INSTITUTE *of* INTERNATIONAL FINANCE

# Digital pound: Summary of responses to the Bank of England and HM Treasury joint consultation

## IIF Staff Note

February 29, 2024

## 1 Executive Summary

This staff note summarizes the responses of the Bank of England (**Bank**) and United Kingdom (**UK**) Treasury (together, the **UK authorities**) to their consultation on a digital pound, the UK's central bank digital currency (**CBDC**) project. These are set out in a response to their joint consultation paper on a digital pound, and a response to the Bank's technology working paper, both released on January 25. In the newly released papers, the authorities summarize the submissions they received, respond to some of the points made, and set out next steps in the digital pound project.

This note additionally compares the responses to key points advocated by the IIF in its own response to the consultations in June 2023. Some of the points of expected ongoing concern will be around the level of holding limits (which we think are too high) and how they will be enforced, consistently with the UK authorities' commitment to user privacy, the costs and liabilities that may be imposed by the project on banks and other payment interface providers (**PIPs**), the potential for the Bank to unilaterally change key parameters around the attractiveness of the digital pound such as whether it will pay interest on wallet balances, and the potential complexity of the project if point of sale payments are in scope early on.

## 2 Key issues and outcomes

The UK authorities received over 51,000 responses to their joint consultation paper on a digital pound, the vast majority of which were from individual submitters. This indicates the consultation caught the attention of the general public as well as financial and technology sectors.

For the most part, individual responses were concerned about the role of Parliament in introducing a digital pound, the potential for a digital pound to lead to government surveillance of citizens' spending, and the potential for programmable payments to lead to government control of the same. There was also broad concern that a digital pound would replace cash.

**Comment:** These themes were also addressed in the IIF response on June 30, 2023. The IIF advocated that a change to remuneration of a digital pound may require the agreement of Government, which would trigger Parliamentary oversight. The IIF additionally raised the question how privacy vis-à-vis the central bank was to be squared with enforcement of holding limits. While agreeing that programmability of payments was desirable, the IIF also cautioned against the digital pound itself being programmable and against its issuance in the form of time-limited government vouchers. Another key theme was the vexed issue of holding limits, discussed in detail below.

## 2.1 Privacy

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.

In response, the UK authorities state that privacy would be a "core design feature" of a digital pound, and state that the central bank will not have access to users' personal information. Privacy objectives will be embedded in the legislation for the digital pound; the previous position indicated that the existing privacy regime would suffice. The digital pound won't be anonymous, however, so that law enforcement will have access to users' personal information in limited circumstances where there is a fair and lawful basis.

Some respondents raised concerns that privacy-enhancing technologies (**PETs**), on which the UK authorities place a lot of credence, are still immature. The Bank says it will conduct experiments to understand the benefits and trade-offs of both well-established and emerging types of PETs.

There was broad support for tiered wallets, which would allow PIPs to offer less stringent identity requirements for low value digital pound holdings and transactions. In their response, the Bank and HM Treasury commit 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.

**Comment:** The UK authorities seem to have felt obliged to give strong reassurances to the public about privacy, as many individuals' responses reflect a strong mistrust of the authorities' motives in putting forward a digital pound. Having said that, banks and other payment interface providers (PIPs) will be keen to ensure that restrictions pertaining to transaction data are not further tightened, relative to the protections in the UK General Data Protection Regulation.

Surprisingly, the paper does not address the critical issue of how individual holding limits can be enforced across multiple digital pound wallets without the Bank collecting personal information. One possibility is that UK authorities envisage that the private sector will be tasked with this potentially onerous role. This would be at odds with the approach to the digital euro, where it is envisaged this would be a function of the central banks.[1] It is important that the authorities' intentions on this key design feature of the digital pound scheme be made transparent, as there are very significant potential cost and liability implications, including for PIPs.

The paper is also silent on the issue of the risk of the opening of multiple low-doc wallets exceeding anti-money laundering (AML) risk appetites on the part of financial institutions and UK

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[1] See Article 35(8) of the digital euro proposal, discussed in the [IIF staff assessment of digital euro proposal]() (September 2023).

authorities. It is possible, again, that the authorities believe that looking across multiple wallets in real time should be a job delegated to the private sector. This remains unclear in the paper.

Lastly, the paper says it is a “misconception” that the Bank would be able to link people’s identity to transaction data and that digital identification would enable government surveillance; however, there was no acknowledgment of the ease with which pseudonymous data can be re-identified, a point the IIF made in its own submission.

## 2.2 Programmability and the role of cash

The authorities have also moved to address citizens’ concerns about programmability by promising that legislation for a digital pound would guarantee that the Bank and the Government would not program users’ digital pounds. During the design phase, the authorities will also explore further technological safeguards against programmability initiated by the Bank or the Government. At the same time, stakeholder engagement will continue to understand which innovative functionality, including for programmable payments, PIPs and users might want. It’s also stated that PIPs could only program digital pound payments with user consent, and this would be subject to a robust regulatory framework.

The Government has also legislated to safeguard access to cash, with the aim of ensuring that it would remain available even if a digital pound were launched.

**Comment:** Any regime around programmable payments will need a strong consent management framework that enables fully informed consent on the part of users. Separately, safeguarding the role of cash may become expensive if declining cash transaction volumes reduce the revenue base of the cash-in-transit industry.

## 2.3 Role of Parliament

The response paper repeats the May 2023 Government commitment to introducing primary legislation before launching a digital pound, clarifying that Parliament would vote on such legislation (including the design and regulatory framework) before any digital pound is launched, and there would be another public consultation before that.

**Comment:** There is no explicit commitment to enshrine the non-remunerated nature of the digital pound in primary legislation, nor that Government agreement would be needed if the Bank wished to pay remuneration on CBDC issuance in the future (for example, to make it more attractive). It may be undesirable if the Bank could unilaterally start paying interest on digital pounds without the agreement of Government.

## 2.4 Holding limits and access

Holding limits on CBDC balances are one important mitigant against the risk of bank deposit disintermediation in normal times (particularly in low or negative interest rate environments) and against run risk in stressed times, where the presence of CBDC wallets may exacerbate the risk of depositors moving funds from bank deposits to CBDC wallets. Disintermediation of bank deposits has cost consequences on bank funding and can be expected to reduce the supply and increase the price of credit to the real economy, while heightened bank run risk in stressed times clearly has financial stability implications.

### *2.4.1 Individual holding limits*

The consultation paper proposed setting individual holding limits of £10,000 – 20,000, at least during the introductory period. The response paper reports a wide range of views on limits. The majority of banks favored limits in the £3,000-£5,000 range, citing the risk of deposit outflows in steady state and in stressed scenarios. 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%.

The UK authorities conclude in light of the feedback received "and the absence of any materially new analysis," they 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. They also say that 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, and other factors.[2]

**Comment:** The IIF response supported a lower limit than those proposed, but said more analysis was needed to determine a precise figure, working back from a sensitivity analysis linking different holding limits to deposit disintermediation rates in normal and stressed scenarios. The IIF also suggested that holding limits should be permanent and not just a transitional measure. This remains the IIF's position. The IIF is encouraged that the authorities will undertake further study, and that it will "be informed by continued engagement with the financial services industry," but continues to advocate that such a sensitivity analysis should form a central part of such study.

Many may be puzzled by the reference to the absence of "any materially new analysis" and feel that this underplays the availability of cogent economic evidence pointing to the vulnerability of the financial system to high CBDC holding limits, and its power to support the real economy through lending. See for example recent papers including a Copenhagen Economics paper,[3] which lend support to cautionary conclusions reached by earlier analysis undertaken by bodies such as UK Finance.[4]

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[2] The other factors mentioned are: 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. Response paper, p. 51.

[3] The key findings from a recent study by Copenhagen Economics are that the digital euro can realistically lead to an outflow of up to 739 billion euro of bank deposits in the euro area. Furthermore, the increase in the cost of borrowing could have a lasting impact on investment decisions and economic activity, and lead to a permanent reduction in GDP on some scenarios of 0.12-0.34%. For a more detailed summary, see IIF staff note on the Digital Euro Rulebook and Copenhagen Economics paper (January 2024).

[4] See UK Finance, Retail UK CBDC on credit creation and financial stability (December 2022), which concluded that a large-scale displacement of deposit funding from the banking sector and the resultant increase in the banks' funding costs is likely to lead to a substantial contraction in the provision of credit and/or an increase in the cost of credit. Furthermore, stress vulnerability of the banking sector is likely to

It is also a bit surprising that the paper does not indicate serious interest in exploring limits on transactions or other means to exacerbate run risk in times of stress beyond holding limits. It is possible that this could be driven by the authorities' emphasis on attractiveness of the digital pound, presumably fearing that multiple limits might reduce uptake unduly, though this remains unclear. This is a gap that should be filled during the design phase, in the IIF's view.

### *2.4.2 Corporate holding limits*

The consultation paper suggested that corporates would also be limited in their holdings of digital pounds, but the limit would be significantly higher than for individuals considering corporates' larger balance sheets. There was also a suggestion that financial firms' access could be restricted to prevent wholesale financial activity being conducted in digital pounds.

Reportedly, there was agreement that corporate limits should be substantially higher than for individuals, although several respondents (including the IIF) felt it was difficult to assess the appropriate level without greater clarity on corporates' use cases for a digital pound. It is noted that some respondents thought that sole traders should be treated as individuals, with a very low or zero limit on corporate accounts. The majority also reportedly did not support restrictions by type of corporate, such as for wholesale uses.

The Bank will further explore what degree of access and level of holding limits would be most appropriate for corporates.

**Comment:** The individual holding limit for corporates will be an important parameter to get right, given the weight of corporate balances in overall deposit volumes, overall bank funding composition, and the risk of rapid flight. Corporate rate sensitivity is also high, so that negative or zero bank deposit rates could exacerbate disintermediation and flight risk. The issue of holding limits is so important that, in our view, the continued involvement of the UK Treasury is desirable.

### *2.4.3 Non-resident holdings*

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

The response paper indicates that most respondents thought non-residents should access a digital pound on the same basis as UK residents, but that some respondents raised concerns about the macro-economic implications of non-resident access.

In light of respondents' feedback, the UK authorities are minded to support non-UK residents' access to a digital pound on the same basis as UK residents. Further work will be undertaken on whether, and to what extent, non-resident corporates might have access to a digital pound.

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increase materially, due to greater reliance on wholesale funding and lower stability of deposit funding. Specifically, under scenario 2 of the analysis, lending volume for an individual illustrative credit institution declines by circa 8% and lending rates increase by circa 70-110bps, before non-bank sector response.

**Comment:** The IIF had indicated it may be prudent to initially provide access to digital pounds only to UK residents (potentially also including temporary visitors). The topic of non-resident corporate access will continue to be of importance, given potentially very large balances.

## 2.5 Platform model and public-private partnership

The consultation asked about roles and responsibilities of private sector digital wallets, and whether consultees agreed that digital wallet providers should not hold end-users' funds on balance sheet.

According to the response paper, most respondents agreed that the Bank should provide the core infrastructure and that PIPs should not hold end-users' funds directly (the so-called platform model). There was strong emphasis on the need for clear and fair regulation of PIPs to ensure a level playing field, and the principle of "same risk, same regulatory outcome" needing to be applied to all intermediaries in a platform system, including new entrants.

The paper acknowledged concerns the IIF and its members have voiced, that PIPs might struggle to identify commercially viable business models.

In response, the authorities confirm their view that the platform model continues to serve best the objectives of a digital pound, but they also say that the Bank anticipates the model will evolve and adapt over the course of the design phase. They will also look to make progress on developing the regulatory framework for PIPs, prioritizing understanding the costs and revenues for PIPs and the viability of their business models to support participation in a digital pound ecosystem.

The consultation paper contained six design principles, and the IIF among others advocated for inclusion of **interoperability** with other means of payment among them. This has been reflected in the final list of seven principles, which also newly mention scalability and attractiveness.[5]

The UK authorities think that the design of a digital pound proposed in the consultation paper remains appropriate to deliver their public policy objectives. They state that transparency around the work and engagement with a diverse group of stakeholders will be more important than ever in the design phase.

**Comment**: It is heartening to see concerns the IIF has voiced about business model viability and the need for a regulatory level playing field based on the "same risk, same regulatory outcome" principle acknowledged, but more detail will need to be provided during the design phase to satisfy concerns on these points. It is also encouraging to see interoperability added to the design principles, as the IIF advocated, and a continuing emphasis on stakeholder engagement.

[5] The principles are: Reliable and secure; User privacy and control; Supports innovation; Interoperable; Adaptable and scalable; Inclusive and attractive; and Energy efficient.

# 3 Responses to other consultation questions

## 3.1 Future payments landscape

The paper discussed evolving payment trends, highlighting both opportunities and risks. Respondents urged for clearer digital pound use cases, with opinions varying on its necessity given the efficiency of current retail payments. Fintechs highlighted micropayments, while tech firms and consultancies pointed out blockchain benefits. Some banking industry responses suggested that private sector innovations like tokenized deposits could meet the digital pound's goals. Additionally, potential applications for a wholesale digital pound were proposed.

In the response, there is helpful acknowledgement that the future success of a digital pound would depend on close collaboration with the private sector. In recent months, the Bank and UK Treasury have refreshed the format and memberships of the CBDC Engagement and Technology forums. They have also launched a series of industry working groups to test use cases and potential design functionalities. The first two of these groups will focus on **retailer needs** and **offline payments**. The Bank will work closely with industry on ideas for **tokenized deposits**.

Lastly, the authorities suggest they may focus on the renewed real-time gross settlement system (RTGS), rather than putting primary focus on a new wholesale CBDC platform.

**Comment:** The IIF recommended that authorities thoroughly examine the UK market's challenges and opportunities, including current initiatives already underway that address identified issues, and pinpoint remaining problems. The IIF urged deeper examination of funding and investment for competing payment projects to ensure there are sufficient benefits of pursuing such competing project versus the costs of doing so. Authorities must keep these questions clearly in mind as they move forward.

## 3.2 Which payments will be in scope

The response states that there was “broad agreement” with the consultation proposal to prioritize in-store, online and person-to-person payments, but that 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.

Innovative functionality, including smart contracts, will continue to be explored. The Bank’s current position is that smart contracts would not be hosted on the core ledger.

**Comment:** The IIF recommended against starting with point-of-sale payments given their complexity and dependencies. The setting up of an industry working group focused on retailer needs is presumably an attempt to grapple with these questions early.

## 3.3 Financial inclusion and equality

The consultation paper asked about design choices that should be considered in order to support financial inclusion, and also about the impacts on those who share protected characteristics. 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.

**Comment:** The IIF's submission said that offline capability would appear essential for resilience reasons, and devices offering offline capability (such as smartcards) may help a digital pound to be more inclusive. Authorities will explore **offline** capabilities further through a specific working group, as well as functionality through physical card form factors and in areas of low connectivity. The IIF continues to be skeptical that a retail CBDC, on its own, will improve financial inclusion as the primary causes of financial exclusion are not addressed by most CBDC designs under discussion today.

# 4 Technology working paper

As mentioned, the Bank also published a technology working paper for consultation at the same time as the main Bank – UK Treasury joint consultation paper, and a separate response paper has been published on technology issues.

The technology working paper mainly discusses processes for resolving technology issues during the design phase. Some of the more notable points to come out of the paper include:

- Confirmation of a 99.999% uptime resilience target for the digital pound infrastructure, subject to further consideration. The IIF had commented that a minimum of 99.95% also mentioned in the consultation paper was not very high for an instrument that is intended to be cash-like.

- Broad support for the proposition that analytics should take place on a separate platform, away from the core digital pound system.

- Almost all respondents agreed that both well-known and disposable aliases would be needed. The Bank is exploring technologies that could potentially distribute the alias service functionality across a digital pound ecosystem.

- The Bank will conduct further exploration of API functionality, including assessing additional features mentioned in responses. This might include developing a sandbox, provided by the Bank, which would enable technologists and stakeholders to test the APIs and develop innovative use cases.

- The Bank will also work with stakeholders to assess the viability and utility of additional form factors beyond smartphones, smart cards, and point of sale devices, such as QR and SMS.

# 5 Next steps

The next steps laid out in the response papers consist of 4 broad workstreams collectively forming the work agenda for the design phase:

- **Blueprint:** a comprehensive description of a digital pound architecture, should a decision be taken to proceed to build it.

- **Experimentation and proofs of concept:** experiments and proofs of concept, which will both inform the proposals the Bank will set out in the blueprint and enhance knowledge and capabilities, whether or not a decision is taken to build a digital pound. The Bank will continue to partner with private firms to conduct experiments and proofs of concept.

- **National conversation**: a program of engagement by HM Treasury and the Bank 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. Significant detail is given of this assessment in the paper:

  > *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.*[6]

Beyond the design phase, projected to last into 2025/26, a key decision point (to be taken in 2025 at the earliest) would be the decision to move into the build phase, given the considerable financial investment required (see project timeline in **Annex**). There would be a further decision point after the build phase to actually launch the digital pound.

**Comment:** The design phase will focus on further development and exploration. There is a welcome commitment to engage widely and frequently with stakeholders to ensure that their perspectives and expertise are reflected in the digital pound design as the phase progresses.

## 6 Conclusion

The publication of the response papers is an important waypoint in the digital pound project, which is gradually increasing momentum. The IIF and its members will look to the UK authorities, and the various working groups, to clarify certain crucial design parameters, including around holding limits and the deployment of PETs.

The cost-benefit analysis that is promised in the response paper is very welcome, but needs to be informed by clear-eyed sensitivity analysis to ensure that financial stability and the financial sector's ability to finance the real economy will not be weakened by the launch of any digital pound, in normal and in stressed times, and in times of near-zero interest rates as well as more normal circumstances. Any consideration of how the UK economy and financial system might evolve in the absence of a digital pound must avoid speculation and be rooted in evidence on existing trends and developments.

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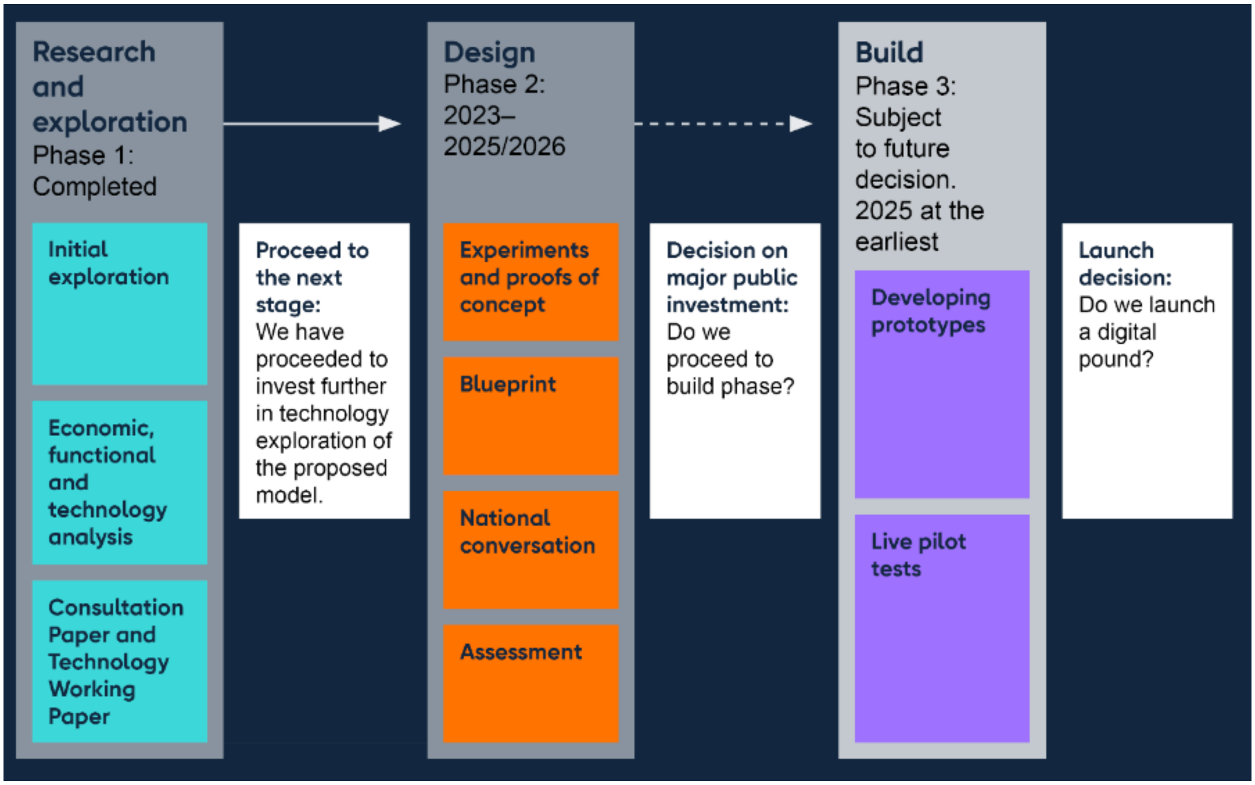
[6] Response paper, p. 67.

# Annex

## Digital pound project timeline




*Source: Bank of England, UK Treasury*