Recommendations to mitigate any negative impact from a digital pound included ensuring that it would be used alongside cash and bank deposits and be made as accessible as possible. Supporting financial inclusion and digital education were also seen as important.

The Bank and HM Treasury's response

Tackling financial and digital exclusion remains a priority for the Government. The Bank and HM Treasury want any digital pound to support financial inclusion across the UK.

Financial inclusion is high in the UK, and the Government has taken several steps to ensure fair and affordable access to vital financial products and services in the payments and banking sectors, such as the provision of basic bank accounts. The Government works closely with regulators, industry, and the third sector to understand and respond to new developments.

The Bank and HM Treasury are considering how the design of a digital pound could present opportunities to enhance financial and digital inclusion, drawing on respondents' suggestions. A range of actions is being explored:

- The Bank will conduct technology experiments on peer-to-peer and peer-to-business payments, including exploring how those in areas of low connectivity or with limited digital access would still be able to use a digital pound.
- Inclusion will be an important aspect of the design of a digital pound and will form part of experimentation during the design phase, such as through the exploration of physical card payments.
- The Bank and HM Treasury have set up a working group to consider specifically the question of offline payments, which could be an important functionality to allow users to make payments in areas of low connectivity.^[12]

- Prior to any decision to introduce a digital pound, an equalities impact assessment would be conducted and published to set out the impacts that a digital pound would have on protected groups.

The decision to introduce a digital pound would only be taken if the Bank and HM Treasury were adequately assured that it could be designed and launched in an equitable and accessible way. It is clear that there is considerable overlap between financial inclusion, digital inclusion, and access to cash, and the Bank and HM Treasury are considering all these issues together.

Proposed design

What the Consultation Paper said

The [Consultation Paper](#) consulted on the proposed design for a digital pound, given the Bank and HM Treasury's primary motivations. These are the availability of central bank money as an anchor for confidence in and safety of money, and promoting competition, innovation, choice, and efficiency in payments.

The proposed design features for a digital pound are summarised in Diagram 9.

Question asked in the Consultation Paper

10. Given our primary motivations, does our proposed design for the digital pound meet its objectives?

Summary of respondents' views

Overall, respondents from a broad range of industries showed support for the proposed design choices, given the Bank and HM Treasury's objectives. Respondents called for open debate and active engagement with stakeholders, including consumer awareness and education campaigns, during the design phase of a digital pound.

Some respondents suggested taking a 'start small', iterative approach through trialling and testing specific use cases, and modelling economic simulations, during the design phase.

Others offered their expertise and experience to add value to the design of a digital pound, and a small number of respondents suggested additional design features (eg visibility of the core ledger by end-users) or design principles (eg a requirement to balance the needs of consumers and financial services and payments providers) for the platform model.

Others thought that a focus on making a digital pound interoperable with existing forms of money may inhibit efforts to make the digital pound platform extensible (easy to adapt to evolving technology or use cases), pointing to the need for a more forward-looking approach.

Several respondents called for the conduct of a Cost-Benefit Analysis of the introduction of a digital pound. Some felt that the Bank and HM Treasury should justify their decision if they decided not to proceed with issuing a digital pound.

Respondents called for an open debate, and for the Bank and HM Treasury to engage actively with stakeholders during the design phase. Some mentioned conducting consumer awareness and education campaigns to engage the public.

Several respondents shared their views on the position not to remunerate a digital pound.

The Consultation Paper explained that a digital pound would not be remunerated. Were the approach to remuneration to change after a digital pound was introduced, that would follow public consultation and the Bank would provide adequate lead time, so that holders of digital pounds were able to exit from, or enter, the system in an orderly manner, if they wished to.

Most respondents who commented on this topic mainly came from the banking and payments industries and supported the position not to remunerate a digital pound.

However, a small group of respondents raised a number of concerns. Several noted that non-remuneration would limit PIPs' revenues because they would not receive interest payments on the assets matching their digital pound liabilities. That could constrain digital pound provision by making it less commercially viable. A small number of respondents noted that not paying interest might limit user adoption of a digital pound. This could limit its role as an anchor for the monetary system. Others thought that non-remuneration would not necessarily dampen bank deposit outflows to digital pounds in times of stress.

Many individual respondents were concerned about the possibility of an expiry date on their digital pound holdings, the imposition of a negative interest rate on their digital pounds, or, similarly, the imposition by the PIPs of a usage fee as PIPs sought to generate revenue.

A few academics and industry bodies favoured reviewing this position at a later stage, in light of the role an interest-bearing digital pound could play in supporting PIPs' revenues and enhancing the Bank's and the Government's policy tools.

The Bank and HM Treasury's response

In light of the feedback received, the Bank and HM Treasury think that the design of a digital pound proposed in the [Consultation Paper](#) remains appropriate to deliver the Bank and HM Treasury's public policy objectives.

Developing a detailed design for a digital pound will be the focus of efforts in the design phase of the project. To that end, the Bank and HM Treasury have agreed a set of design principles that will guide this work. These are detailed in the 'Next steps' chapter.

Transparency around the work and engagement with a diverse group of stakeholders will be more important than ever in the design phase. The Bank and HM Treasury will build upon the approach to date, including through the CBDC [Engagement](#) and [Technology](#) Forums. As explained in the 'Next steps' chapter, the [CBDC Academic Advisory Group \(AAG\)](#), as well as expert [working groups](#), have been set up to explore particular topics in detail. The Bank and HM Treasury will also continue engagement with civil society, academics, technologists, and stakeholders across the UK as well as internationally. This programme of engagement will continue to inform the national conversation on the future of money as part of the next steps in the digital pound project.

Diagram 9: Next steps following the design proposals



5: Next steps

The Bank and HM Treasury have progressed to the design phase of work on a digital pound and expect to decide whether to proceed to the build phase around the middle of the decade.

As announced in the [Consultation Paper](#), in light of the likely need for a digital pound in the future, work has now moved to the design phase (Diagram 10). The priority of the design phase is to develop further, in both policy and technology terms, the in-depth design of such a digital pound.

Work during the design phase will focus on developing in detail the digital pound proposition, with a particular focus on the operational, functional and technology model for a digital pound. That will involve determining the technological feasibility and investment required to build and operate the digital pound infrastructure. In turn, that will support an overall assessment of the costs and benefits of building and running the digital pound architecture. This work will equip the Bank and HM Treasury with the knowledge and capability to build a digital pound and shorten the development lead times, were a decision taken to introduce one in the future. It will also provide the basis for the future decision on whether to move to a build phase and introduce a digital pound. If a decision was taken to move to the build phase, a prototype digital pound would be developed, first in a simulated environment and then in live pilot tests. The Government has committed to introducing primary legislation in advance of launching a digital pound, which would be preceded by further public consultation.

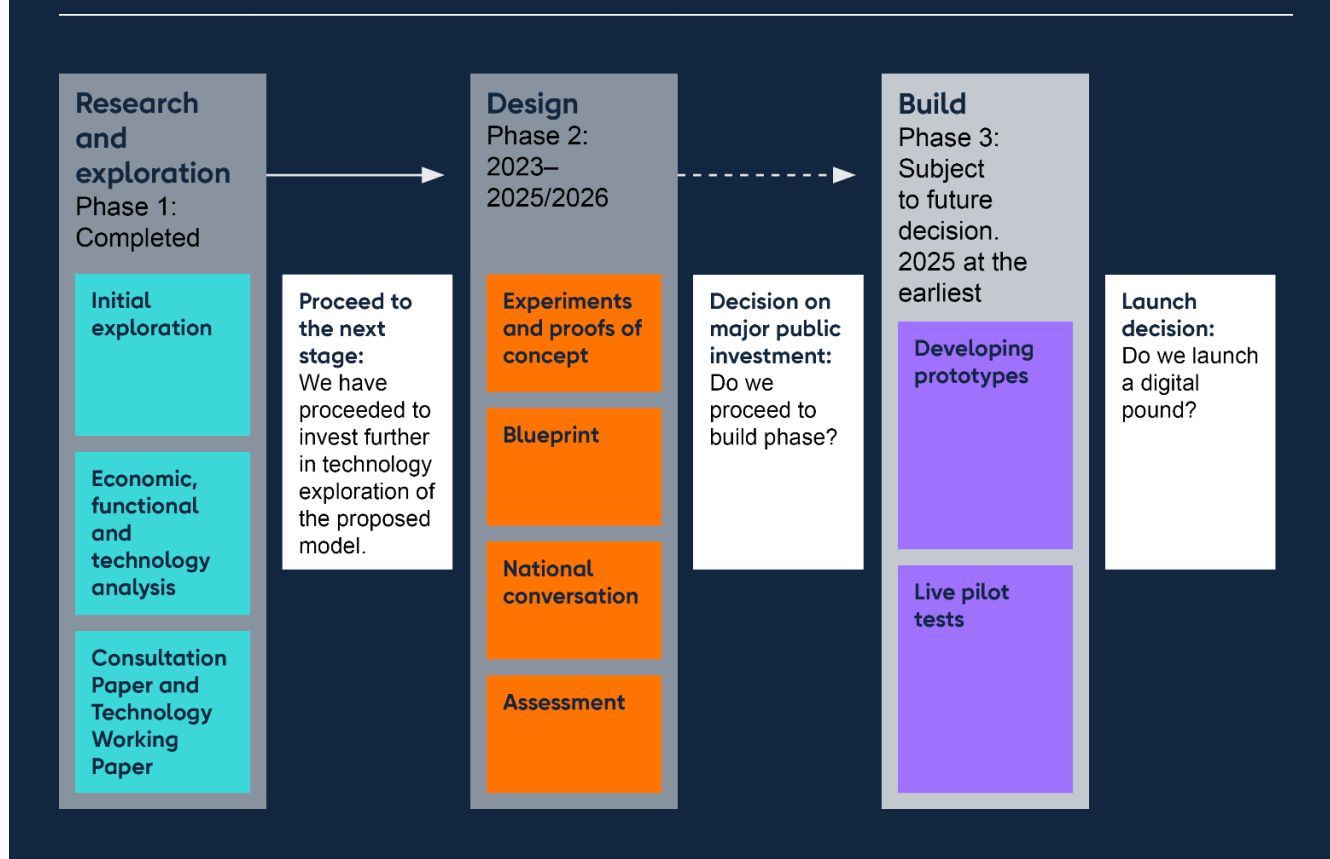
The design phase will present enduring benefits for the digital economy in the UK, particularly the fintech and technology sectors, even if a decision is taken not to build a digital pound.

Technologies for a digital pound are also relevant to new forms of digital money issued by the private sector, such as stablecoins, as well as finding possible applications in financial market infrastructures. It is likely that digital currency technologies will be significant in shaping the future of both retail and wholesale finance.

If a decision is taken not to proceed to build a digital pound, the Bank and HM Treasury's partnership with the private sector for experiments and proofs of concept in the design phase will still be beneficial. First, it will promote private innovation in digital currency technologies. Second, it will encourage innovative digital money business models. Third, it will support knowledge-sharing across the UK fintech and technology sectors. The design work will also benefit the Bank and HM Treasury by improving the understanding of the economic benefits

and the risks to financial stability of technologies supporting new forms of private digital money. So even if a digital pound is not built, the design phase will bring benefits to the digital money ecosystem and help to prepare the UK for the future of money and finance.

Diagram 10: Roadmap for the digital pound project



Feedback received in the consultation process has further informed and shaped priorities in the design phase.

It is only practicable to focus – in depth – on one core model for a digital pound in the design phase explorations. Feedback to the consultation suggests that the model for a digital pound set out in the Consultation Paper is appropriate. It will therefore be the focus of work in coming years.

The wider feedback to the consultation has significantly helped to guide priorities. The Bank and HM Treasury appreciate the strength of feeling among individuals on a range of issues. As part of the design phase, the following steps will be taken forward:

- Before any launch of a digital pound, the Government has committed to introducing primary legislation.
- Privacy would be a core design feature of a digital pound, and an utmost priority, therefore:
 - The Bank and the Government would not access users' personal data through the Bank's core infrastructure – and legislation introduced by the Government for a digital pound would guarantee users' privacy.
 - The Bank commits to exploring technological options that would prevent the Bank from accessing any personal data through the Bank's core infrastructure.
- The Bank and the Government would not program a digital pound – and legislation introduced by the Government for a digital pound would guarantee this.
- Throughout the design phase, there is a commitment to engaging with Parliament and reporting periodically on progress.

| The design phase has four key workstreams, which are interrelated.

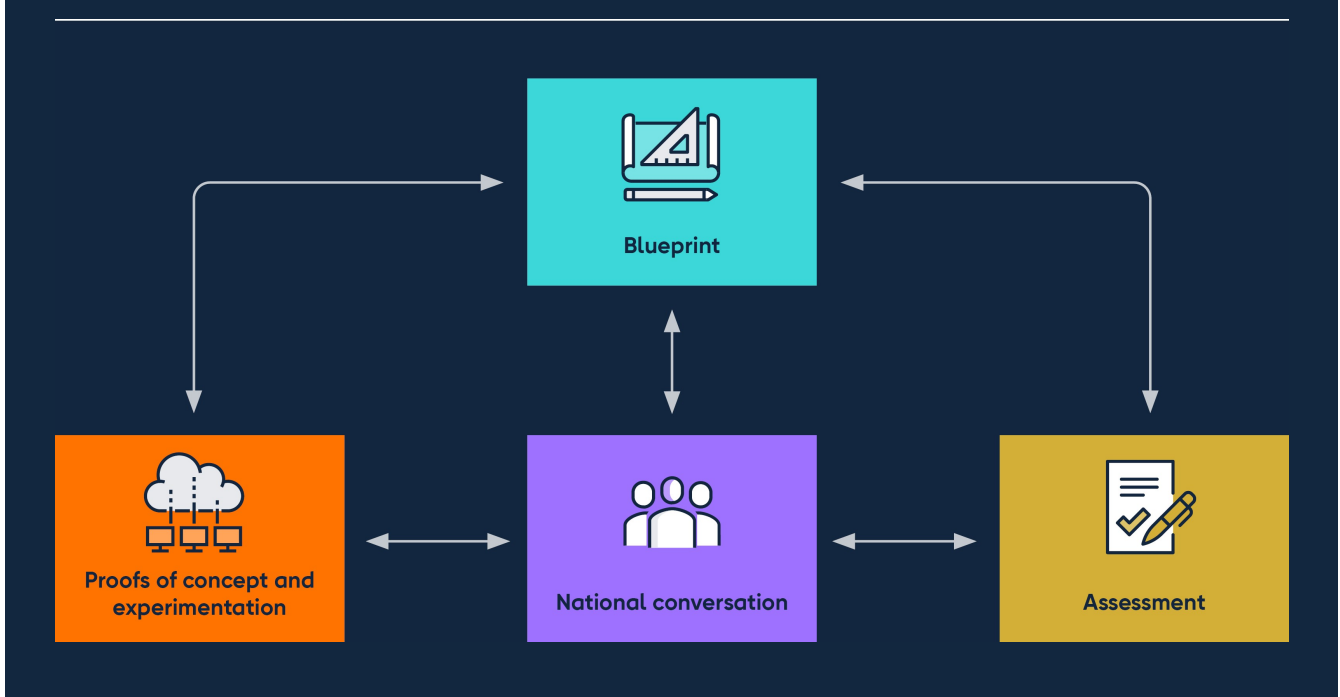
The Bank and HM Treasury envisage four workstreams within the design phase (Diagram 11).

- **Experimentation and proofs of concept:** focused experiments in collaboration with innovative private-sector firms. These will establish the technological feasibility of different design choices.
- **Blueprint:** a comprehensive description of the digital pound architecture, should a decision be taken to proceed to build it.
- **National conversation:** a programme of engagement by the Bank and HM Treasury with the public, businesses and wider stakeholders to ensure that work on a digital pound takes account of all views. This will also build public understanding of a digital pound and user needs.
- **Assessment:** a framework to evaluate the costs and benefits of a digital pound, to inform the decision on whether to proceed to the build phase.

The four workstreams of the design phase complement and reinforce one another. For example, experiments and proofs of concept will be relevant in the national conversation on the future of money by showing the potential use cases that a digital pound might generate. Both will also inform the design choices ultimately proposed in the blueprint.

The assessment of whether to proceed to the build phase will be based on the specific design of a digital pound detailed in the blueprint, as well as being informed by the national conversation on the future of money. The build phase would then execute the design of a digital pound as specified in the blueprint.

Diagram 11: Workstreams of the design phase



Experiments and proofs of concept

The Bank will continue to partner with innovative private firms in the design phase to conduct experiments and proofs of concept. This work will allow the Bank to understand better the state-of-the-art for technologies and to what extent they can meet digital pound design requirements. The Bank has already completed successful experiments in relation to Application Programming Interface (API), point of sale, digital wallet applications and offline payments.[13]

To ensure a fair and transparent approach to partnerships with the private sector, experiments and proofs of concept will follow appropriate governance, in line with procurement law and the Bank's procurement policy.

Blueprint and design principles

The design phase will set out a clear proposition for a digital pound. That will include setting out the product and technology proposition for a digital pound that would be proposed for the build phase.

The [Consultation Paper](#) and [Technology Working Paper](#) set out objectives for a digital pound. Taking on board the feedback received on both papers, the Bank and HM Treasury have developed a set of design principles (Table A). These will guide work in the design phase by providing a framework to develop the blueprint for the digital pound proposition, alongside continued engagement with stakeholders.

Adhering to these design principles will support the Bank's core purposes of monetary and financial stability, and HM Treasury's objectives of an inclusive and innovative digital payments ecosystem, while delivering a digital pound platform that is secure, private, adaptable, energy efficient, and interoperable with other payment rails.

Table A: Design principles for a digital pound

Principle	Summary
Reliable and secure	A digital pound should always be available so users can trust they can make payments at all times
User privacy and control	No access to personal data by the Bank and the Government through the Bank's core infrastructure Enable privacy-preserving payment options Money is not programmed by the Bank or the Government
Support innovation	Provide public infrastructure and functionality at good value-for-money to support innovative services Lower barriers to entry to promote competition in payments
Interoperable	Users would be able to exchange digital pounds conveniently with other forms of money Users of a digital pound would be able to pay non-users conveniently, and vice versa
Adaptable and scalable	Support our prioritised payment and non-payment use cases Built with future trends in mind Adaptable to support use cases we cannot currently anticipate
Inclusive and attractive	Attractive to individuals and businesses Designed to be widely accepted Able to sustain a range of private-sector business models in the ecosystem
Energy efficient	Without compromising user choice, a digital pound would support the Government's net-zero plans A digital pound would be at least as energy efficient as existing payments infrastructures

Delivering the blueprint will require specialist input from a range of stakeholders, including technical experts. As such, the Bank and HM Treasury have increased their external engagement, and will ensure stakeholders are informed and involved throughout the design phase.

In addition to the [CBDC Engagement Forum](#) (with members from industry and civil society) and the [CBDC Technology Forum](#) (with technical specialists) set up in 2021, last year, the Bank and HM Treasury set up the [CBDC Academic Advisory Group \(AAG\)](#) to ensure that cutting-edge research from a range of academic disciplines is given due consideration.

The Bank and HM Treasury also set up [working groups](#) following the publication of Requests for Information, to explore particular topics in detail. There will also be a structured programme of market research that will provide evidence to inform design choices in accordance with the design principles.

Later this year, the Bank and HM Treasury intend to explain in more detail the approach to the design phase, including plans for experimentation and proofs of concept, the considerations the blueprint will seek to address and the methods to be used to gather evidence to support the development of that blueprint.

Additionally, the Bank and HM Treasury intend to publish periodically discussions on material considerations related to the design of, or technology for, a potential digital pound. This is in order to enable stakeholders to understand emerging thinking, and to seek expert input, feedback and challenge at an early stage. Potential publications are likely to include:

- **Project reports:** these would set out findings of the Bank's experiments and proofs of concept.
- **Design notes:** these would explain the Bank and HM Treasury's emerging thinking on digital pound technology and policy topics.
- **Forum minutes:** these include minutes of, and materials discussed at, meetings of the stakeholder engagement groups.

These publications will ensure expert input is accounted for in the eventual digital pound blueprint. They will not, however, represent final decisions on the design of a digital pound.

National conversation on the future of money

The journey towards issuing any digital pound must involve a conversation about the future of money. Technology evolves rapidly, and exciting payments innovations in the private sector are changing money and the way it is used. Last year, in his [Mansion House speech](#), the Chancellor highlighted this as he launched the independent [Future of Payments Review](#)

2023 led by Joe Garner to help deliver the next generation of world-class retail payments in the UK. The exploration of a digital pound is just one part of our wider work on innovation to ensure the UK remains at the forefront of payments technology.

Public trust is essential to this process. The Bank and HM Treasury will embark on a programme of engagement with the public and businesses during the design phase to raise awareness of this shared work, and, more importantly, ensure that all voices are listened to, including understanding the concerns, and perceived risks and opportunities of new forms of digital money. The feedback obtained will help to shape the design of a digital pound and inform the decision of whether to introduce it.

Assessment

As set out above, the design phase will conclude with a decision on whether to proceed to the build phase of the digital pound project. The build phase would involve constructing the core digital pound technology. As such, it would represent a significant infrastructure project.

That decision must therefore be informed by an assessment of the costs and benefits that building and running a digital pound would entail. The Bank and HM Treasury will assess not only the financial costs of developing and maintaining a digital pound, but also any wider economic and societal opportunities and risks. The assessment will be informed by as strong a base of evidence as can be captured. It will be forward-looking, recognising that a digital pound could only be introduced into a future payments landscape, rather than the status quo. It will therefore be essential to consider how the UK economy and financial system might evolve in the absence of a digital pound.

Conclusion

The decision of whether to build a digital pound will be made around the middle of the decade at the earliest, as the design phase draws to a close. That decision will draw on extensive engagement with stakeholders across all of society throughout the design phase, as part of the development of the digital pound's blueprint, the national conversation on the future of money and Parliamentary scrutiny of the Bank and HM Treasury's design work.

Further work over the coming years during the design phase will explore the design and feasibility of a digital pound. This preparatory work, which is being undertaken in collaboration with the private sector, is critical for the Bank and HM Treasury to understand and prepare for future changes in the payments landscape, and will bring benefits regardless of the decision to build a digital pound. This work will help to ensure the UK remains competitively placed to harness the benefits of future innovation in payments. It will foster an environment supportive of future payment methods that are even more accessible and efficient than the current payments landscape.

The Government has committed to introducing primary legislation before launching a digital pound. Commitments to prevent the Government and the Bank from accessing personal data through the Bank's core infrastructure, and not to pursue government or central bank-initiated programmable digital pounds, would be enshrined in that primary legislation. There would be further public consultation on a digital pound prior to the introduction of primary legislation by the Government.

A digital pound would enhance user choice by complementing, not replacing, cash, providing users with an additional means of making payments in digital form. A digital pound would enhance user convenience by providing a platform that can support the private sector in offering innovative payments functionalities in an increasingly digitalised world, including those that cannot be predicted today.

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1. UK Finance (2023) – [UK Payment Markets Summary](#).
 2. See for example the Libra White Paper and related [Diem technical papers](#).
 3. [Update on plans for the regulation of fiat-backed stablecoins](#) (October 2023).
 4. The original online questionnaire had omitted one consultation question, so a second online questionnaire was subsequently set up to capture responses to this. The figures discussed therefore combine responses to the two online questionnaires.
 5. For applications of NLP techniques, see [Machine learning the news for better macroeconomic forecasting – Bank Underground](#) (2020) and [Open letters: Laying bare linguistic patterns in PRA messages using machine learning – Bank Underground](#) (2018).
 6. The UK's AML and CFT Regimes include the [Money Laundering, Terrorist Financing and Transfer of Funds \(Information on the Payer\) Regulations 2017](#), and the [Funds Transfer Regulation 2015](#).
 7. The Trust Framework creates a set of rules and standards to facilitate common recognition and interoperability of certified digital identities. This allows an individual to bind personal information to their digital identity and share this information as needed. The system allows for information to be established with varying levels of confidence. These levels of confidence are stipulated by a combination of the number of pieces of identity evidence, the strength and validity of the evidence, their activity history, and identity fraud.
 8. Free access to cash on high streets where there is a cluster of five or more retailers, and that do not have access to a free-to-use ATM or a Post Office counter within one kilometre ([LINK](#)).
 9. The review also contains further recommendations designed to improve the consumer experience of digital payments, exploit the benefits of Open Banking and improve regulatory alignment.
 10. An alias service manages the range of different identifiers (eg phone number, a primary account number (PAN), account number and sort code) that can be used to route transactions between users. Aliases could be used to allow wallets to be compatible and interoperable with other payment infrastructure eg a long 'card number' for payments at the point-of-sale or a sort code and account number for account-to-account payments. See the Bank's [Technology Working Paper](#) and the [Technology Working Paper response](#).
 11. Web3 is a broad term that refers to the next wave of digitisation of social and economic interaction. Technologies such as Artificial Intelligence and Distributed Ledger Technology could bring new economic activity in three-dimensional (3D) immersive and collaborative digital worlds like the Metaverse, where users can build virtual objects and interact virtually.
 12. An open call for input was published to ensure this working group is represented by a diverse group of individuals and organisations. See [Digital pound working groups](#).
 13. Experiments on API were carried out over the past year by the London Centre of the BIS Innovation Hub in collaboration with the private sector under [Project Rosalind](#).

