



## Call for interest: Synchronised settlement in central bank money

The call for interest closed on Friday 05 October 2018. If you would like to find out more about the Bank's work on synchronisation, please contact us via [RTGSEngagement@bankofengland.co.uk](mailto:RTGSEngagement@bankofengland.co.uk)

### Background

The Bank of England's Real-Time Gross Settlement (RTGS) service lies at the heart of delivering the Bank's mission for monetary and financial stability. RTGS is used to provide safe final settlement in central bank money for over £600 billion of transactions a day, spanning the vast majority of payments in the UK economy — from salaries to company invoices, from car purchases to coffee sales, from pensions to investment flows.

The way payments are made has changed dramatically in recent years, reflecting changes in the needs of households and companies, changes in technology, and an evolving regulatory landscape. In order to better meet the needs of users in this changing payments environment, the Bank has established a multi-year programme to deliver a renewed RTGS service with a range of new features and enhanced capabilities.<sup>1</sup>

One of these new features for which we would like to explore demand is '**synchronisation**' - the ability to synchronise cash movements in RTGS with the movement of cash or assets in other systems. The Bank believes that this functionality could provide an opportunity to reduce cost and risk, improve efficiency, and support innovative new methods of settlement. We are now seeking to work with a small group of organisations to further explore the potential for this functionality.

### What is synchronisation?

At the heart of synchronisation is the concept of 'atomic settlement'. This means that the transfer of two assets is linked in such a way as to ensure that the transfer of one asset occurs *if and only if* the transfer of the other asset also occurs – that is, settlement is conditional. So the outcome of settlement is either both parties successfully exchanging those assets, or no transfer taking place.

Synchronisation could therefore involve the settlement in RTGS of a payment in sterling central bank money along with the transfer of another asset *at the same time*. The other asset could be:

- In the sterling RTGS service (Payment versus Payment);
- On another payments ledger, such as an RTGS service in another currency (Payment versus Payment); or
- On an external asset ledger (Delivery versus Payment).

Payments that involve multiple ledgers and payments supporting asset transfers are often costly, complex and slow. The longer a transaction takes to complete, the more settlement and price risk can arise. Synchronisation functionality could offer participants, service providers and end users the potential for a significant reduction in such risk as well as greater speed and efficiency.

### What could synchronisation be used for?

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<sup>1</sup> For more information, see <https://www.bankofengland.co.uk/payment-and-settlement/rtgs-renewal-programme>

During 2018 the Bank has engaged with financial institutions, infrastructures, trade bodies, policy makers and fintech firms on synchronisation.<sup>2</sup> The feedback received suggested that there could be demand and use cases for this functionality over the lifetime of the renewed RTGS service. These use cases could include:

- **Housing transactions:** The combination of new technology and access to RTGS via synchronisation has the potential to make the payment, land registration and stamp duty process involved in house purchases quicker and more efficient. House movers can find moving day a particular challenge, with parties often having to wait until late in the afternoon for confirmation that funds had been received. It is argued that these delays can cost consumers millions in additional fees to removal firms.<sup>3</sup>
- **Corporate transactions:** Corporate transactions can involve significant co-ordination efforts, and often funds are required to be positioned days in advance. Synchronisation might offer parties a reduction in some of the manual effort and liquidity cost involved, as well as reducing the risk profile of these transactions.
- **Cross-border payments:** A domestic payment can be executed in real time, but a cross-border transaction can take two or three days and costs on average 10 times more than a domestic payment.<sup>4</sup> There could be scope, working with other national RTGS services, to improve inter-bank cross-border payments by using synchronisation to achieve simultaneous settlement across currencies.

## How could it work?

We want to consider whether the renewed RTGS service should be built in a way which could support this settlement functionality. We are currently focussing on a model, in which the renewed RTGS service could have the functionality required for a trusted third party (the 'Synchronisation Operator') to connect and offer synchronisation services to the market, as illustrated in Figure 1. The Synchronisation Operator would have permissions to earmark<sup>5</sup> and order the transfer of funds between participating institutions' accounts in RTGS, but would not hold an account. The service could be used by multiple Synchronisation Operators, and, if implemented, the functionality designed would be neutral as to what asset transfer the fund movements were being synchronised with.

## The Bank's next stage of work

**What is the Bank looking to do?** We want to understand what demand there might be and to assess in more detail what the design implications of this settlement service will be for the renewed RTGS service. To do this, we want to work with a small group of organisations to help us think more closely about:

- How a Synchronisation Operator could connect to the renewed RTGS service;

<sup>2</sup> Including holding industry workshops, see <https://www.bankofengland.co.uk/-/media/boe/files/minutes/2018/synchronisation-workshop-feb-2018.pdf>

<sup>3</sup> 'Improving the home buying and selling process: Summary of responses to the Call for Evidence and government response' (Ministry of Housing, Communities & Local Government, April 2018)

<sup>4</sup> McKinsey & Company 'Global Payments 2016: Strong Fundamentals Despite Uncertain Times'

<sup>5</sup> It is anticipated that this would be a revocable, contractual earmark and that no interest or right over the relevant funds would be created.

- What functionality and capabilities the renewed RTGS service might need in order for third parties to offer innovative synchronisation services;
- What functionality a Synchronisation Operator might need in its own systems in order to deliver synchronisation services; and
- The Bank's policy with regards to how it expects this functionality to be used (and by which infrastructures).

**Who will the Bank engage with?** We are looking to engage with different types of firms – for example, a potential Synchronisation Operator or a potential user who can see the benefit in synchronising payments they make or facilitate. We hope that engaging with the Bank on this topic would also help organisations to think about how their own platforms or use cases could be adapted or developed to align with the emerging design for the renewed RTGS service.

**What level of engagement does the Bank require?** Interested parties can indicate their preferred level of engagement in this topic:

**Level 1:** We are asking all interested parties to complete a questionnaire (see below for details) which will feed in to the Bank's thinking on this work. Parties may also opt to receive email updates on this work.

**Level 2:** In addition to completing the questionnaire, we will invite some firms to discuss this topic in further detail with the Bank, via:

- **Introductory session** (2-3 hours, hosted at the Bank of England) – to share the themes coming out of the questionnaire responses and outline the plan for further work.
- **One-to-one sessions** (1-2 hours per session, in person or via teleconference) – to discuss individual firm's proposals in more detail. These sessions could focus on, for example, policy or architecture requirements, depending on mutual interests.
- **Round table wrap up** (2-3 hours, hosted at the Bank of England) – to share lessons learnt and gauge firms' interest in using the functionality synchronisation might offer.

We aim to undertake the majority of this work later this year, with dates to be confirmed. All arrangements are subject to change.

Parties should indicate on the questionnaire whether they are interested in engaging as a 'Level 2' firm. When so doing, interested parties should be aware of the following:

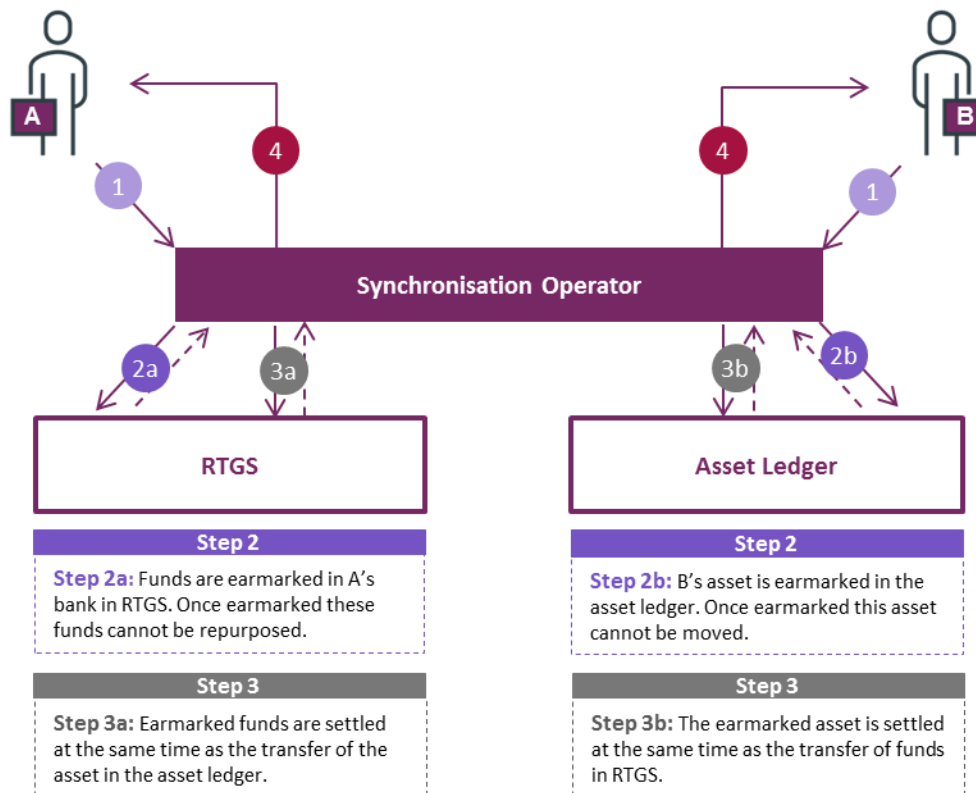
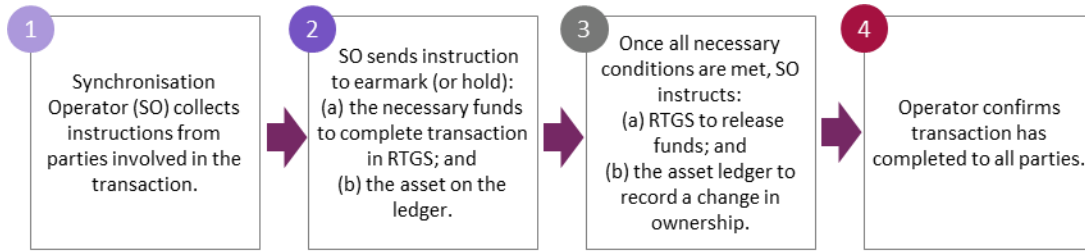
- Depending on the number and types of parties that express an interest in working with us, questionnaire responses may be used to determine which Level 2 firms the Bank engages with.
- The Bank may publish the names of Level 2 firms.
- The Bank expects to publish a summary of findings from this work in due course.
- No payment will be provided to any parties participating in this work.

**How do I take part?** The call for interest closed on Friday 05 October 2018. If you would like to find out more about the Bank's work on synchronisation, please contact us via

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Figure 1: How synchronisation could work





## Synchronisation call for interest - questionnaire

### Section A: Background

- Briefly describe your organisation

### Section B: Use cases

- Describe the use case(s) for synchronisation that you are interested in exploring with us. Please indicate proposed settlement type (PvP or DvP, domestic or cross border).
- Describe the steps involved in the current process and how you see this changing if synchronisation functionality could be used.
- Who would be the Synchronisation Operator in the case described? This may be your organisation, another known party, or a new third party (in this case - who would be responsible for developing this?).
- Please describe any business rules you envisage would be needed (e.g. what should happen in the event that one part of the synchronised transaction fails, or if a transaction is outstanding at the close of business).

### Section C: Costs and benefits

#### If possible, provide details of:

- Costs or risks associated with the current process.
- Any benefits that you think could be realised from using the synchronisation functionality (e.g. efficiency gains, cost savings, reduction in risks, etc.).
- Any costs or risks that you think may be involved in using synchronisation functionality.

### Section D: Synchronisation Operator details\*

#### \*Please only complete this section if you are interested in becoming a Synchronisation Operator

- If you could design the connection between your organisation and RTGS, what would it look like? We are particularly interested in (a) how you see the earmarking functionality working, (b) required messaging.
- What should the Bank do to make the synchronisation functionality attractive to service providers?

### Section E: Other

- Please provide any other relevant information including any questions you would like addressed during this process.