

Final Report of MMC Market Participants Discussion Group

The Wholesale Market Response to the Extended RTGS Outage Simulated in SIMEX16

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The Bank is very grateful to all those who contributed to this Report. This is helpful in setting out a potential way forward for the market to respond during a major operational disruption. The Report's recommendations show that the industry supports the SIMEX16 findings. In this respect, industry participants are encouraged to act upon the recommendations in this Report where necessary to minimise the impact on themselves and the market during any future payments disruption. Progress will be reviewed by the Cross Market Operational Resilience Group (CMORG) as owner of the SIMEX16 findings to which the MMC's Report contributed.

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Executive Summary

- Following the SIMEX16 exercise, a Market Participants Discussion Group of the Money Markets Committee (MMC) members was convened to discuss the wholesale market's response to a multi-day outage of the Bank of England's Real Time Gross Settlement (RTGS) system.
- The Group discussed the merits of re-routing wholesale CHAPS payments through Faster Payments (FPS) as an alternative payment pathway, and the associated impact on liquidity and collateral requirements in such a scenario. The group met three times between September and November 2017.
- The Group concluded that FPS could be a suitable vehicle for re-routing payments in an extended RTGS outage, and as a result encourages all market participants to have access to FPS (or some other appropriate alternative pathway); CHAPS Direct Participants are encouraged in particular to have direct access to FPS as an alternative pathway.
- All market participants would benefit from having direct or indirect access to an alternative pathway for payments, such as FPS, given that retaining the capability to make payments would seem to outweigh the likely costs. Nevertheless it was recognised that there were significant potential costs and other practical impediments. But without such access, where appropriate, to an alternative pathway for payments, some market participants and their clients may be disadvantaged in the event of an extended RTGS outage.
- Barriers to using FPS should be addressed as soon as is feasible: notably FPS direct participants should ensure they have internal operational capability to increase their FPS cap quickly if needed; furthermore FPS direct participants should establish an automated process for converting CHAPS payments into FPS format.
- The Group concluded that the best use of collateral in such a scenario was at the Bank of England to generate liquidity. Consequently the Group encourages the market as a whole to deliver more Level A collateral to the Bank, in order to facilitate liquidity creation in such an event.
- The Group agreed that FPS would be viable as a re-routing solution for a maximum of 5 days, but in all likelihood a shorter period than this.
- The Group agreed that that Bank should lead communications of the risk reduction benefits of an alternative pathway for payments, such as FPS, as a solution for re-routing wholesale payments. However it should also recognise the difficulties for those banks that are just CHAPS Direct Participants.
- Related best practice should be included in an update to the UK Money Markets Code in 2018.
- Throughout the discussions, the Group recognised that customer retail payments would usually be prioritised by banks over wholesale payments in an RTGS outage, subject to any over-riding financial stability considerations.
- The Group felt that it was difficult to be prescriptive about timing for the completion of its recommendations, but envisaged that these could be implemented by the time the renewal of the RTGS system had been completed.
- The Group was unable to make any definitive statement on charges and compensation. However the Group endorsed the principle that there should be no undue enrichment as a result of an RTGS outage. It was agreed that it would be helpful if the UK Money Market Code could include wording to reflect this current best practice principle.

1. Background

- SIMEX16 was a simulation exercise that focused on rehearsing the response of retail and wholesale market participants and the Authorities to a multiday outage of the Bank of England's Real Time Gross Settlement (RTGS) system. The exercise took place in November 2016 with 33 participant organisations.
- Key objectives of the exercise included:
 - 1) to rehearse the core cross-market committees and their interaction with other key authorities;
 - 2) provide participants an opportunity to test their contingency options;
 - 3) identify sector-wide issues to be addressed collectively;
 - 4) assess effectiveness of external communications with the industry and customers;
 - 5) identify areas for improvement / further exploration.
- Many banks were keen to explore the scope to re-route CHAPS payments via FPS in response to the exercise scenario.
- The major sponsor banks and their key indirect participants also identified potential changes to their liquidity requirement in the event of a prolonged RTGS outage.

Faster Payments

The Faster Payments Service (FPS) is used for payments that originate from online, mobile and telephone banking. Standing Orders are also processed via FPS. Some FPS Direct Participants offer file input to businesses. Payments are cleared in near-real time between FPS Direct Participants and their customers, but settled on a deferred net settlement basis between the Participants three times each business day.

Associated credit and liquidity risks have been eliminated through the use of 'cash prefunding'. Each Direct Participant holds funds in a 'cash collateral account' in RTGS to at least the value of the net sender cap in FPS. If a settling Direct Participant defaults, the cash set aside can be used to complete settlement.

There is a good degree of substitution between CHAPS and FPS payments as they are both push payments (also known as credit transfers).

- Access to FPS: Traditionally, the cost of direct access of FPS has been considered relatively high. However a range of recent initiatives has brought these costs down.
- Payments re-routing: FPS has consulted on increasing the scheme transaction limit from 250k to £20mn. CHAPS and FPS payments will both be based on ISO20022 messaging standards.

2. Money Markets Committee (MMC) Response

- i. The MMC agreed at their meeting on 25th September 2017 to establish a Discussion Group at which the wholesale markets' response could be developed. In particular the Group would focus on how FPS might be used as an alternative settlement system in the event of a prolonged RTGS outage, and on the impact on liquidity and collateral requirements.
- ii. The Group focussed on wholesale market (trading) activity not, for example, provision of payment services to corporate and retail customers.
- iii. Members of the Group are listed at the front of this report.
- iv. The Group met on three occasions between 12th September 2017 and 20th November 2017. This report is the outcome of those discussions.

3. The Group's Initial Discussions

- i. The Group was updated during the discussions on the wider work following the SIMEX16 exercise.
 - a. During the exercise the Bank had provided several billion in liquidity against 'Level A' Collateral to CREST, Bacs and FPS settlement members using a process that did not depend upon RTGS/MIRS¹ or SWIFT. The Bank is exploring the feasibility of enhancing this capability and improving controls for its use. This is particularly important as this would support any increase in Bacs and FPS 'net sender caps', and would support the topping up of liquidity into CREST to support continued processing.
 - b. The exercise established a need for the major banks to share lessons learned on re-routing payments.
 - c. The FPS Scheme is working on increasing its scheme transaction limit (currently £250k).
 - d. CHAPS Direct Participants who are not FPS Direct Participants have an action to consider the merits of FPS direct access to provide an alternative for re-routing payments.
 - e. Direct and indirect participants are encouraged to discuss bilaterally how liquidity requirements and dependencies could change in an RTGS outage.
- ii. The Group was also given an overview of how prefunding in FPS works. In summary, values are netted off three times per day between the direct participants and are settled in central bank money. Credit and liquidity risk is eliminated by cash collateral deposited in a Reserves Collateralisation Account (RCA). The net sender cap in FPS cannot be more than the RCA balance. There was a SIMEX16 finding that some FPS Direct Participants should consider the level of Level A collateral held with the Bank and how a low holding could inhibit their ability to quickly increase debit caps (and as such, disrupt the smooth processing of payments).

¹ Market Infrastructure Resiliency Service, a contingency infrastructure operated by SWIFT that is geographically remote and technologically independent of the Bank's RTGS operations.

- iii. FPS reported to the Group that progress was being made on increasing the cap for individual payments. £20mn had been successfully tested, and this cap could be permanently increased subject to the approval of the FPS Board and regulatory approval. FPS confirmed that processes were now in place for individual members to increase their limits within 15 minutes, subject to plausibility testing (and within the constraint of the scheme transaction limit). FPS also confirmed that they could easily extend the duration of a settlement cycle.
- iv. Throughout these discussions, the Group agreed that its focus was on wholesale payment settlements, but all members agreed that customer retail payments should always be prioritised, subject to over-riding financial stability considerations. FPS emphasised that such prioritisation was the responsibility of individual participants, not the scheme. The Group felt that this prioritisation should be publically recorded and communicated to all market participants.

4. Output from The Discussions

a. Operational Considerations / barriers to using FPS in an RTGS outage

- i. The Group agreed that FPS could be a suitable vehicle for re-routing wholesale payments. But there were several key barriers that meant that it would not be practical or possible for all market participants, especially those not signed up to FPS:
 - a) some large international banks with no UK retail activity were not direct participants of FPS (and may not have indirect access either);
 - b) corporates (including the largest), investment managers and money market funds were often not signed up to FPS through their bank;
 - c) inertia was in reality another problem as corporates had historically not used FPS (and in some cases FPS was not made readily available by their banks);
 - d) costs were highlighted as a particular barrier; these had been reducing but were still an issue for some. In particular, the costs associated with developing new IT systems were highlighted by some members of the Group. This was exacerbated where a bank did not operate its payment systems 24/7, given the FPS scheme's current requirement for 24 hour operation was. However, there may be some proportionate flexibility depending on volume and type of transactions (e.g. if low volume of transactions are all wholesale market-based).
- ii. The Group broadly felt that the overall benefits of using FPS to re-route wholesale payments outweighed some of these practical issues, although this may not be the case for all institutions. It noted that institutions with no access to FPS may be at a significant disadvantage in the event of an RTGS/CHAPS outage in terms of their own ability to process payments, including for their customers where applicable.

- iii. Even for those firms that are FPS Direct Participants, further key considerations were raised. Operational capability to internally increase the FPS cap was a potential concern. The need to change internal IT systems was highlighted; this would not be possible as a quick response to an RTGS/CHAPS outage and would need to be addressed in advance as part of contingency planning.
- iv. There was a need to be capable of converting CHAPS payments into FPS format. This would be time consuming if done manually and subject to operational risk. The Group felt that Direct Participants of FPS should be encouraged to create an automated process, particularly as future messaging standards for CHAPS and FPS will both be based on ISO 20022.
- v. If indirect participants use different CHAPS and FPS providers, insufficient cash balances or collateral may be held with the FPS provider to support re-routing. Members of the Group felt there is a strong case for indirect participants to consider the benefits of using the same CHAPS and FPS provider for this reason.
- vi. The Group felt that it was not possible to quantify for how long usage of FPS in an extended RTGS outage could be sustained. It was agreed that at 5 days were at the upper limit of possibility, but that even this was a remote possibility and seemed practically unlikely.
- vii. Consideration was given as to how market participants could be encouraged to use alternative pathways for payments and what communications might be appropriate. It was generally felt that the Bank was best placed to lead this, and that a previous speech on operational resilience provided a good example of this.² Additionally, the Group felt that the UK Money Markets Code would be a good medium through which to set out the best practice in preparing suitable contingency planning for such an event. The Group noted that the Code remains a best-practice statement and that care should be taken to ensure that any future wording included in the Code on this issue adequately reflects the proportionate and non-binding nature of the Code.

b. Liquidity and Collateral

- i. It would be desirable to be able to move collateral between FPS Direct Participants and Indirect Participants as a means of reducing credit risk; however the Group noted that moving collateral may be difficult and operationally cumbersome. It would be dependent on CREST still being operational; haircuts and valuations may be difficult to manage in a potentially disjointed market.

² <http://www.bankofengland.co.uk/publications/Documents/speeches/2017/speech979.pdf>

- ii. It was felt that settlement in non-sterling cash could be a workable alternative for some participants, especially for major UK banks with global operations and for international banks. Nevertheless it would be less workable for smaller banks and building societies. It was highlighted that arrangements for moving collateral or for non-sterling cash settlement were strongly dependent on bilateral relationships. Similarly, extremely large settlements could bilaterally be agreed to be delayed but this is again dependent on the relationship between the parties.
- iii. Overall, the Group concluded that the best use of collateral by Direct Participants would be to deliver this to the Bank of England, so that sterling liquidity could be generated against it.³ A clear action for eligible market participants was to consider whether there was enough Level A Collateral transferred to the Bank for this purpose (the Bank has a corresponding action from SIMEX16).
- iv. The Group also expressed interest in whether the Bank could assist by transferring liquidity between Direct Participant and Indirect Participants to reduce credit risk and cumbersome processes to transfer collateral.

c. Charges and Compensation

- i. The Group were reminded throughout their discussions of the importance of competition law. Care is needed that there can be no suggestion that the MMC or the Discussion Group is the focal point of any anti-competitive behaviour.
- ii. For this reason the discussion around compensation and charges was necessarily limited to flagging that this was a bilateral relationship issue.
- iii. The Group felt however that it would be helpful if the UK Money Market Code could include wording to reflect current best practice principles such as “in the event of an extended systems outage, no party should seek to benefit from undue enrichment.” The group agreed that the UK Money Markets Code sub-Committee would be the appropriate forum to agree the particular wording for this.

³ Either through the process to generate an Operational Standing Facility; the special process to create additional liquidity for Bacs, FPS or CREST; or the ‘auto-collateralised repo’ functionality built into CREST.

5. Summary and Conclusions

- a. FPS could be a suitable vehicle for re-routing payments in an RTGS extended outage.**
- b. All market participants should consider the benefits of having access to FPS (or a similar alternative pathway), given that the advantages of retaining the capability to make payments would seem to outweigh the likely costs. Without appropriate access to alternative pathways for payments, some market participants and their clients may be disadvantaged in the event of an extended RTGS outage.**
- c. Where appropriate, internal operational capability to increase the FPS cap should be addressed as soon as feasible.**
- d. Direct FPS Participants should establish an automated process for the conversion of CHAPS payments into FPS format. An appropriate timeframe for this to be completed could be in line with the ISO20022 standard being adopted for CHAPS and FPS payments.**
- e. It was noted that having the same CHAPS and FPS provider may help to ensure sufficient cash/collateral is available to support use of FPS instead of CHAPS in any outage.**
- f. Participants that are indirect members of CHAPS as well as FPS should seek to ensure sufficient cash/collateral is held at their FPS provider to cover re-routing.**
- g. FPS as a re-routing solution would be viable for an absolute maximum of 5 days and in all probability only for a shorter period.**
- h. It would be helpful if the Bank of England could lead communications on the benefits of re-routing using an alternative pathway and related best practice could be included in an update to the UK Money Market Code in 2018**
- i. The current market practice of prioritising customer retail payments ahead of wholesale own-account payments was endorsed subject to any over-riding financial stability considerations.**
- j. It was acknowledged that bilateral movement of collateral in such an event would be cumbersome. There was a preference for cash collateral, which for larger and international banks could be non-sterling.**
 - i. The best use of collateral for organisations with direct access to the prefunded retail system was at the Bank of England to generate liquidity. (For CREST settlement banks, the repo functionality built into CREST would suffice.)**
 - ii. It was recognised that direct participants in the retail system should transfer more Level A collateral at the Bank in order to facilitate liquidity creation in such an event.**
- k. The Group was unable to make any definitive statement on charges and compensation. However the Group endorsed the principle that there should be no**

undue enrichment as a result of an RTGS outage. It was agreed that it would be helpful if the UK Money Market Code could include wording to reflect this current best practice principle.

6. Next Steps

- a. The Group has no objection to the publication and external sharing of the conclusions of this report.**
- b. The UK Money Market Code is updated appropriately.**