FEDERAL RESERVE SYSTEM

Docket No. OP-1831

Expansion of Fedwire® Funds Service and National Settlement Service Operating Hours

AGENCY: Board of Governors of the Federal Reserve System

ACTION: Request for comment

SUMMARY: The Board of Governors of the Federal Reserve System (Board) is seeking input on a proposal to expand the operating hours of the Fedwire® Funds Service and the National Settlement Service (NSS). The Board proposes to expand the operating hours of the Fedwire Funds Service to 22 hours per day, 7 days per week, every day of the year (22x7x365) and to correspondingly expand the operating hours of NSS, with NSS closing 30 minutes earlier than the Fedwire Funds Service. At this time, the Board is not considering expanding operating hours for the Fedwire Securities Service. The Board requests comments on the potential benefits, risks, and implementation considerations of the proposal.

DATES: Comments on the proposed actions must be received on or before [INSERT 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: You may submit comments, identified by Docket No. OP-1831, by any of the following methods:

- Email: regs.comments@federalreserve.gov. Include docket number in the subject line of the message.
- FAX: (202) 452-3819 or (202) 452-3102.
• Mail: Ann Misback, Secretary, Board of Governors of the Federal Reserve System, 20th Street and Constitution Avenue, N.W., Washington, DC 20551.

All public comments will be made available on the Board’s website at http://www.federalreserve.gov/generalinfo/foia/ProposedRegs.cfm as submitted, unless modified for technical reasons or to remove personally identifiable information at the commenter’s request. Accordingly, comments will not be edited to remove any identifying or contact information. Public comments may also be viewed electronically or in paper in Room 146, 1709 New York Avenue, NW, Washington, DC 20006, between 9:00 a.m. and 5:00 p.m. eastern time (ET) on weekdays.

FOR FURTHER INFORMATION CONTACT:
Mark Magro, Manager, Division of Reserve Bank Operations and Payment Systems (202-452-3944); Ann Sun, Lead Financial Institution Policy Analyst, Division of Reserve Bank Operations and Payment Systems (202-912-7938); or Gavin Smith, Senior Counsel, Legal Division (202-452-3474); or Corinne Milliken Van Ness, Senior Counsel, Legal Division (202-452-2421), Board of Governors of the Federal Reserve System. For users of Telecommunications Device for the Deaf (TDD), contact (202-263-4869.)

SUPPLEMENTARY INFORMATION:

I. Background

The Federal Reserve has a long-standing policy objective to foster a safe and efficient U.S. payment system. The Federal Reserve advances its objectives for the payment system through, among other things, the Federal Reserve Banks’ (Reserve Banks) operation of two large-value payment services: the Fedwire® Funds Service and NSS.1 The Fedwire Funds

1 “Fedwire” is a registered service mark of the Federal Reserve Banks.
Service is a real-time gross settlement (RTGS) service that allows participating financial institutions (participants) to send and receive individual electronic funds transfers up to one penny less than $10 billion in value that are immediate to participants, final, and irrevocable. NSS is a multilateral settlement service that allows for immediate, final, and irrevocable settlement of obligations that arise from private-sector clearing arrangements, such as check clearinghouses, a private-sector ACH network, and securities settlement systems. Together, these services, alongside a large-value payment service operated by the private sector, provide the backbone for the nation’s payment system and thereby support a significant amount of economic activity in the United States, including large-value domestic financial market transactions, the U.S. dollar leg of many cross-border transactions, and private-sector payment clearing arrangements.

The Federal Reserve has consistently improved its payment services to meet the evolving needs of the U.S. economy. As technological advancements and globalization of commerce continue to drive change in the large-value payment landscape, the Board believes that expanding the availability of the Fedwire Funds Service and NSS would enhance the safety and efficiency of the U.S. payment system by extending the hours in which settlement in risk-free

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2 Settlement files submitted to NSS can be for an amount up to one penny less than $10 trillion; each entry in a settlement file can be for an amount up to one penny less than $100 billion.

3 The private-sector large-value payment service is CHIPS®, which is owned and operated by The Clearing House Payments Company L.L.C. (TCH). “CHIPS” is a registered service mark of TCH. While the Fedwire Funds Service supports large-value payments (often referred to as “wholesale” payments), not all payments sent through the Fedwire Funds Service would be considered large value. For example, while the average value of a payment in 2023 on the Fedwire Funds Service was $5.625 million, the median value was approximately $19,000. In general, smaller-value, general purpose payments sent by consumers and businesses are made using services designed for smaller value (“retail”) transactions such as the Reserve Banks’ check clearing and automated clearinghouse (ACH) services, and the FedNow® Service for instant payments. “FedNow” is a registered service mark of the Federal Reserve Banks.
central bank money can occur.⁴ Thus, the Board is proposing to expand the operating hours of the Fedwire Funds Service to 22 hours per day, 7 days per week, every day of the year and to expand the operating hours of NSS correspondingly, with NSS closing 30 minutes earlier than the Fedwire Funds Service.⁵ The Board recognizes that a significant expansion in operations for large-value payments in the short term might pose burdensome technical and operational changes at a time when the industry will also be adjusting to the new ISO® 20022 message format for large-value payments and instant payment services.⁶ Therefore, the Board proposes that the expansion to 22x7x365 would be implemented no sooner than two years after the migration of the Fedwire Funds Service to the ISO 20022 standard, scheduled for March 2025. The final implementation timeline for 22x7x365 will be determined based on input from this request for comment, among other relevant considerations.

The Board is seeking comment on the potential benefits, risks, costs, and other considerations of expanded hours for the Fedwire Funds Service and NSS, as described in Section II. The Board is also requesting comment on implementation considerations, as

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⁴ Central bank money is a liability of the central bank that can be used for settlement purposes and is considered free of credit and liquidity risks. Central bank money has traditionally taken two forms: cash and reserve balances held by eligible financial institutions at the central bank.

⁵ Fedwire Funds Service is currently open from 9:00 p.m. ET of the preceding calendar day to 7:00 p.m. ET, five days per week, Monday through Friday excluding holidays observed by the Reserve Banks. NSS is open from 9:00 p.m. to 6:30 p.m. ET, five days per week, Monday through Friday excluding holidays observed by the Reserve Banks. The Federal Reserve has historically provided at least 30 minutes between the close of NSS and the close of the Fedwire Funds Service, recognizing that the Fedwire Funds Service is the primary alternative for orderly and efficient settlement of bilateral obligations in case a settlement arrangement is unable to complete its multilateral settlement through NSS.

⁶ “ISO” is a registered service mark of the International Organization for Standardization.

For example, the FedNow Service, which was launched in July 2023, is an instant payments service. Instant payments allow consumers and businesses to send and receive funds from their accounts at banks and credit unions in real time, any time of day, any day of the year, with immediate funds availability to receivers.
described in Section III. As noted, the Board is not considering expanding operating hours for the Fedwire Securities Service at this time.

II. Proposed Action

A. Proposal

The Board proposes to expand the operating hours of Fedwire Funds Service to 22x7x365 and to correspondingly expand the operating hours of NSS. It is anticipated that if the proposal is adopted NSS would continue to close at 6:30 p.m. ET, 30 minutes prior to the close of Fedwire Funds Service at 7:00 p.m. ET. Both services will maintain their current opening time of 9:00 p.m. ET of the preceding calendar day for the proposed weekend operating days. Table 1 summarizes the proposed changes to operating hours for the Fedwire Funds Service and NSS.

Table 1 - Proposed Changes to Operating Hours for the Fedwire Funds Service and NSS

<table>
<thead>
<tr>
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<th>Current operating hours</th>
<th>Proposed operating hours</th>
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<tr>
<td><strong>Fedwire Funds Service</strong>&lt;sup&gt;7&lt;/sup&gt;</td>
<td>9:00 p.m. ET – 7:00 p.m. ET, Monday – Friday, excluding holidays</td>
<td>9:00 p.m. ET – 7:00 p.m. ET, every day</td>
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<tr>
<td><strong>NSS</strong>&lt;sup&gt;8&lt;/sup&gt;</td>
<td>9:00 p.m. ET – 6:30 p.m. ET, Monday – Friday, excluding holidays</td>
<td>9:00 p.m. ET – 6:30 p.m. ET, every day</td>
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<sup>7</sup> The Fedwire Funds Service begins processing online payment orders beginning at 9:00 p.m. ET on the preceding calendar day. The Fedwire Funds Service begins processing online nonvalue messages at 8:35 p.m. ET on the preceding calendar day. The cutoff time for special account messages is 5:00 p.m. ET, the cutoff time for customer messages is 6:45 p.m. ET, and the cutoff time for bank messages is 7:00 p.m. ET. The Fedwire Funds Service closes at 7:00 p.m. ET.

<sup>8</sup> The file processing window for NSS begins at 9:00 p.m. ET on the preceding calendar day and closes at 6:30 p.m. ET.
B. Rationale for proposal

The Federal Reserve has expanded operating hours for the Fedwire Funds Service and NSS over time in response to changing market conditions and industry demand. Most recently, the Board received public comments on expanded hours for the Fedwire Funds Service and NSS in response to Federal Register notices related to the development of the FedNow Service.9 Certain commenters indicated that expanded hours would provide a means for participants in retail instant payment services to manage liquidity needs related to instant payment activity on a round-the-clock basis.10 To address this industry input and meet FedNow Service implementation timelines, the Board determined that liquidity management transfer functionality should be provided within the FedNow Service at the time of its launch in July 2023. However, the Board indicated it would continue to explore expanded hours for the Fedwire Funds Service and NSS, given the broad benefits that expanded hours could provide to financial markets and the payment systems and market infrastructures that support those markets.11 Subsequently, in a 2022 notice regarding the implementation of the ISO 20022 format for the Fedwire Funds Service, the Board indicated that the Reserve Banks would conduct engagement with industry stakeholders as part of its analysis of expanded operating hours for the Fedwire Funds Service and NSS.12

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9 See 83 FR 57351 (Nov. 15, 2018) and 84 FR 39297 (Aug. 9, 2019).
10 The 24x7x365 nature of instant payments requires banks to have sufficient liquidity to settle instant payments at any time, any day of the week. As a result, banks need a method to fund accounts used to settle instant payment transactions during hours when large-value payment services are not currently open. See 83 FR 57351 (Nov. 15, 2018).
11 See 84 FR 39297 (Aug. 9, 2019). The Board indicated that further analysis was needed to evaluate fully the relevant operational, risk, and policy considerations of expanded Fedwire Funds Service and NSS operating hours.
12 See 87 FR 64217 (Oct. 24, 2022).
The Reserve Banks conducted this engagement through outreach sessions with a broad range of stakeholders, including large global financial institutions, small and mid-sized banks in different regions, and nonbanks and service providers, to better understand the needs and concerns of industry. While these industry outreach sessions were informal and not as comprehensive as an information collection conducted through the broader Federal Register notice process, stakeholders raised several initial themes. Overall, industry stakeholders that are active in global payments markets expressed strong support for an expansion of Fedwire Funds Service and NSS operating hours up to 24x7x365, stating that expanded hours would enhance the ability of cross-border payments and international commerce to be conducted in U.S. dollars and help preserve the status of the U.S. dollar as the preferred currency for global settlements.13 In addition, industry stakeholders noted that while 24x7x365 operating hours would be an ideal state in the longer term, other payment system improvement initiatives should be prioritized ahead of an expansion, including implementation of the new FedNow Service for instant payments and ISO 20022 migration of the Fedwire Funds Service. In general, these stakeholders noted that shifting large-value payment operations to full 24x7x365, with no downtime to accommodate system changes and other operational activities, would be challenging to implement in the shorter term.14

Smaller banks provided differing perspectives on the benefits of Fedwire Funds Service and NSS expanded hours, with some institutions expressing a lack of pressing need and business

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13 Certain industry stakeholders have also expressed these views via the industry-led Payments Risk Committee. See Payments Risk Committee: Fedwire Expanded Hours Whitepaper, available at https://www.newyorkfed.org/medialibrary/microsites/prc/files/2021/prc-fedwire-expanded-hours-considerations-white-paper.

14 In outreach sessions, industry stakeholders indicated that the elimination of downtime between the close and open of the Fedwire Funds Service and NSS could pose a more significant challenge than expanding operating hours into the weekend.
case compared with the level of investment required to operate on a 24x7x365 basis. Other institutions saw value in expanded hours to provide increased flexibility in operating hours among West Coast banks or to maximize time available to recover from an operational issue on the same business day. Overall, smaller banks noted the importance of maintaining optionality to participate in Fedwire Funds Service and NSS operating hours such that banks are not required to operate or otherwise maintain staff during expanded hours.

Concurrent with the Federal Reserve's consideration of expanded operating hours for the Fedwire Funds Service and NSS, the international community has been advancing initiatives to improve the cost, speed, accessibility, and transparency of cross-border payments. In 2020, the G20 leaders endorsed the Roadmap for Enhancing Cross-Border Payments, which set out a series of “building blocks” to address the frictions underlying the challenges associated with cross-border payments. Building Block 12 focused on extending and aligning the operating hours of existing payment infrastructures and arrangements across jurisdictions, particularly RTGS systems. Cross-jurisdiction alignment could speed up cross-border payments, improve liquidity management, and reduce settlement risk, among other benefits. Global alignment of large-value RTGS system operating hours has been a driver of past expansions for the Fedwire Funds Service because of the risk-reducing benefits. Though the gaps in operating hours between the

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16 In February 2023, the Financial Stability Board published an updated and prioritized Roadmap centered on three priority themes, which includes the extension and alignment of the operating hours of key payment systems. Available at https://www.fsb.org/2023/02/g20-roadmap-for-enhancing-cross-border-payments-priority-actions-for-achieving-the-g20-targets/.

17 See 59 FR 8981 (Feb. 24, 1994). Foreign exchange settlement risk is also commonly known as “Herstatt risk.” The name comes from an episode in which a German bank, the Herstatt Bank, was closed by its supervisor after the bank had received deutsche mark payments for foreign exchange transactions, but before it provided U.S. dollars to
Fedwire Funds Service and other RTGS systems have decreased over time, gaps still remain, in particular during weekend hours. Expanding the operating hours of the Fedwire Funds Service and NSS into the weekend would be consistent with the broader G20 agenda and would be consistent with the actions of other central banks that are considering or have already expanded operating hours for their large-value payment services.\(^{18}\)

Also, the Federal Reserve recognizes that payment infrastructure needs to evolve to support commerce that is increasingly being conducted outside traditional business hours. Expanded hours for the Fedwire Funds Service and NSS alongside the FedNow Service would bring the benefits of near round-the-clock payments for large-value, wholesale payments, such as multi-million dollar business invoices, real estate transactions, and insurance payouts, ensuring that the evolution of commerce is supported across retail and wholesale infrastructures.\(^{19}\)

C. Analysis of options for expanded hours

While 24x7x365 operating hours for the Fedwire Funds Service and NSS remains a possibility in the longer term, the Board recognizes that the shift to full round-the-clock operations, with no downtime in operations to complete end-of-day processing or implement its counterparties in those transactions. Overlap in central bank services operating hours can mitigate foreign exchange settlement risk by providing an opportunity to shorten the time between the settlement of both legs of a foreign exchange transaction, including enabling simultaneous settlement.

\(^{18}\) A number of central banks, such as those in Mexico and South Africa, have operated 24x7x365 large-value payment services for some time. Other central banks, including those in India and Switzerland, operate at near 24x7x365. In the United Kingdom, the Bank of England has announced that its next-generation large-value payment service will be capable of near 24x7x365 operations by 2024. The Bank of England will consider extending the operating hours of its large-value payment service in line with the industry’s demand. See the Bank of England’s Roadmap for Real-Time Gross Settlement service beyond 2024, available at https://www.bankofengland.co.uk/paper/2022/roadmap-for-real-time-gross-settlement-service-beyond-2024.

\(^{19}\) The FedNow Service supports real-time, immediate end-to-end instant payments between end user senders and receivers, with immediate funds availability to receivers. The Fedwire Funds Service supports large-value payments that are either between banks only or intended for end-user receivers, with no immediate funds availability requirement for payments to end user receivers.
system upgrades for large-value payment services, may pose challenges in the shorter term. The Board considered multiple alternatives to the proposed 22x7x365, including the addition of a short weekend window of operating hours on Saturday and/or Sunday; 22 hours per day, 6 days per week; 24 hours per day, 5 days per week; and 24x7x365 operating hours. Overall, the Board believes that expanding to 22x7x365 could achieve many of the benefits of 24x7x365 hours while giving the industry and Reserve Banks time to adjust technology and operations for potential future expansions of operating hours of the Fedwire Funds Service and NSS. Participation in expanded hours would be voluntary. The Board is proposing to extend the current 22x5 Fedwire Funds Service and NSS operating hours to 22x7x365 no sooner than two years after the implementation of the ISO 20022 message format for the Fedwire Funds Service, scheduled for March 2025. (See Section III for a further discussion on implementation considerations).

A key reason for considering a 22x7x365 expansion of Fedwire Funds Service and NSS operating hours is a faster and less costly implementation than a full 24x7x365 expansion, which would help achieve the Board’s safety and efficiency policy objectives for large-value payments in the nearer term. In addition, industry feedback to date underscored that investment in technical infrastructure modernization for participants to accommodate round-the-clock availability would pose challenges that could be reduced by a shorter move to 22x7x365 operating hours.

An expansion of Fedwire Funds Service and NSS operating hours to 22x7x365 could also reduce costs and risks to the industry and the Federal Reserve relative to an expansion to 24x7x365 operations. For example, an expansion to 22x7x365 operating hours could allow participants to gradually adapt to seven-day operations for wholesale payments, which could
reduce operational risks. Additionally, lessons learned from the expansion could be applied to the potential future development of full 24x7x365 operations for the Fedwire Funds Service and NSS.

D. Benefits, costs, risks, and other considerations

1. Benefits

Expanding current Fedwire Funds Service and NSS operating hours from five to seven days per week, each day of the year, could improve the safety and efficiency of both domestic and global large-value U.S. dollar payments. Domestically, expanded hours could allow systemically important financial market utilities (FMUs) (that is, a large-value payment service, securities and derivatives clearinghouses, and securities settlement services) and retail payment arrangements (that is, check clearinghouses, an ACH network, and an instant payment service) that leverage the Fedwire Funds Service and/or NSS to have broader options for settlement of time-critical payments. Settlement outside of traditional windows could reduce credit risk in certain FMUs and retail payment arrangements by narrowing the time gap between the creation of payment obligations and the discharge of those obligations in final funds, thereby reducing the potential for spillover effects in the financial system from settlement disruptions. To the extent that FMUs and retail payment arrangements operate outside of traditional windows, these firms could have the option to receive or send funds in central bank money seven days per week, potentially improving their operational efficiency or reducing the build-up of credit risk on days

20 Currently, the FedNow Service provides liquidity management transfer capability for FedNow participants and participants in a private-sector instant payment service to transfer funds to support instant payment liquidity needs during certain hours including when the Fedwire Funds Service is closed. While the hours of liquidity management transfers in FedNow might be adjusted if Fedwire Funds Service hours are expanded, transfers would remain available during the two-hour Fedwire Funds Service closure.
when Fedwire Funds Service and NSS are not currently operating. Expanded hours might also spur new or enhanced private-sector payment solutions that leverage the Fedwire Funds Service and/or NSS, or enable financial market trading and lending activity that previously could not be supported during weekend hours. Finally, as noted above, expanded hours for the Fedwire Funds Service and NSS alongside the FedNow Service would bring the benefits of near round-the-clock payments for large-value consumer and business payments, such as multi-million dollar business invoices, real estate transactions, and insurance payouts.

Expanded hours would also facilitate greater overlap and reduced gaps between the operating hours of the Fedwire Funds Service/NSS and key large-value payment services in other jurisdictions. This overlap and reduction in gaps would support more efficient cross-border payments through faster settlement and improved liquidity management. For example, some industry feedback highlighted the value of Sunday operating hours to support payment flows in the Middle East and North Africa region. Increased overlap in operating hours could provide more opportunities to settle cross-currency payments simultaneously via new or existing payment-versus-payment mechanisms and arrangements, thereby reducing settlement risk and potentially allowing for greater transparency in global foreign exchange (FX) markets. As explored in the "Committee on Payments and Market Infrastructures final report: Extending and aligning operating hours for cross-border payments", expansion of large-value payment system operating hours would also add to the current global settlement window (i.e., the time period during which the largest number of large-value RTGS systems are simultaneously operating).

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21 See the Committee on Payments and Market Infrastructures final report “Extending and aligning operating hours for cross-border payments,” available at https://www.bis.org/cpmi/publ/d203.pdf.

22 As explored in the "Committee on Payments and Market Infrastructures final report: Extending and aligning operating hours for cross-border payments", expansion of large-value payment system operating hours would also add to the current global settlement window (i.e., the time period during which the largest number of large-value RTGS systems are simultaneously operating).
foreign jurisdiction. Expanded operating hours would be consistent with the actions of other central banks, some of which have already undertaken an expansion of operating hours for their large-value payment services by targeting near or full 24x7x365 operations or by considering or positioning themselves for future expansion.23

2. Costs and risks

The potential benefits of expanding Fedwire Funds Service and NSS operating hours to 22x7x365 need to be weighed against potential costs and risks. Expanded hours would require operational and technical changes that would impose costs on the Reserve Banks and on institutions that participate in the Fedwire Funds Service and NSS. The magnitude of costs would vary by institution. Some institutions have cited the potential for significant costs related to upgrades of legacy infrastructure, as well as increased staffing, to support expanded hours. Others have indicated that costs would be more incremental because their institutions could build on existing infrastructure that they use to support 24x7x365 instant payments. The Board is seeking comment on the cost burden to industry stakeholders of moving to 22x7x365 operations, as well as costs related to potential 24x7x365 operations in the future. Reserve Bank costs are discussed in Section 3.a.

In addition to the potential financial impact, extending current operating hours to every day of the year could generate additional risks to participants, the Reserve Banks, and the U.S. financial system more broadly.24 For example, transferring funds to meet potential rapid deposit

23 See footnote 20 regarding Mexico, South Africa, India, Switzerland and the United Kingdom, for example.

24 It is anticipated that not all participants may choose to participate in the expanded weekend hours at launch. Please see section III.B. for a discussion of optional participation in a 22x7x365 operating environment of the Fedwire Funds Service and NSS.
outflows during weekends and holidays could exacerbate liquidity issues for a bank in crisis. This risk could have financial stability implications if large deposit outflows experienced by a single participant created contagion to other participants.

The two-hour window between 7:00 p.m. and 9:00 p.m. ET on Saturday and Sunday under the Board’s proposal to expanded hours would serve as a pause in transferring funds to meet deposit outflows. Participants experiencing outflows could potentially utilize this time period to implement liquidity and risk management measures to address outflows. The Board is seeking comments on the likelihood that expanding Fedwire Funds Service and NSS hours would exacerbate liquidity risks arising from deposit outflows, as well as any additional risk controls that would be needed during expanded hours. Relatedly, the Board recognizes that participants’ ability to access funding during expanded weekend and holiday hours will be important and seeks comments on the potential benefits and costs of extending discount window operations.

Expanded operating hours could also potentially increase operational and financial risks to participants and the Reserve Banks by expanding the time during which cyber-attacks or other operational disruptions could take place. While these risks are not new to the financial sector, the Board is seeking to understand the industry’s readiness to manage these types of risks on a near round-the-clock basis.

3. Other policy considerations

The proposed expansion of operating hours to 22x7x365 would constitute major enhancements to the Fedwire Funds Service and NSS. Under longstanding Board policy, any

25 See Section II.A. Proposal for the proposed operating hours on Saturday and Sunday.
potential new payment service or major enhancements to an existing service must meet the following criteria: (a) the Federal Reserve must expect to achieve full cost recovery of costs over the long run, (b) the Federal Reserve must expect that its providing the service will yield a clear public benefit, and (c) the service should be one that other providers alone cannot be expected to provide with reasonable effectiveness, scope, and equity. An analysis of these criteria is set forth below.

a. Cost recovery

Section 11A of the Federal Reserve Act, as added by the Monetary Control Act of 1980, requires that fees for Federal Reserve Bank payment services be set in accordance with the principle that, over the long run, those fees recover the costs of providing the services. In addition, Board policy specifies that each major service category offered by the Federal Reserve must separately satisfy the cost recovery objective of the Monetary Control Act: in the long run, aggregate revenues should match costs.

Initial analysis suggests that over the long run, the Reserve Banks would be able to recover the costs associated with the proposed 22x7x365 expanded operating hours. Discussions with industry stakeholders about the need for expanded hours to support cross-border activity, innovative use cases, and additional settlement opportunities for systemically important and

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27 Specifically, section 11A provides that, “[o]ver the long run, fees shall be established on the basis of all direct and indirect costs actually incurred in providing the Federal Reserve services priced, including interest on items credited prior to actual collection, overhead, and an allocation of imputed costs which takes into account the taxes that would have been paid and the return on capital that would have been provided had the services been furnished by a private business firm, except that the pricing principles shall give due regard to competitive factors and the provision of an adequate level of such services nationwide.” 12 U.S.C. 248a.

large-value transactions support the assumption that, over time, expanding Fedwire Funds Service and NSS hours would generate increases in volume and revenue. The Reserve Banks completed a cost estimate analysis that included system changes and additional staffing during the weekends. The Reserve Banks expect these costs would be offset by increased revenue, subject to various factors such as the competitive and/or economic environment in future years, new product enhancement opportunities, and potential Fedwire Funds Service and NSS pricing changes. In addition, Reserve Bank operational costs may be lower for expanded hours due to efficiency gains that could arise from leveraging operations and customer support staff that are already in place for the FedNow Service. The Board will conduct a full analysis of long-term cost recovery impacts to the Fedwire Funds Service and NSS based on input received on the proposal.

b. Public benefit

The Board believes the expansion of operating hours for the Fedwire Funds Service and NSS could have several important safety and efficiency benefits. From a domestic perspective, expanded hours could reduce credit risk and improve safety in the financial system by narrowing the time gap between the creation of payment obligations and the discharge of those obligations in final funds, improve operational efficiency in FMUs and retail payment arrangements, and spur innovations in large-value payments such as weekend interbank lending markets. From an international perspective, expanded hours would increase overlap and reduce gaps between the operating hours of the Fedwire Funds Service and NSS and other key large-value real time gross settlement systems internationally and would support greater efficiency in cross-border payments. Please see previous section II.D.1. for a full discussion of potential benefits.
c. Other providers

Board policy also requires that for any new service or major service change, the service should be one that other providers alone cannot be expected to provide with reasonable effectiveness, scope, and equity.29 Today, to provide final settlement, the private-sector large-value payment service relies on the Fedwire Funds Service to support its settlement process. Thus, this service would likely not be able to effectively expand its operating hours without a similar expansion in the operating hours of the Fedwire Funds Service. In terms of scope and equity, today the Fedwire Funds Service and NSS are broadly accessible to eligible financial institutions across the country on equal terms.30 Thus, the Federal Reserve could offer financial institutions similarly broad access to expanded operating hours.

III. Implementation Considerations

This section describes (A) the potential timeline for an expansion of the Fedwire Funds Service and NSS operating hours from 22x5 to 22x7x365, and considerations that will inform the final timeline, (B) considerations for optional participation in a 22x7x365 operating environment, (C) other potential enhancements to the Fedwire Funds Service and NSS, and (D) the availability of the discount window.

A. Timeline for Proposal

The implementation timeline for the expansion of operating hours to 22x7x365 and potentially to 24x7x365 in the future will depend on many factors, including the operational and

30 Depository institutions may access these services either directly (settling transactions in their Federal Reserve account) or indirectly (through another depository institution that acts as a correspondent bank for the institution).
technical challenges to the Federal Reserve and participants of implementing and adopting potential operating hours expansions, industry preferences related to timing, demand for 22x7x365 and 24x7x365 operating hours among participants, and interdependencies with other developments in the payments landscape. Should the Board decide to proceed with the proposed expansion to 22x7x365, it will consider these and other factors before determining the final timeline.

Based on initial industry outreach conducted after the 2022 *Federal Register* notice for the implementation of the ISO 20022 standard for the Fedwire Funds Service, there is broad consensus from stakeholders that expanding Fedwire Funds Service and NSS operating hours should not occur until after the implementation of the ISO 20022 standard for the Fedwire Funds Service scheduled for March 2025. Initial analysis suggests an expansion of Fedwire Funds Service and NSS operating hours to 22x7x365 could potentially be achieved no sooner than two years after the implementation of the ISO 20022 message format for the Fedwire Funds Service. As a result, if public comments in response to this notice indicate support for the proposed expansion to 22x7x365 operating hours for the Fedwire Funds Service and NSS, the Federal Reserve would expand operating hours to 22x7x365 no sooner than 2027.

In determining an implementation timeline for 22x7x365 operating hours, the Board will consider feedback received in response to this notice, including whether an interim step short of 22x7x365 would be desirable. Key feedback areas will include the extent to which participants would benefit from weekend operating hours for the Fedwire Funds Service and NSS being made available as soon as practicable, and the extent to which participants may need to adjust their staffing, internal systems, and processes to take advantage of weekend operating hours. Furthermore, the eventual timeline will also reflect interdependencies between the development
and adoption of expanded operating hours for the Fedwire Funds Service and NSS and other initiatives.

An expansion to full 24x7x365 operating hours for the Fedwire Funds Service and NSS is a possibility in the future. The Board is interested in collecting feedback from industry on constraints, preferences, and demand related to full 24x7x365 operating hours. If the Board does propose to expand operating hours further to 24x7x365, it would seek public comment in a separate proposal.

B. Considerations for optional participation in a 22x7x365 operating environment of the Fedwire Funds Service and NSS

In alignment with current service terms and in response to industry feedback from smaller institutions, participation in proposed 22x7x365 operating hours for the Fedwire Funds Service and NSS would be optional. Currently, a Fedwire Funds Service participant, for example, may decide not to be open to process payment orders sent to it over the Fedwire Funds Service during overnight hours. Similarly, an institution that participates in a private-sector clearing arrangement for which transactions are settled through NSS may be allowed under the rules of the clearing arrangement (i) not to send or receive transactions using the clearing arrangement during overnight hours (and thus not trigger any settlement obligations) or (ii) to instruct the agent for the NSS settlement arrangement not to include any debit or credit entries for the institution or other institutions for which it settles in any settlement files submitted to
NSS during that time.\textsuperscript{31} The Board believes the optionality should be maintained during any expanded hours.

If a participant chooses not to operate during some or all potential weekend and holiday operating hours of the Fedwire Funds Service, the participant might continue to receive payment orders through the Fedwire Funds Service, just as some participants today receive payment orders while they are not operating during overnight hours. If a participant chooses not to operate during the weekend or on a holiday, it would not be required to take action on any payment orders sent to it during those days if they are not funds-transfer business days for the participant. Alternatively, if a participant wishes to operate only during part of the weekend and holiday operating hours, it may set cutoff or closing times for its funds-transfer business day, after which it would not be required to take action on a payment order sent to it until its next funds-transfer business day.\textsuperscript{32} For NSS, if a participant does not settle transactions through the NSS settlement arrangement during weekend or holiday operating hours, it may be unable to send or receive transactions through the private-sector clearing arrangement during that time depending on the rules of the clearing arrangement.

Although optionality with respect to participation in a 22x7x365 operating environment may allow some participants to avoid certain costs associated with an expansion in operating hours of the Fedwire Funds Service and NSS, it may also present certain challenges. For example, a participant that chooses not to operate (that is, send payments), but continues to receive payments in its master account during certain Fedwire Funds Service operating hours,

\footnote{\textsuperscript{31} Only institutions that are settlers in an NSS settlement arrangement may settle debit or credit entries in an NSS settlement file. Settlers may settle debit or credit entries for their own account or on behalf of other institutions that participate in the private-sector clearing arrangement. Settlers must have their own master account.}

could become a source of trapped liquidity, which could lead to the participant’s counterparties implementing liquidity management measures such as restricting payments to the participant while they are offline.\textsuperscript{33} Further, such optionality could, over time, hinder broad adoption of expanded hours across the participant base, which could limit the full benefits of 22x7x365 Fedwire Funds Service and NSS. Notwithstanding these considerations, the Board is not contemplating a change to the participation model for Fedwire Funds Service and NSS.

C. Potential other enhancements to Fedwire Funds Service and NSS

While this notice focuses on the proposal to expand operating hours to 22x7x365, the Board recognizes there may be other enhancements to the Fedwire Funds Service and NSS that could be considered in the context of or in addition to expanded hours. For example, the possibility of a new participant directory feature that potentially provides a listing of participants open for transactions and at which times has been raised by participants. Other potential service enhancements center around further access to information, such as the improved ability for institutions to track payments from sender to beneficiary, and application programming interfaces (APIs) to access payments-related data. In addition, some institutions have raised the possibility of improved fraud controls or screening capabilities. Finally, a significant undertaking could entail the addition of a liquidity savings mechanism for the Fedwire Funds Service.\textsuperscript{34} The Board is seeking to understand such functionality considerations and others,

\textsuperscript{33} However, participants face this same challenge in the current operating environment of the Fedwire Funds Service and NSS, which provides similar optionality in participation.

\textsuperscript{34} A liquidity savings mechanism can be defined as a queuing arrangement for payments, which conditions the release of queued payments on the receipt of offsetting or partially offsetting payments, and as a result economizes on the use of participants’ cash balances.
including the priority institutions place on their development, particularly in relation to expanding operating hours.

D. Availability of the Discount Window

The Board recognizes banks’ ability to access funding during expanded weekend and holiday hours will be important and seeks comments on the need for discount window operations to support expanded hours. The Board stated in its 2019 notice related to the development of the FedNow Service that the Federal Reserve would conduct analysis on extending discount window operations to make overnight credit available on weekends and holidays. Subsequently, in its 2020 notice announcing the details of the FedNow Service, the Board noted that the need for overnight credit on weekend and holidays was expected to be limited initially, and the hours during which discount window loans could be originated would remain unchanged. This perspective was influenced by the expected low volumes for a new service as well as by the lower dollar value of FedNow Service transactions.

The Board recognizes that the combination of the FedNow Service maturing in the coming years and the Board’s proposal to expand Fedwire Funds Service and NSS operating hours, with limits of one penny less than $10 billion per payment order and one penny less than $10 trillion per settlement file, respectively, will increase the importance of accessing liquidity on weekends and holidays. The Board is seeking comment on the potential demand for liquidity via the discount window during expanded hours for the Fedwire Funds Service and NSS and

35 Discount window office hours vary by district, but typically begin at 8:00 or 8:30 a.m. local time and end when the Fedwire Funds Service closes at 7:00 p.m. ET.

36 See 85 FR 48522 (August 11, 2020) Liquidity management transfer functionality was included as a core part of the FedNow Service at the time of its launch.
whether its availability during certain defined hours on weekends and holidays would affect industry views on expanded hours.

**IV. Expanded Hours Impact on the Payment System Risk Policy (PSR policy)**

Part II of the PSR policy governs the provision of intraday credit (also known as daylight overdrafts) to institutions with accounts at the Reserve Banks and outlines the methods that Reserve Banks use to control credit risk associated with providing intraday credit. 37 Intraday credit supports the smooth functioning of the payment system by supplying temporary liquidity in order to cover shortages in institutions’ account that can result when the timing of payment inflows and outflows are not balanced. To be eligible for intraday credit, the PSR policy requires that an institution be “financially healthy” and have regular access to the discount window. Reserve Banks monitor financial and supervisory developments to determine an institution's eligibility for intraday credit and have several tools to control credit risk to Reserve Banks, including caps on intraday credit, incentivizing or in some cases requiring collateral, and the ability to monitor the institution’s account balance in real time and reject Fedwire Funds Service or NSS transactions.

The PSR policy allows for access to intraday credit up to 24x7x365. Therefore, if the Federal Reserve expands the operating hours of the Fedwire Funds Service and NSS, those institutions eligible to access intraday credit and electing to use the services would have access to intraday credit during the expanded hours. Reserve Banks would continue to use the same general framework to monitor institutions and control credit risk as they use in the current operating environment. Further, if the Federal Reserve expands Fedwire Funds Service and NSS

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37 The PSR policy is available at [https://www.federalreserve.gov/paymentsystems/psr_about.htm](https://www.federalreserve.gov/paymentsystems/psr_about.htm).
hours, the Board would continue to expect that institutions manage their master accounts in compliance with the Board’s Payment System Risk Policy and other Federal Reserve policies, including to avoid overnight overdrafts.  

If the Board finalizes this proposal to expand operating hours for the Fedwire Funds Service and NSS, it would also make any necessary updates to existing policies as well, including the PSR policy.

V. Exclusion of the Fedwire Securities Service

At this time, the Board is not considering expanding operating hours for the Fedwire Securities Service. The Board does not expect the proposed expansion of Fedwire Funds Service and NSS operating hours to create significant changes in secured lending, derivatives markets, or other market activity that would necessitate expanded operating hours for the Fedwire Securities Service in the near term. In part, this is because the aggregate value of transfers during current off-hours for the large-value payment services will likely be relatively low at the outset and thus unlikely to result in increased demand for securities transfers during those hours. It is possible that expanded hours for the Fedwire Funds Service and NSS could

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38 To minimize Reserve Bank exposure to overnight overdrafts, the Board charges a penalty fee to discourage institutions from incurring overnight overdrafts. See part III of the PSR policy. An institution would incur an overnight overdraft on each calendar day that its account balance is negative at 7:00 p.m. ET, which is the close of the business day. All institutions, regardless of the Reserve Bank payment services that they use, will incur an overnight overdraft penalty charge for each calendar day, including weekends and holidays, that an overnight overdraft is outstanding.

39 The Fedwire Securities Service is currently open for transfers between participants from 8:30 a.m. ET until 3:30 p.m. ET Monday through Friday, excluding holidays observed by the Reserve Banks. In addition, Fedwire Securities Service participants may reposition securities between their own securities accounts from 8:30 a.m. ET until 7:00 p.m. ET on those same weekdays.
influence markets in the longer-term, which could in turn increase demand for the Fedwire Securities Service during current off-hours.

The Board understands that expanding operating hours for the Fedwire Securities Service will require greater study and coordination with other FMUs, services, and institutions that are typically open alongside the service, such as securities pricing services and repurchase agreement service providers. The Board will continue to monitor activity in securities markets and seek feedback from institutions to determine whether to pursue in the future an expansion of Fedwire Securities Service operating hours.

VI. Competitive Impact Analysis

Board policy requires that the Board conduct a competitive impact analysis when considering changes to a service. The policy requires the Board to first determine whether there will be a direct and material adverse effect on the ability of other service providers to compete effectively with the Federal Reserve in providing similar services and then, if such an adverse effect is identified, to determine if that effect is due to differing legal powers or the Federal Reserve’s dominant market position deriving from such legal differences. Next, if such legal differences exist, then the proposed change would be further evaluated to assess its benefits and the proposal could be modified.40

40 See The Federal Reserve in the Payments System (issued 1984; revised 1990), Federal Reserve Regulatory Service 9–1558. The policy states, “The Board will also conduct a competitive impact analysis when considering an operational or legal change, such as a change to a price or service, or a change to Regulation J, if that change would have a direct and material adverse effect on the ability of other service providers to compete effectively with the Federal Reserve in providing similar services due to differing legal powers or constraints or due to a dominant market position of the Federal Reserve deriving from such legal differences. All operational or legal changes having a substantial effect on payments-system participants will be subject to a competitive-impact analysis, even if competitive effects are not apparent on the face of the proposal. In conducting the competitive-impact analysis, the Board would first determine whether the proposal has a direct and material adverse effect on the ability of other
The Board believes that an expansion of Fedwire Funds Service and NSS operating hours would not have a direct and material adverse effect on the ability of other service providers to compete effectively with the Federal Reserve. In particular, the Federal Reserve provides the only large-value payment services in the United States that allow settlement in central bank money. The main private-sector provider of large-value payment services and a number of depository institutions offered comments on a previous Federal Register notice noting that they would benefit from an expansion of Fedwire Funds Service operating hours.41 These organizations indicated that an expansion of Fedwire Funds Service operating hours would improve efficiency and reduce risk in conducting U.S. dollar payments and settlements and would support private-sector payments efforts in the United States. For instance, expanding Fedwire Funds Service operating hours could improve liquidity risk management for payment systems that rely on the Fedwire Funds Service for prefunding (for example, a private-sector instant payment service, a large-value payment service, and a foreign exchange settlement system). Accordingly, an expansion of Fedwire Funds Service and NSS operating hours is not expected to adversely impact any other service provider that competes with Federal Reserve payment services and could instead support their efficiency and resilience.

service providers to compete effectively with the Federal Reserve in providing similar services. Second, if such an adverse effect on the ability to compete is identified, the Board would then ascertain whether the adverse effect was due to legal differences or due to a dominant market position deriving from such legal differences. Third, if it is determined that legal differences or a dominant market position deriving from such legal differences exist, then the proposed change would be further evaluated to assess its benefits, such as contributing to payments-system efficiency or integrity or other Board objectives, and to determine whether the proposal’s objectives could be reasonably achieved with a lesser or no adverse competitive impact. Fourth, the Board would then either modify the proposal to lessen or eliminate the adverse impact on competitors’ ability to compete or determine that the payments-system objectives may not be reasonably achieved if the proposal were modified. If reasonable modifications would not mitigate the adverse effect, the Board would then determine whether the anticipated benefits were significant enough to proceed with the change even though it may adversely affect the ability of other service providers to compete with the Federal Reserve in that service.”

41 See comment letters submitted to the “Potential Federal Reserve Actions to Support Interbank Settlement of Faster Payments, Request for Comment,” 83 FR 57351.
VII. Request for Comment

The Board requests public comment on the entire proposal, and specifically on the following questions:

1. What are the primary benefits to the banking industry, financial markets, and broader economy from an expansion to 22x7x365 Fedwire Funds Service and NSS operating hours? What are the primary benefits to your institution?

2. What will be the primary sources of demand for expanded hours for the Fedwire Funds Service and NSS, from 22x5 to 22x7x365? What types of transactions or institutions are most likely to generate demand for the ability to make payments during weekend hours? What additional use cases could be satisfied with the expansion to full 24x7x365 operating hours? Would they represent sources of new and additional volume that could flow over the Fedwire Funds Service, a shift of existing volume over the service, or both?

3. How might expanded operating hours of the Fedwire Funds Service and NSS support private-sector innovation?

4. How does the existence of the FedNow Service affect your views of the benefits of expanded hours for the Fedwire Funds Service and NSS? How do you anticipate using these services in the future?

5. Do you prefer an interim expansion of operating hours before moving to 22x7x365? If so, what operating hours for the Fedwire Funds Service and NSS would be most useful for your institution? What considerations factor into your preference?

6. What is your preferred timeline for a potential expansion of Fedwire Funds Service and NSS operating hours to 22x7x365? What considerations factor into your preference (for
example, demand, time to implement changes, adjustments to staffing and internal systems, other major industry milestones or payment system improvements)?

7. Are you interested in full 24x7x365 operating hours for Fedwire Funds Service and NSS? If so, what is your preferred time frame for such an expansion of operating hours? What considerations factor into your preference?

8. What costs and risks would arise for the banking industry, financial markets, and broader economy from an expansion to 22x7x365 of Fedwire Funds Service and NSS operating hours? What are the costs and risks to your institution? What is the estimated incremental cost on a percentage basis to support 22x7x365 operating hours for the Fedwire Funds Service and NSS? What are the implications for competitiveness?

9. What are the ways in which benefits, costs, or risks of 22x7x365 Fedwire Funds Service and NSS could vary for different types of market participants (for example, for smaller institutions, non-traditional participants, or participants in particular time zones)?

10. Are there infrastructure-related market conditions or barriers (for example, the availability of short-term funding markets over the weekend) that may prevent or reduce your firm’s ability to fully achieve the potential benefits of 22x7x365 operating hours for the Fedwire Funds Service and NSS? If so, what are they? What steps might the industry and/or Federal Reserve take to remove such barriers?

11. The Federal Reserve plans to maintain the ability to opt out of expanded hours. How would the optionality with respect to participating in a 22x7x365 operating hours environment of the Fedwire Funds Service and NSS, as described in this notice, benefit or challenge your institution or the broader industry? What steps might the Federal
Reserve take to augment potential benefits? What steps might the Federal Reserve take to mitigate potential costs and risks?

12. How does your institution anticipate managing liquidity needs in an expanded hours environment? Is the availability of discount window loan originations on weekends and holidays a prerequisite for expanded operating hours for the Fedwire Funds Service and NSS? If so, should the discount window be available 22x7x365, or alternatively, during certain defined hours on weekends and holidays? During what hours should discount window loan originations be available?

13. What effects, if any, on funding market activity should be taken into account when considering the expansion of operating hours for the Fedwire Funds Service and NSS? Would the expansion of operating hours for the Fedwire Funds Service and NSS affect existing wholesale funding markets, including the repurchase market? Do you expect wholesale funding market activity to occur on weekends and holidays?

14. Describe any other enhancements or initiatives that the Reserve Banks should consider in addition to, or in the context of, expanded hours for the Fedwire Funds Service and NSS. How would such potential enhancements be used in the context of expanded hours? Are there any potential service enhancements that should be prioritized ahead of expanded hours?

15. Please describe any other consideration that you believe should be taken into account as the Board contemplates expansion of operating hours for the Fedwire Funds Service and NSS.
By order of the Board of Governors of the Federal Reserve System.

Ann E. Misback,
Secretary of the Board.

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