Bank of England

HM Treasury

The digital pound: a CBDC for the UK

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The Digital Pound: a UK CBDC

A new form of money for households and businesses?

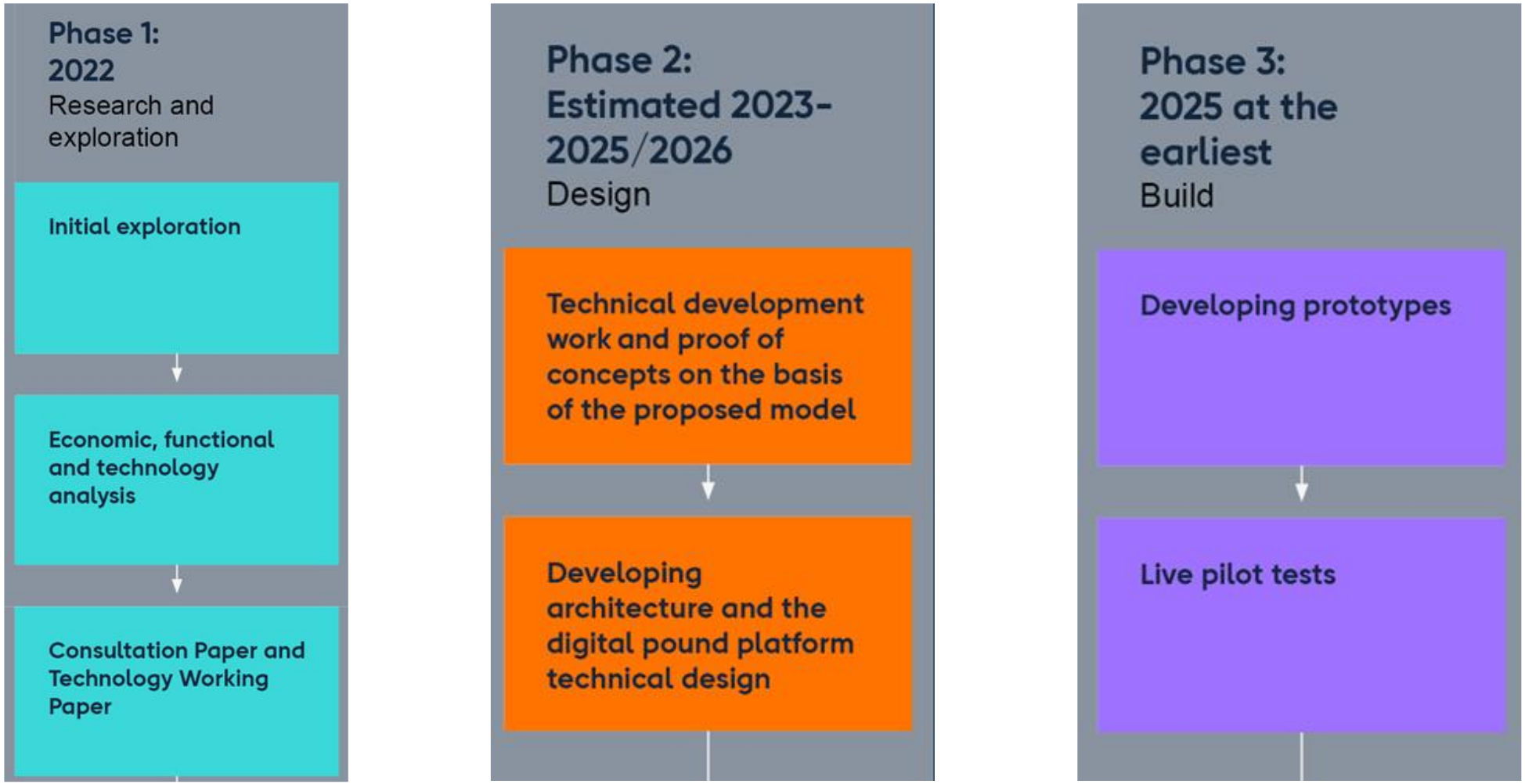
A joint publication by Bank of England and HM Treasury

- Describes the public policy motivations for a CBDC in the UK
- Consults on a proposed design
- Accompanying Technology Working Paper by the Bank of England

Headline: the digital pound is likely to be needed in the future

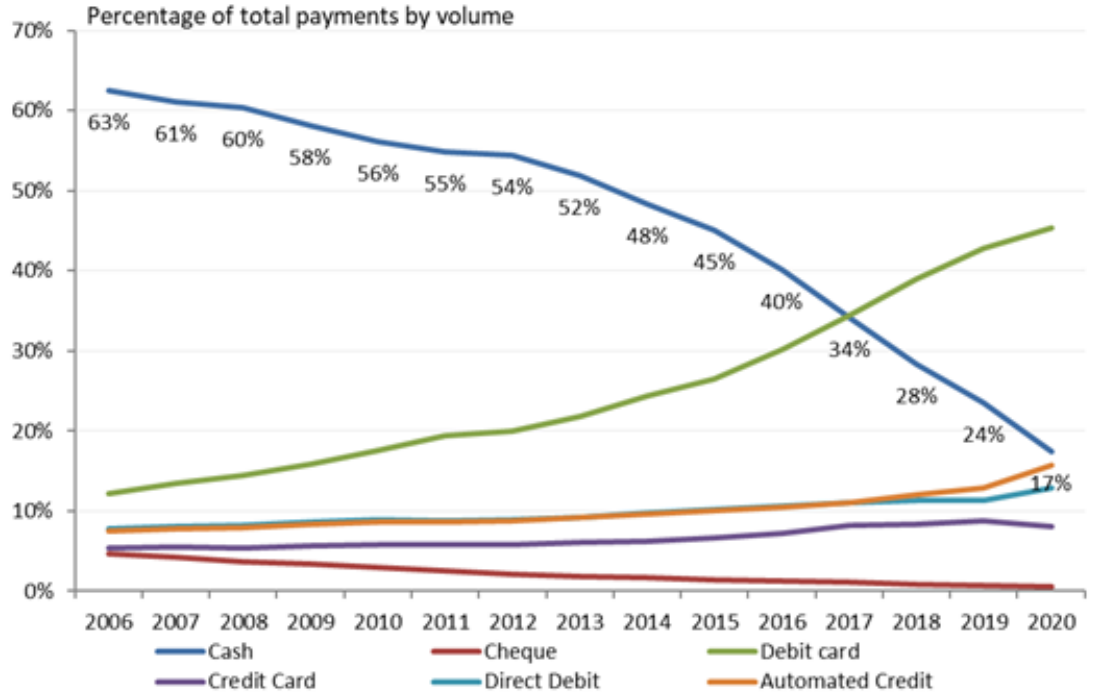
- No commitment to implement, but clear step up in work into a design phase

The digital pound roadmap

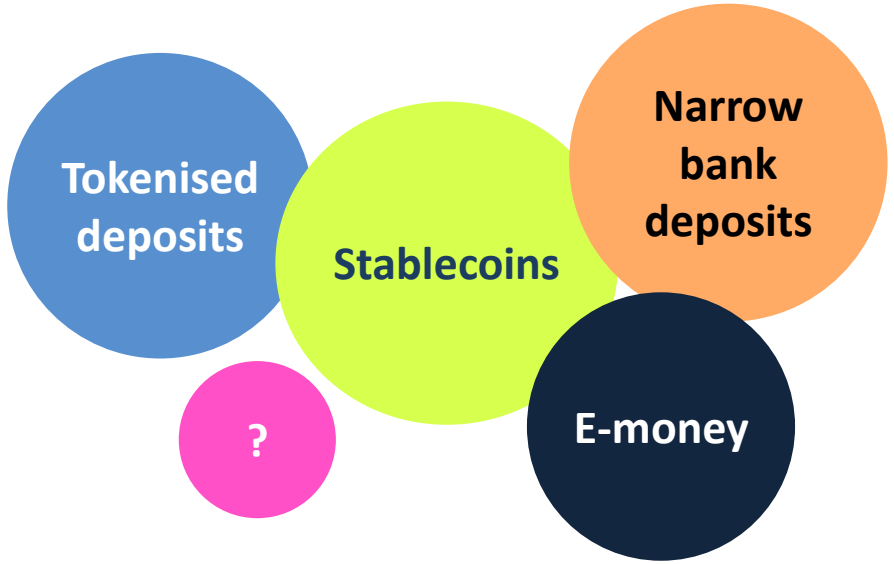


Trends in payments drive the likely need for a digital pound

Decline in cash use



Emergence of new forms of private money



Two primary motivations

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

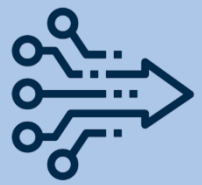
Promoting innovation, choice, and efficiency

Payments resilience, improving cross-border payments, and maximising financial inclusion

The digital pound would improve the availability and usefulness of central bank money, maintaining trust in money

Central bank money is the <u>anchor of confidence</u> in our monetary system.

Today, physical cash is the only form of central bank money available to the public



Cash supports <u>uniformity of money</u>.

This might be threatened by a combination of lower cash use and the emergence of new forms of private digital money

Preventing risks to uniformity underpins the case for the digital pound

Infrastructure to support a digital world

Innovation

The digital pound model is a flexible core platform for the private sector to innovate

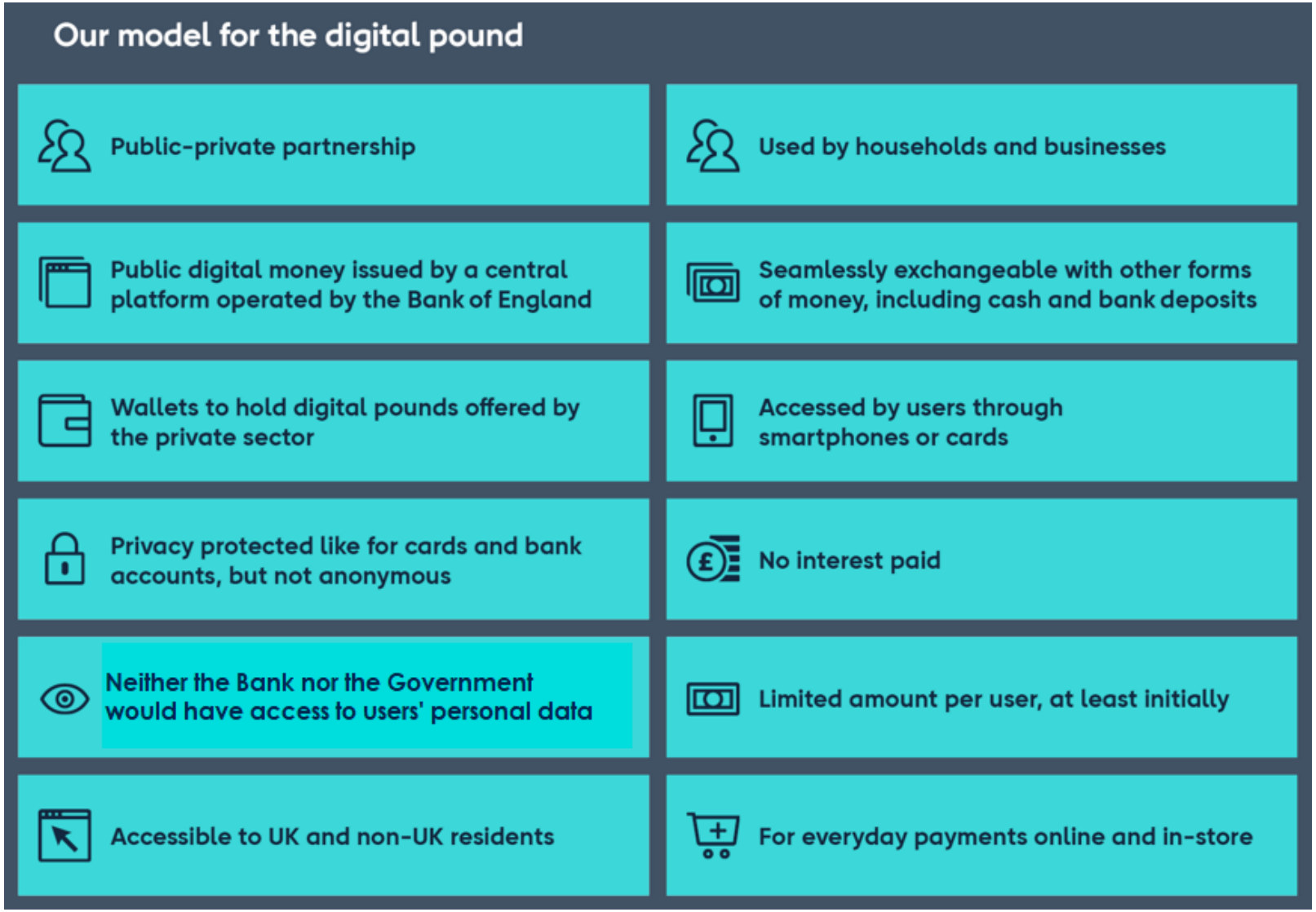
Choice

Innovation leads to wider participation in markets and to improvements in convenience, speed, cost, and choice

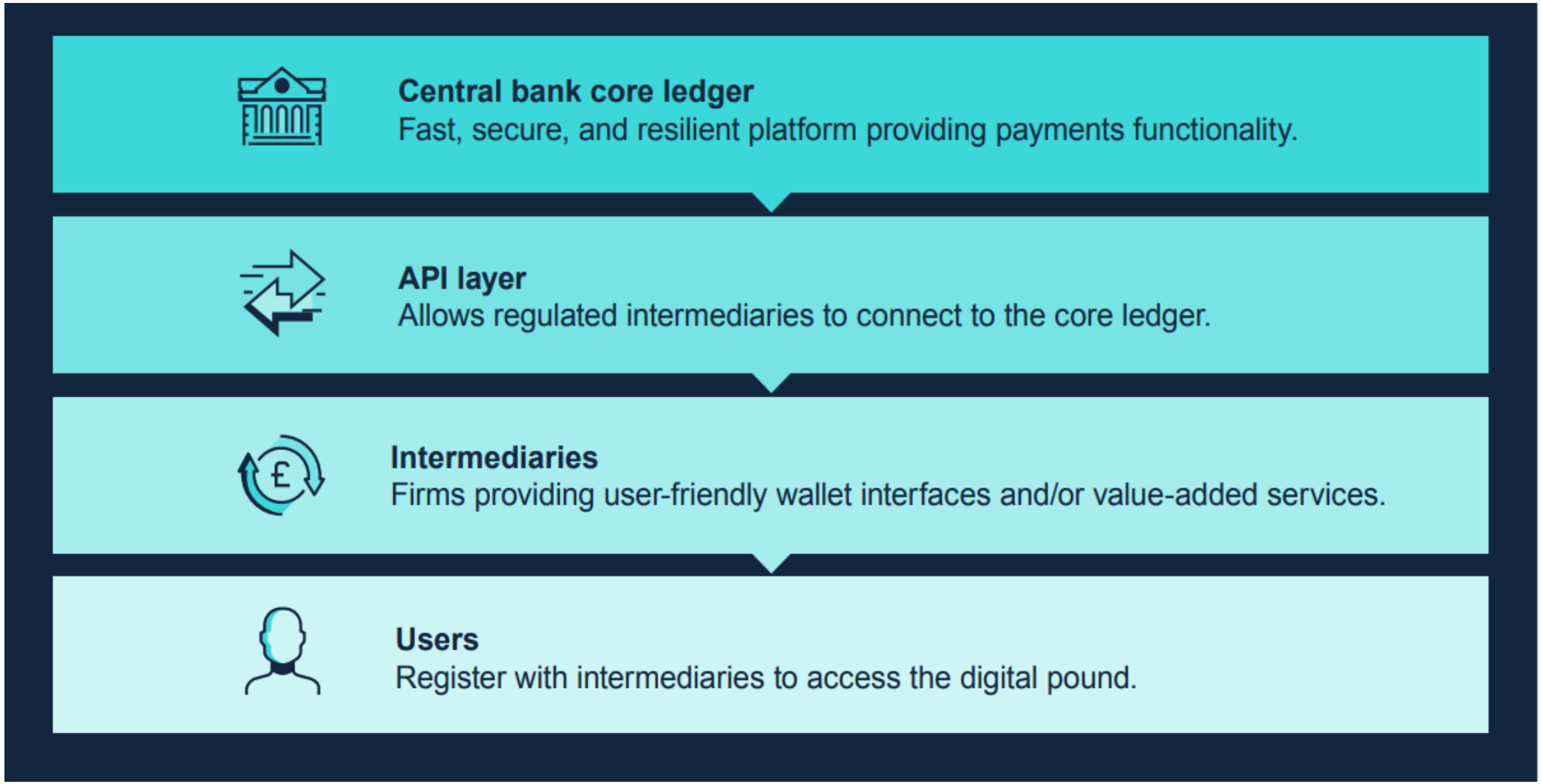
Efficiency

While UK payments have improved, there is likely further scope for innovation to further reduce payment costs

The CP sets out a high-level design for a digital pound



We propose to deliver the digital pound through the 'platform model'



The platform model: role of the Bank of England

Public sector infrastructure to support private sector innovation

- Users' digital pounds would be held on the 'core ledger',
- Private sector would be responsible for interacting directly with end users.
- Operationally resilient
- Extensible and flexible
- Interoperable

The platform model: role of intermediaries

Private sector innovation would play a key role in the digital pound system

- The private sector would provide pass-through wallets
- Wallets would not hold digital pounds on their balance sheet
- There would be opportunities for businesses who do not wish to process payments
- Non-financial firms could be involved
- There would be a robust legal and regulatory framework

Digital pound features: user interaction

Using smartphones or cards

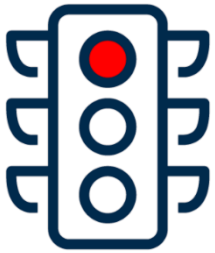
In-store, online and person-to-person

Easy to move between digital pounds and other types of money

Digital pound features: interest and limits

The digital pound would not pay interest

- Intended to be a means of payment, not intended as a savings product



There would be a limit on how much you could hold

- A limit of £10,000 to £20,000 is proposed

Non-UK residents could use digital pounds too

- When visiting the UK (e.g., as tourists), and when outside the UK for payments with either a UK or non-UK resident

Digital pound features: 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

Digital pound features : Financial inclusion

It is not a main motivation for introducing the digital pound…

…but it could be an additional payment option for some financially excluded groups

Some relevant factors include:

The extent to which familiar devices can be used and whether there is a role for in-person services (e.g. Post Office)

Cost and simplicity to use

Ease of understanding and trust

Technology Working Paper

Purpose of the Technology Working Paper

Builds on the **policy objectives and functional requirements** outlined in the Consultation Paper

Outlines the **technology design considerations** and an **illustrative conceptual model** for a digital pound

Aimed at getting **feedback from stakeholders and technology experts**

Technology design considerations

1. Privacy

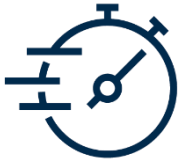
Protecting personal data while facilitating regulatory compliance

2. Security

Securing against new and existing cyber risks

3. Resilience

Protecting critical services and minimising disruption to achieve 24/7 availability



4. Performance

High performance targets include c.30,000 tps

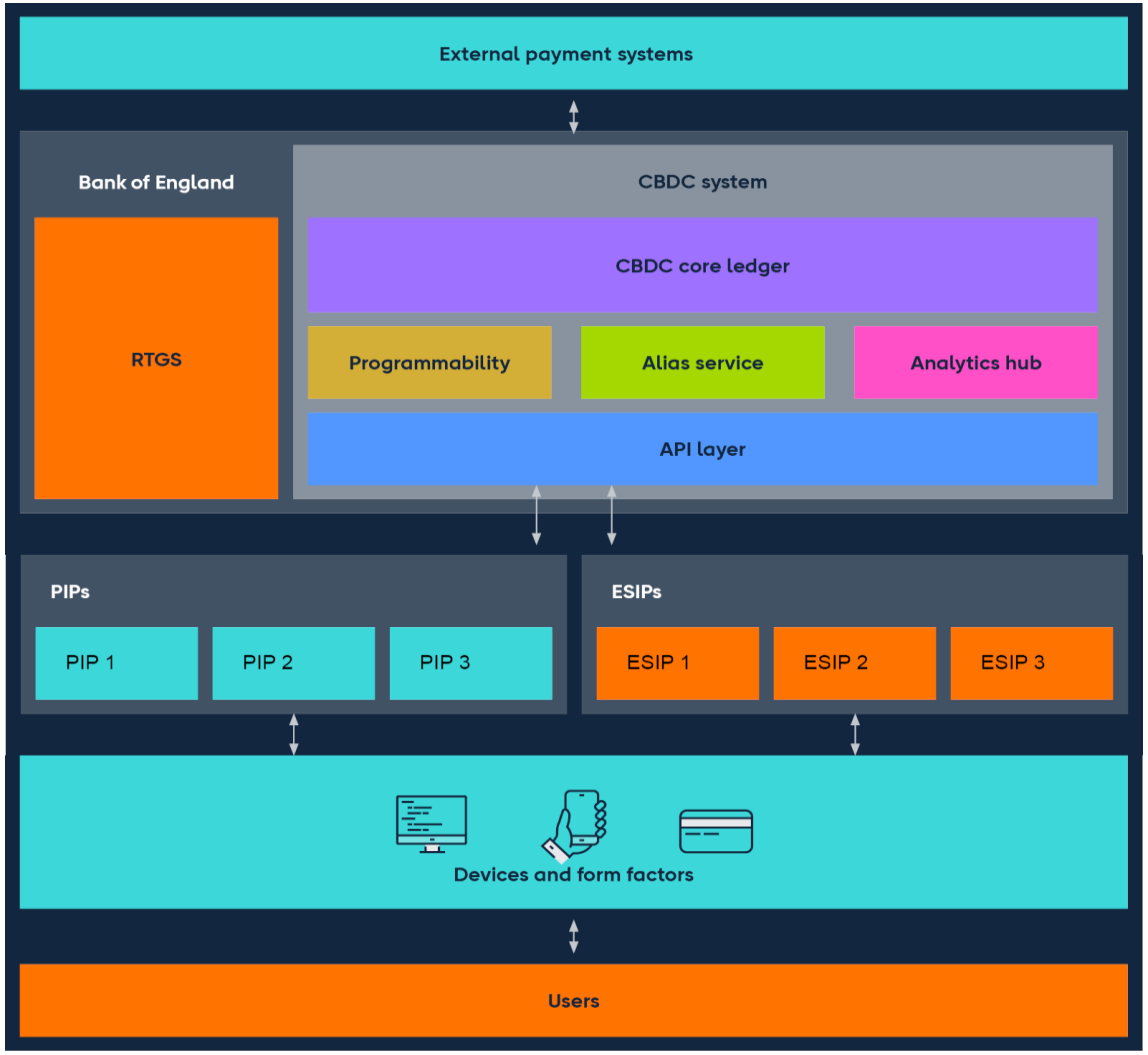
5. Extensibility

Ability to expand and enhance functionality without impacting existing services

6. Energy usage

Energy efficient and minimise any impact on the environment

The illustrative conceptual model



The core ledger and API layer

Core ledger

- Records digital pound issuance and movement
- Provides minimum necessary functionality for a digital pound
- Choice of core ledger technology will be determined by its ability to meet the technical requirements for a digital pound

API layer

- Allows PIPs and ESIPs to access the core ledger functionality
- Provides a single entry point for API calls
- Agnostic to core ledger technology

Other components

Analytics

Analysing system status and performance

Devices and payments

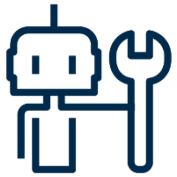
Includes smart devices, smart cards, e-commerce websites and applications, and PoS devices

Alias service

Supports interoperability. May include well-known and disposable aliases

Offline payments

Could support resilience but could also introduce complexities



Programmability

No central bank-initiated programmable functions. PIPs could, with user consent, implement programmability

Interoperability

If feasible, could be enabled using existing payment infrastructure, eg FPS and LINK