The digital pound: a CBDC for the UK

Katie Fortune
Context: trends in payments

Use of cash falling rapidly

Use of new forms of digital money rising

Sources: UK Finance and CoinGecko
Central Bank Digital Currency (CBDC)

Major publications:
Bank/HMT Consultation Paper and Bank Technology Working Paper
The digital pound: a CBDC for the UK

If current trends in retail payments continue, there is likely to be a need for a digital pound in the future. It is too early to decide whether to introduce one, but we will step up our preparation.

Consultation Paper

A. Rationale

B. High level design
   1. The platform model and public-private partnership
   2. Data protection and privacy
   3. User experience for households and businesses
Two primary motivations

To ensure the role of central bank money as an anchor for confidence in our monetary system

Promoting innovation, choice, and efficiency

Other motivations: payments resilience, improving cross-border payments, and maximising financial inclusion
Proposed design: the ‘platform model’

- **Central bank core ledger**
  Fast, secure, and resilient platform providing payments functionality.

- **API layer**
  Allows regulated intermediaries to connect to the core ledger.

- **Intermediaries**
  Firms providing user-friendly wallet interfaces and/or value-added services.

- **Users**
  Register with intermediaries to access the digital pound.
Proposed design: privacy

A digital pound would be private but not anonymous

Neither the Bank nor the Government would have access to digital pound users’ personal data

Users would be able to make choices about the way their data is used

Neither the Bank nor the Government would program a digital pound or restrict how it was spent
Proposed design: user experience

Support everyday payments (in-store, online, person-to-person)

Easy to move between digital pounds and other types of money

The digital pound would not pay interest

There would be a limit on how much you could hold

Non-UK residents could use digital pounds too
Technology design considerations

Six foundational considerations that will likely have significant impact on CBDC design choices

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<td>Protecting users’ personal data while allowing PIPs and ESIPs to comply with regulations</td>
<td>Securing the CBDC system against new and existing cyber risks</td>
<td>Protecting critical services and minimising disruption to achieve 24/7 availability</td>
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<td>High performance targets include c.30,000 tps, and confirmation and settlement under one second</td>
<td>Using open and composable components to allow PIPs and ESIPs to seamlessly implement new functionality</td>
<td>Energy efficient and minimise any impact on the environment</td>
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What next for the digital pound
The digital pound roadmap

Phase 1: 2022
Research and exploration
- Initial exploration
- Economic, functional and technology analysis
- Consultation Paper and Technology Working Paper

Phase 2: Estimated 2023-2025/2026
Design
- Technical development work and proof of concepts on the basis of the proposed model
- Developing architecture and the digital pound platform technical design

Phase 3: 2025 at the earliest
Build
- Developing prototypes
- Live pilot tests
Use cases and the CBDC ecosystem

Central Bank

Public policy objectives

Intermediaries

Ability to develop and market propositions

Consumers & businesses

End use cases for CBDC
Project Rosalind: API prototypes for retail CBDC

The project demonstrated that a well-designed API layer could:

- **Facilitate retail CBDC payments**
  Prototyped 33 API functionalities in **six** categories

- **Achieve interoperability**
  Application- and ledger-agnostic

- **Support innovation**
  Explored **30+** retail CBDC use cases

Enable public-private collaboration and ecosystem building for retail CBDC system

- **Collaborated with 30+** teams from the public and private sector globally

- **Engaged with 300+** individuals from the central banking community, academia and the industry