13th January 2022

RTGS.global®

To: CPMI Secretariat
Via email: cpmi@bis.org

From: RTGS.global

Dear CPMI Secretariat,

We appreciate the opportunity to provide comments on the November 2021 CPMI Consultative report '*Extending and aligning payment system operating hours for cross-border payments*'[1] (the "Report").

We at RTGS.global® are developing a next-generation financial market infrastructure (FMI) offering an innovative and efficient system facilitating inter-bank cross-border payments using liquidity the banks hold in central bank reserves. Our liquidity settlement system supports several use cases in furtherance of the FSB/G20 Roadmap for Enhancing Cross-border Payments,[2] including PvP settlement of wholesale FX transactions in developed and emerging market currencies. Our system is able to support liquidity transfers 24 x 7 x 365 regardless of central bank or RTGS operating hours, however , we have thoughts on a number of the topics and questions covered in the Report.

Our responses are organized as general comments on the topics raised for consideration in the Report. As applicable, we have indicated where the responses address or relate to a specific question asked in the Report.

1. Introduction

Extending the operating hours of global RTGS systems would implicate several important factors and challenges. These factors and challenges should be carefully weighed and considered against the perceived benefits of expanded hours. The essentiality for expansion of RTGS hours should also be assessed in light of other industry initiatives being developed to advance the goal of enhancing cross-border payments.

The Report points out that an extension of RTGS operating hours is likely to require technical and market convention changes, as well as impact operational and staffing needs, along with their associated costs.[3] We strongly agree with this, and raise below some important considerations we urge the CPMI and central banks to examine and discuss in the context of extending RTGS operating hours. We have organized these by theme (Demand, Risk, Legal Framework, Cost, and Social). *[Report Question 10]*

[1] https://www.bis.org/cpmi/publ/d199.htm
[2] https://www.fsb.org/2020/10/enhancing-cross-border-payments-stage-3-roadmap/
[3] https://www.bis.org/cpmi/publ/d199.htm (p.7)

2. Factors for Consideration in Assessing Expansion of RTGS Operating Hours

Demand for Extended RTGS Opening Hours

Impetus for changing RTGS hours: A critical question to address before embarking on a change as significant as expanding RTGS operating hours, in particular if contemplating weekend hours or a 24/7 model, is whether there is a clear use case that will benefit from this effort. Central banks should be certain that there is actual demand in their local jurisdiction for the expansion of RTGS operating hours, bearing in mind who will ultimately bear the cost of the 'upgrade' (costs are discussed in greater detail below).

We suggest there is an absence of key drivers for expansion of RTGS opening hours. Given domestic deferred net settlement systems, which underpin retail faster payment system activities in many countries, can already operate 24x7x365, there appears to be little or no benefit in extended RTGS opening hours for retail domestic payment customers, especially if domestic consumers and small businesses were to be expected to bear the cost of expanded hours, which would inevitably be passed on to them by their banks. *[Report Question 7]*

If expanded operating hours were solely being justified as aiding cross-border transactions in light of differing time-zones, we also query the demand and question the economic arguments. For cross-border transfers, many consumers and small businesses are already well served by existing retail cross-border payment providers who offer 24x7x365 services backed by liquidity in the major centres they operate in. If the cost of expanded hours were to be borne by those participating in cross-border activities, this could result in significant price increases for cross-border transactions. For commercial bank cross-border payments, we question whether the time sensitivity is sufficient enough to warrant major change, and suggest this be further analysed.

Risk Implications of a Change to RTGS Operating Hours *[Report Question 10]*

RTGS down-time for maintenance and development work: It is usually mandatory that banks that are direct participants in their local RTGS/high-value payment system (HVPS) must be connected to the HVPS and able to send and receive payments at all times whilst the HVPS is open. Many central banks and commercial banks, however, perform evening or overnight maintenance activities on their systems. Needing to be able to send and receive RTGS/HVPS payments at hours when required maintenance work would ordinarily be done would restrict the ability to perform this maintenance work. This, in turn, could increase operational risk for the central bank and bank.

Additionally, central banks and commercial banks may find they need to undertake significant development work on their own systems to be able to support extended hour, day, or 24/7 operations. RTGS around the world are different; some could support 24-hour operations, others would require time for end-of-day processes to be effected before moving into the next value date. Moving to an extended hours model could be a major and complex undertaking for some.

Operational risk and resilience: Furthermore, banks should ensure any extension of operating hours would not introduce new risk into their systems. The Report correctly points out that entities participating in an RTGS system may need to review and/or enhance their existing operational procedures, risk monitoring tools and mitigation measures to accommodate the longer operating hours. Extending RTGS operating hours into what are currently non-business days will result in reduced windows for 'live' trialling opportunities *e.g.* the low value counterparty trialling that is undertaken at weekends for on-boarding new UK CHAPS members. Similarly, the absence of long 'holiday weekends' would further limit opportunities for the rollout of substantive system upgrades, *e.g.* RTGS v2 in the UK. In the rare circumstance of a catastrophic system event, the weekend provides time for a RTGS system/commercial bank to recover without further adverse impact on the wider banking ecosystem. The impact of losing these windows should be carefully weighed against the perceived benefit of doing away with weekend closing times.

We agree with the CPMI that it is crucial that RTGS operators ensure that any extended hours do not jeopardize current levels of operational resilience and risk management, including against cyber-attacks and payment fraud.[3]

Liquidity implications and risk: The throughput (values and volumes) of every RTGS system is finely-tuned. As such, any change such as extending the system's operating hours, could materially impact liquidity usage and behaviour in the local currency. The potential spillover effects of extending RTGS hours in this regard requires thorough advance exploration, simulation and modelling, to ensure that a well-intentioned change does not inadvertently disrupt the sound functioning, safety and stability of local systems, payments, and FX markets. As stated in the Report, RTGS participants would need to ensure that they have sufficient liquidity to support their activities at all times, which would implicate the availability of sources of liquidity during the extended hours.[4]

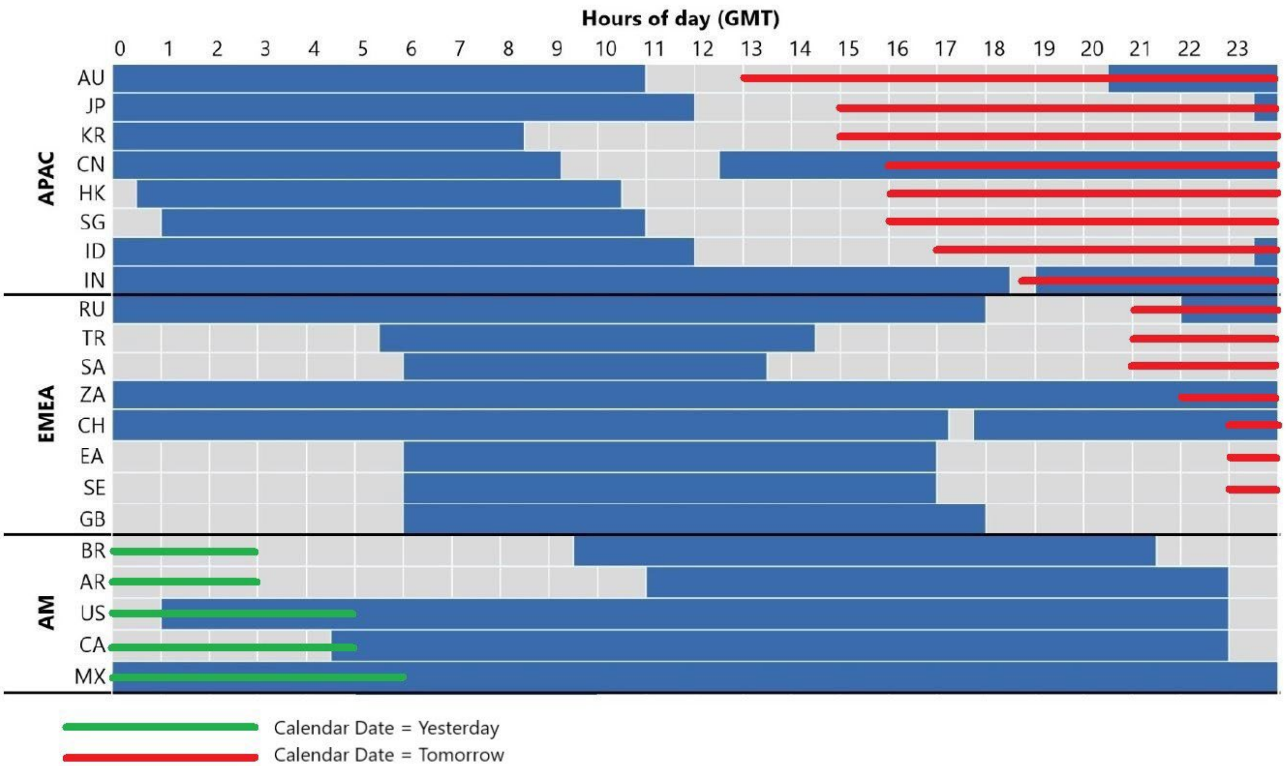
Extensions of opening hours, even by a few hours, is likely to make it more difficult for banks to anticipate their liquidity throughput through the day, and for central banks to be able to monitor throughput, *e.g.* the Bank of England's CHAPS throughput criteria. This, in turn, could have negative implications on risk management.

Legal Framework Implications of a Change to RTGS Operating Hours

Transaction value dates: If RTGS systems were to extend their hours on existing operating days, there is still a fundamental challenge associated with 'value date' (calendar date) which would not necessarily be addressed. For example, the Fed extending the RTGS operating hours for USD would not help with respect to a cross-border flow associated with JPY due to the fact that the Fed would be still be at Date "D" whereas Japan's RTGS would already be at date "D+1". Transactions can only settle (in real-time) on their agreed/contractual value date. For there to be a benefit in this USD/JPY example, the US must already (in legal terms) have moved to the next calendar date.

This challenge can be visibly demonstrated if the chart at the top of page 19 of the Report is modified to not only show the opening hours of RTGS systems across the regions but, additionally show (in GMT) the point at which the calendar date changes in each country:

[3] https://www.bis.org/cpmi/publ/d199.htm (p.7)
[4] https://www.bis.org/cpmi/publ/d199.htm (p.7)



As can be seen, once calendar/value dates are taken into account, any potential benefit arising from extended opening hours is substantially reduced.

Page 12 of the Report makes reference to the potential for an RTGS operator "reopening the payment system with next day value date soon after closure". This is arguably not a viable proposition since, in an increasing number of countries, commercial banks must keep their own systems aligned to local calendar dates/times to fulfil payments made over local domestic instant payment systems. These, in turn, are likely to settle on a deferred net settlement basis over their local RTGS system which means the RTGS systems too must maintain alignment to local calendar dates. It would be extremely difficult for a commercial bank to keep some systems aligned to local calendar dates and others aligned to the "next" calendar date if an RTGS was to bring its calendar date forward ahead of midnight local time. *[Report Question 9]*

For a central bank to provide an RTGS service for longer hours and/or on weekends and holidays, it is assumed that participants of that system would also need to adopt these extended hours. For example, if the RTGS operator required participants to undertake specific, time-sensitive actions during the extended hours, the participants would need to react immediately. This could mean that nearly all banks (as frequent users of RTGS systems) would need to extend the operating hours of their payments divisions in jurisdictions where they participate locally in an RTGS system. If the banks were not to extend their own hours in this way this could, at a minimum, render the efforts of the central bank in providing longer hours futile but also potentially introduce disruption where, say, some RTGS participant banks extend their hours of operation but others do not. Extending RTGS operating hours may also impact the operating hours of post-trade vendors and Financial Market Infrastructure (FMI) service providers, resulting in disruption if these vendors and FMIs do not also make a change.

Cost and Resourcing Considerations

Additional staffing and costs: Additional personnel would likely be required in order for banks to service and maintain coverage for an RTGS system running longer hours, or 24/7. We make the point earlier that consumers and small businesses should not be expected to subsidise the costs arising from extending RTGS opening hours unless they are clearly benefitting from the 'enhanced' service. In our view, there appears to be little or no benefit in extended RTGS opening hours for retail domestic payment customers.

Furthermore, indirect participants in a local RTGS/HVPS may need to provide collateral to their HVPS sponsoring participant(s) earlier than previously required, thereby bringing additional costs in terms of resourcing and their own operational requirements. Banks' Treasury departments would, potentially, need to completely re-align their working practices to accommodate RTGS payments on weekends and holidays.

Resourcing demands on Central Banks: The costs involved in extending operating hours may be significant for many central banks. Typically, one 'shift' of personnel is required to operate and maintain a central bank's RTGS system in routine operating hours; 24/7 coverage may require up to three teams to sustain the same capability. For smaller central banks, the additional cost resource may be unaffordable meaning they are "left behind", resulting in further friction for cross-border payments in their currencies.

Furthermore, central banks have their own unique timelines for RTGS change projects. Some central bank RTGS change initiatives are long-term and span multiple years, for example, 'next-generation RTGS', ISO20022, etc. To date, in some jurisdictions even extending RTGS opening hours by one hour has been unpopular with central banks. 24/7 RTGS would be a significant operation to take on, for all parties involved, and may not be of interest for many central banks. For some central banks to be in a position to adopt and fund significant changes to their operating hours, or especially to extend to additional operating days, could take a long time. *[Report Question 6]*

Social implications

Business Days and Holidays: If RTGS systems were to be open on weekends and public holidays, at a fundamental social level this could blur or change what is known colloquially as "business days" vs "non-business days". The societal ramifications of such a change would therefore need to be assessed, such as whether the concept of 'weekends' for the general population might be diluted. Also, what happens with religious holidays across the various faiths would need to be considered. There would also be a question as to whether other markets, such as equities, fixed income and real estate would be impacted by the extension of RTGS operating hours. For example, if it were now possible to settle a real estate transaction at a weekend, would the legal conveyancing industry need to adopt weekend working practices too?

3. Enhancing cross-border payments without necessitating changes to RTGS operating hours

The Report states that, 'when the operating hours of RTGS systems in different jurisdictions do not overlap, the processing of cross-border payments suffers delays, increasing liquidity costs and settlement risk.'[5] Whilst there no doubt are examples of this being the case, in our view this outcome is not inevitable, and expanding RTGS operating hours is not the only solution for avoiding these issues or vital to achieving enhancement of crossborder payments.

The Report goes on to mention that in certain jurisdictions fast payment systems allow for real-time central bank money settlement for retail fast payments even when the relevant RTGS systems are closed, and that fast payment systems could, potentially, be used for one or more inter-bank payment legs.[6] The Report suggests that the potential use of fast payment systems in cross-border payments should continue to be investigated alongside considering the extension of operating hours for RTGS systems.

We agree that other mechanisms, such as the use of fast payment systems for inter-bank cross-border payments, should be considered in parallel with consideration of expanded RTGS hours. In our view, whilst there may be specific scenarios in which greater overlap or alignment of operating hours of certain RTGS systems may be helpful, on the whole, extension of RTGS operating hours does not have to be a prerequisite for the industry to achieve improved cross-border payments as contemplated by the G20 Roadmap.

We suggest the CPMI and Central Banks, in conjunction with assessing whether extension of RTGS hours would yield the benefits sought, engage with the industry to consider other ideas, designs, mechanisms and solutions that can be employed to advance the FSB/G20 Roadmap goals but which implicate less resourcing, cost and disruption than would extending central bank RTGS operating hours. For example, if there were to be interoperability between deferred net settlement faster payment systems across borders, supported by a legal framework that would create the same outcome as a domestic fast payment system, 24/7 RTGS would not be needed.

[5] https://www.bis.org/cpmi/publ/d199.htm (p.5)
[6] https://www.bis.org/cpmi/publ/d199.htm (pp.10, 11)

4. Conclusion

As recognised in the FSB/G20 Roadmap targets, the work being done on enhancing cross-border payments should be seeking to bring costs down. Extending RTGS operating hours is likely to increase costs rather than decrease them, unless the costs are, inequitably in our opinion, subsidised by domestic payments consumers and small businesses.

Furthermore, we have raised a number of points which should, in our view, be closely considered in advance of making changes to RTGS operating hours, to avoid unanticipated disruption and introducing new challenges and risk. We urge that the potential impact of extended RTGS hours on all industry participants be carefully considered and weighed against the perceived benefits, and other industry initiatives to enhancing cross-border payments be explored, before RTGS opening hour changes are decided upon.