

By electronic submission to cpmi@bis.org

Secretariat to the Committee on Payments and Market Infrastructures

J.P. Morgan response to the FSB Consultative Document: Extending and aligning payment system operating hours for cross-border payments

J.P. Morgan (JPM / the “Firm”) appreciates the opportunity to submit its comment to the Committee on Payments and Market Infrastructures (CPMI) in response to the consultative document, “Extending and aligning payment system operating hours for cross-border payments” (the “Consultation”).

JPM is fully supportive of the central bank-led global market initiative to enhance end-user cross-border payments. JPM averages daily global payment processing value in the region of \$7 trillion and, as a result, has significant experience in the challenges of providing payments services to customers in multiple jurisdictions. JPM participates in multiple real time gross settlement (RTGS) systems and real time/instant/faster payment systems, some of which operate 24/7, and has had experience with the challenges of transitioning to 24/7 payments processing.

While extending operating hours may have some benefits, end to end payments processing speed is a complex issue and consideration should be given to addressing factors within the other building blocks that contribute to delays, such as sanctions screening and local requirements for purpose codes and other payment data that lead to investigations. These should be taken into consideration if the investment in extended hours is to become a meaningful building block in meeting program objectives.

The Firm agrees with the principle of extending RTGS systems operating hours and the concept of adding to the global settlement window on working days where this might improve the speed of cross-border payments in corridors where the settlement window is not optimized/or insufficient overlap exists with other systems. Expansion of RTGS operating hours also has the potential to meaningfully contribute to risk management by expanding the window to process time-critical wholesale payments that require central bank money. Any such extension could be an initial step to thoughtfully moving towards adding processing windows on weekends. The benefits of any such extension should be set against new 24/7 faster payments systems that are also looking at cross-border models to serve the retail segments most needing these services. Use cases for weekend settlement in RTGS systems remain limited in the near and medium term and nascent for the long term, so the cost-benefit of end states 2 and 3 should be evaluated in light of how they will help meet program targets, domestic needs, and support ancillary payment systems against the significant investments that will be required by participants and end users. In order to fully realize the potential benefits of extended RTGS operating hours, the availability of supporting services at RTGS participants/banking providers during the extended hours will be required, and consideration of such additional investments needs to be incorporated into any plan to extend hours if the speed improvements are to become meaningful.

Please find responses to the specific Consultation questions below.

Q1. Can the extension of real-time gross settlement (RTGS) systems' operating hours materially contribute to achieving the cross-border payments targets endorsed by the G20, especially in terms of speed? Please explain.

Reflecting work being undertaken in the other building blocks, the operating hours of RTGS systems currently in place are not the primary barrier to meeting the FSB objectives for speed and cost of crossborder payments, as well as transparency and access. In theory, extending operating hours could contribute to increasing the speed of payment – but this is likely only to be the case in the traditional RTGS wholesale segment, where the FSB objectives are less of a priority. Extending operating hours for RTGS systems would have little to no impact on the Retail/Small to Medium Enterprise (SME) or remittance segments that are the more visible gaps that the program seeks to address. [The CPMI Report “Developments in retail fast payments and implications for RTGS systems”](#) from December 2021 makes the point that current faster payments systems (FPS) models are less reliant on core RTGS systems and the implications for RTGS operating hours are limited. Further, the availability of services provided by RTGS participants (not just payments) to payment recipients/their clients matter more than the RTGS system itself. The RTGS payment's speed in arriving may contribute in helping off-hour interbank funding of underlying liquidity, but has limited impact if other local services cannot be accessed by the client that would be the ultimate beneficiary.

To improve speed for other segments, evolution is required in the ACH and domestic instant payments capabilities. This would include extending these services to facilitate payments that emanate from outside the local jurisdiction. Interlinking alternative instant payment solutions, which settle in central bank money through an RTGS system during current or slightly extended RTGS operating hours, may be a realistic and more beneficial and approach than expanding RTGS systems to run 24/7/365. Interlinked instant payment solutions that would help meet the FSB objectives have already run through proof of concepts and have proven to process payments within accelerated timeframes from a purely technical perspective. Other challenges from a regulatory, rules, standards, operating, access and risk perspective are still to be addressed.

Extending RTGS operating hours will reduce operational risks in the securities processing industry, where for example US markets are planning to evolve to a T+1 settlement cycle¹, significantly reducing the time for international investors to fund or repatriate settlement proceeds. Similar impacts could be anticipated on the very large cross border flow of funds associated with Securities issuance or Bond redemptions. While these are important benefits, addressing these industry directed risks could create a negative perception, if similar focus is not directed at the retail and remittance segments.

Q2. What additional actions would be needed by the public sector and/or private sector entities, beyond those described in the G20 roadmap (see Annex 3 of the current report), to facilitate the extension of RTGS operating hours and realise the benefits that could result from extended RTGS operating hours?

While Section 5 does discuss some of the risks and costs of enhancing operating hours, and suggests that the industry may need time to evolve before making full use of the extended hours – there needs to be a

¹ “Accelerating the U.S. Securities Settlement Cycle to T+1” https://www.ici.org/system/files/202111/21_ppr_t1.pdf

clear definition of a cost-benefit analysis – something that would quantify the technical and operational development and ongoing costs and compare them to some estimate of the value of payments currently delayed, some extrapolation of what would be possible in the enhanced scenarios including new use cases that would be enabled.

Consideration should also be given to how an alternative, potentially lower cost system, such as stablecoin or CBDC might enable high value funds clearing to continue during RTGS off-hours, and be subsequently netted or transferred from digital to RTGS accounting as they start operations – compared to the highlighted incremental staffing and operational costs of extended RTGS. Weekends, for example, are likely to remain low volume for some time, but would be costly to maintain, so reasonable alternatives that work well with the RTGS and central bank money should be considered.

Q3. What benefits for cross-border payments other than speed do you perceive would accrue from an extension of RTGS operating hours? What additional domestic benefits for a jurisdiction do you perceive?

RTGS systems support ancillary payment systems such as ACH, faster payments and cards and any extension of operating hours could enable additional settlement cycles in those systems as well as support optimizing liquidity use in those systems. Further, increased access to RTGS with central bank funds might enable the extension of related financial industry deadlines. For example in the US, if Fedwire Funds were to extend general operating hours it may allow Fedwire Securities to extend the hours for settlement of US Treasury securities, or allow DTCC to extend the processing day for non-government securities. These benefits are likely outside the intention of the G20's efforts.

Subject to additional work aligning standards and formats and a detailed risk assessment of the implications, extended operating hours could encourage central banks to envisage widening access to RTGS systems.

Also, as the US dollar is a key global settlement currency, being able to settle transactions in US dollars on US banking holidays would provide global market benefits on those days as well as reduce impacts of high volume processing that are often experienced on the day after US holidays. Many domestic businesses do not observe all banking holidays in a jurisdiction and would be able to benefit from being able to settle RTGS transactions on those days.

Q4. How well do the three identified end states capture key scenarios that individual central banks/RTGS system operators should consider as they assess current RTGS operating hours and plan for the future? What additional end states or refinements to the end states would you suggest?

The three scenarios are a fair reflection of the plans and changes RTGS systems could make. Extended operating hours are primarily designed to enhance domestic payment services and may not bring benefits to the key areas being addressed in relation to cross-border payments. Extending operating hours in public sector RTGS systems should not have a negative impact on innovation in the private sector to enhance cross-border retail payments and remittances.

End state 1 is most incremental and would likely provide the greatest relative benefit therefore should be considered first by RTGS operators.

Some consideration should also be given to a regular window under end state 3 where known down time could take place and allow for maintenance windows. This could reduce the overall costs and risks involved in a full 24/7 end state as the requirements for zero downtime are considerably more expensive than those for near-zero down time. This window could be timed on Saturday evenings when impact to global settlement would be minimized.

Q5. Which end state, out of the three identified or another one you may want to consider, do you believe strikes the best balance between improving cross-border payments and managing the associated challenges?

End state 1 presents the fewest challenges, mainly around end of day/start of day procedures, and is most likely to achieve a cost commensurate with the benefits that can be derived. End state 3 will be very challenging, and most costly, likely without commensurate benefits. End state 2 can also provide a balance between adding new settlement times that can improve cross border payments tactically without the very large investment towards moving many supporting systems to full 24/7 processing with no downtime. Particularly in markets where there are limited domestic benefits/demand associated with end state 3, end states 1 and 2 should be given the most consideration. 24/7/365 is primarily a retail need between the client and the service provider, not necessarily a need between the banks and the RTGS operator.

Q6. If the RTGS system in your jurisdiction has not yet reached the end state signalled in the previous question, what time horizon (number of years from now) would you envision for reaching it?

Key Jurisdictions:

- USD - end state 1 could be achieved within 12-18 months (post ISO 20022 migration); if either of the other options is pursued more likely to be on a 3-5 year basis.
- GBP – end state 1 could be achieved within three years (post ISO 20022 migration); if either of the other options is pursued more likely to be on a 5 to 10 year basis.
- EUR – end state 1 could be achieved within three years (post ISO 20022 migration); if either of the other options is pursued more likely to be on a 5 to 10 year basis.
- JPY – A market consultation² in 2016 had concluded that, whilst potential demand exists there is no overriding business case to extend RTGS operating hours. This assessment still stands.

Q7. As a result of end state 3, which involves 24/7 RTGS operating hours, do you anticipate demand for 24/7 operations of RTGS systems in the future? If so, what do you expect to be the main drivers and over what time horizon do you expect this to happen?

We anticipate demand for 24/7 operating hours of key RTGS systems in the medium term (3-5 years) or longer, as the global economy continues to move towards a digital, always-on model. The RTGS systems

² <https://www.swift.com/swift-resource/33606/download>

will be the core support for this new reality, just as today they support ancillary payment systems in domestic jurisdictions for daily activities. The availability of the RTGS system will be one of the payment services that support innovation and will serve provide the liquidity needed to support global commerce. Support for ancillary payment system funding and crypto trading is already driving demand.

Q8. Would your organisation make use of and/or benefit from extended RTGS operating hours?

As a large Global Transaction Bank, JPM would make use of extended hours including in the retail/SME markets that G20 seeks to support/improve. To realize those benefits other changes will be required beyond the RTGS changes. These need to be fully analysed and included in any program to expand hours in order to insure the goals of the G20 are met so that, and payments are applied to the end beneficiary account during the extended hours. The result of this overall analysis will be part of a broader business case decision where the perceived benefits of extended RTGS operating hours and impact of change together with the cost for the client to transition will all be weighed and taken into consideration.

Q9. How useful do you view the global settlement window as a concept for considering the aggregate implications of extensions to RTGS operating hours in individual jurisdictions? What alternatives or refinements, if any, would you propose in order to consider the aggregate implications of extensions to RTGS operating hours in individual jurisdictions?

The global settlement model is a logical construct for analysing the aggregate implications of extensions to RTGS operating hours in individual jurisdictions. Currency controls and the need to register or otherwise report cross border currency movements before effecting settlement may reduce or negate the improvement in timing that extending RTGS operating hours would make and should be clearly understood when domestic decisions are made and targets are measured.

A relevant use case for this window is the compromise to speed when a bank in the European Union wants to make an Asian currency payment in its afternoon. Adjustments to operating hours using the global settlement window analysis to address this would help improve speed in this situation and others where gaps are significant, although subject to market wide business case analysis on a corridor by corridor basis is required.

Q10. To what extent have the operational and risk considerations related to an extension of RTGS operating hours been adequately identified? What additional considerations would you consider relevant?

The paper identifies key operational and risk considerations. Additional considerations that are relevant are:

- Quantification of the material benefits that justify the investments that will be required. In addition, enhancement implies increasing access to RTGS systems, which may bring new participant risk into the systems and varied risk management approaches on participation i.e. non-financial institutions subject to different regulatory and supervisory oversight. Membership rules for participation in RTGS systems may need to be modified and structured to cater for the change in overall membership risk profiles that are introduced to the RTGS system.

- Whether all participants in an RTGS system would be required to participate in the new hours, what are the participation models and how that might impact end users. One consideration could be that off-hour settlement is bilaterally pre-agreed between the sending institution and the receiving institution so that other participants who do not require the new window are not impacted.
- Technology investment and risk of supporting 24/7 is ongoing and will likely require new ways to implement upgrades both for payment system operators and participants who today would have a long weekend window to make these changes. An approach to this would be needed.
- Staffing and other infrastructure that is required to be onshore for any business segments need to be clearly factored in to any analysis of using “follow the sun” resources to handle “off hours” processing and support.
- Availability of central bank intraday credit facilities during expanded hours to support the large-value RTGS transactions and potential changes to intraday liquidity models triggered by weekend operating hours.

Q11. What would you identify as the top five considerations related to an extension of RTGS operating hours in your preferred scenario (Q5)?

1. Volume and value of payments that would be accelerated by the increased global window
2. Analysis to verify the earlier settlement added value to local processing (for late settling currencies such as USD and vice versa for late settlement added value of earlier settling currencies such as those in Asia) . Were funds applied and used or did they sit until well into the local business day (i.e. did any value accrue from crediting funds at 3 AM local time? Did they sit unapplied until later in the day?).
3. Cost differential of the 3 end state scenarios
4. Analysis of various routes to ensure benefit as per 1&2 above
5. Ability to impact ACH or RTP systems in parallel, as the objective is to speed retail and small to medium enterprise payments, not only high-value, which are often bank-to-bank payments.

Q12. To what extent do the relevant considerations differ substantially depending on the end state being considered?

Considerations for end states 2 and 3 differ substantially from end state 1, which can likely be achieved with incremental changes to systems, operations and staffing models. End states 2 and 3 will require substantially more change, investment, staffing and re-examination of existing accounting models and liquidity. Many downstream impacts need to be understood and coordinated. Further, the costs will be higher for end state 2 and even significantly more for end state 3 - it is critical to understand the use cases driving demand and the time frame to move to this model. In addition, of the options available for domestic participants in each end state would need to be understood, given the costs, whether participants are able to select to only participate in certain times/days.

Q13. For the top five considerations that you identified in Q11, what mitigation measures could be taken to address them?

All of these considerations require analysis and planning in response to the analysis to insure appropriate choices are made and a viable plan is formulated for a successful rollout. Furthermore, the lessons learned from the ISO 20022 migration, a large scale significant change currently in progress with major global implications for payment systems operators, financial institutions and downstream clients should be reviewed and used to help mitigate risk in change of this size and importance.

Q14. In your view, to what extent will the above measures require coordinated action by industry participants and/or support/guidance from authorities, such as central banks, standard-setting bodies and supervisors (as opposed to actions by individual stakeholders)

The availability of full payment, servicing and reporting capabilities are required for the end client to ultimately benefit from extended RTGS operating hours. Therefore industry participants to the RTGS system must be at the centre of coordination as the key stakeholders. End state 1 could be agreed and implemented by individual stakeholder participants relatively easily; end states 2 and 3 would likely require guidance from central banks and supervisors as the investment will be incrementally greater, while the benefit may not be as clear or as proportional to the investment required. In all scenarios the conventions around business/value date and the implications to any funds transfer law must be considered.

Q15. If you are a stakeholder of an RTGS system that has extended its operating hours in the recent past, what were the key lessons learnt?

In the US, JPM participates in both the Fedwire Funds Service and CHIPS which expanded their operating hours incrementally in March 2021. The incremental increase in hours provided support to extend same day ACH by an additional two hours which benefited US West Coast clients. Given that the US RTGS systems already operate for a significant portion of the day the technical and staffing changes were not overly burdensome but still required significant coordination across lines of business and stakeholders and substantial client communication.

In earlier time zones such as in the case of Japan, RTGS systems are largely used for domestic money market transactions settlement where the market continues to operate during the daytime core business hours. Extended hours later into the evening are used on an exceptional basis based on bilaterally agreed late night settlement needs which have resulted in limited volume uptake.

In India, JPM participates in the RBI RTGS system which expanded to 24x7 in December 2020. Considerations outlined in this consultation were in line with the lessons learned. Volume is still lighter on weekends and payments are expected to be for straight through processing only.

The Firm looks forward to further constructive interaction on this important topic and is happy to discuss any of the above comments in more detail.