

FEDERAL RESERVE SYSTEM

[Docket No. R-0974]

**Enhancement of Federal Reserve
Net Settlement Payment Services**

AGENCY: Board of Governors of the Federal Reserve System.

ACTION: Notice of Proposed Service Enhancement; Request for Comment

SUMMARY: The Board is requesting comment on a proposal for the Federal Reserve Banks to offer an enhanced net settlement service to depository institutions. The proposed service would combine and improve selected features from the Reserve Banks' existing net settlement services.

Under the proposal, the Federal Reserve Banks would offer an enhanced and fully automated net settlement service that would provide participants in clearing arrangements using the service with finality of settlement intraday on the settlement date. The service would facilitate improvements in the operational efficiency of clearing arrangements by providing the settling participants in such arrangements with an on-line mechanism to submit an electronic file of settlement information to the Federal Reserve. Besides providing operational improvements, the enhanced service is intended to facilitate a reduction in the duration of settlement risk for private-sector clearing arrangements.

DATES: Comments must be received on or before August 11, 1997.

ADDRESSES: Comments should refer to Docket No. R-0974 and may be mailed to Mr. William W. Wiles, Secretary, Board of Governors of the Federal Reserve System, 20th Street and Constitution Avenue, N.W., Washington, D.C. 20551. Comments may also be delivered to the Board's mail room between 8:45 a.m. and 5:15 p.m. on weekdays, and to the security control room at all other times. The mail room and the security control room are accessible from the courtyard entrance on 20th Street between Constitution Avenue and C Street, N.W. Comments will be available for inspection and copying by members of the public in the Freedom of Information Office, Room MP-500, between 9:00 a.m. and 5:00 p.m. weekdays, except as provided in Section 261.8 of the Board's Rules Regarding Availability of Information.

FOR FURTHER INFORMATION CONTACT: Jeffrey Marquardt, Assistant Director (202/452-2360), Paul Bettge, Manager (202/452-3174), Myriam Payne, Senior Analyst (202/452-3219), Division of Reserve

Bank Operations and Payment Systems, Board of Governors of the Federal Reserve System; for the hearing impaired only, Telecommunications Device for the Deaf, Diane Jenkins (202/452-3544).

SUPPLEMENTARY INFORMATION:

I. Background

The Federal Reserve Banks provide a variety of services to depository institutions. Included among these services are the distribution of currency and coin, the processing and collection of checks, wire transfers of funds, wire transfers of securities against payment, and automated clearing house (ACH) payments. In addition, the Federal Reserve Banks support a variety of clearinghouses and other clearing arrangements by providing net settlement services to depository institutions that participate in the arrangements.

Clearinghouses and similar arrangements for checks and for electronic payments, such as ACH, Automated Teller Machine (ATM), and Point-of-Sale (POS) networks, have typically been organized as groups of three or more participating depository institutions that exchange payment instructions, account for the value exchanged, and settle balances on a multilateral net basis. These settlements are a critical function of the clearing arrangements. Typically, a net amount is computed that represents the difference between what is owed by each participant to all others from the exchange of payment instructions during a netting cycle and what all others owe the participant. For some participants, the difference is a net debit. For others, the difference is a net credit. These multilateral differences are then settled by participants. The Reserve Banks' net settlement services facilitate settlements by providing mechanisms for transferring funds between the Federal Reserve accounts of the settling participants in a clearing arrangement.¹

Currently, two types of net settlement services are offered by the Reserve Banks. In the first, which is the

¹A settling participant in a clearinghouse that uses a Reserve Bank net settlement service is a depository institution whose account at a Reserve Bank is debited or credited in order to transfer the funds needed to complete settlements. In contrast, non-settling participants typically conduct settlements through a settling participant.

traditional model of the Reserve Banks' net settlement service, a settlement sheet (in either paper or electronic form) containing the net position (net debit or credit) of each settling participant in a clearing arrangement is typically provided by the arrangement, or a settlement agent, to a Reserve Bank on the settlement day (day T). Net debits and credits are then posted (often manually) by the Reserve Bank to participants' Federal Reserve accounts on day T. Posted credits represent available funds for the purposes of intraday cash management and overnight reserve management.²

Many Reserve Banks, however, reserve the right to reverse settlement debits and credits, if a settlement debit posted to a Federal Reserve account is not covered by the morning, or in some cases, early afternoon, of day T+1. This methodology creates the possibility of a settlement failure for a clearing arrangement on day T+1 with respect to the settlement on day T. Further, because these dating conventions refer to banking days, day T+1 may occur on the third or even fourth calendar day following settlement, after a holiday weekend. This policy of providing next-day finality increases the duration of settlement risk for private sector clearing arrangements.

In 1990, the Board approved a second type of net settlement service for national, small-dollar clearing and settlement systems. This service provides same-day finality (day T) to participants and was modeled after the CHIPS (Clearing House Interbank Payments System) settlement arrangement, which was established in 1981. The service is currently available to private ACH as well as check clearinghouses.

To accomplish settlement in these arrangements, the clearinghouse staff informs participants of their respective net settlement debit or credit position on day T. Settling participants with a net debit position send Fedwire funds transfers to a special settlement account at a designated Reserve Bank by a specified deadline. Once all debits have been covered, clearinghouse staff sends Fedwire funds transfers from the special settlement account to the Federal Reserve accounts of settling participants with a net credit position. This process is completed during the banking day on day T, under normal circumstances.

II. Advantages and Disadvantages of Current Services

²The posting time for net settlement entries is chosen by each clearing arrangement within the requirements of the Board's "Daylight Overdraft Transaction Posting Rules" (FRRS 9-1000).

Traditional service - The main advantage of the traditional next-day net settlement service is that it is familiar to clearinghouses and inexpensive for clearinghouses and participants to use. The main disadvantage of this service is that it increases the duration of settlement risk to clearinghouse participants and their customers. Another disadvantage is that some versions of this service use unsophisticated security methods to ensure authenticity, as well as to safeguard the integrity, of the settlement information.

The traditional next-day settlement service evolved from the existing Federal Reserve accounting application to maximize operational simplicity and minimize operating costs for users. As a result, a disadvantage of the traditional service to Reserve Banks is that automated risk-management tools for checking balances on day T were not part of the design. Instead, to help control credit risk, the Reserve Banks rely on the right to reverse net settlement entries on day T+1, if a clearinghouse participant cannot cover a settlement debit to its account.

Further, as interstate branch banking increases and the Federal Reserve policy of granting one Federal Reserve account per chartered bank, including banks with interstate branches, is phased in next year, more clearinghouses will need to conduct net settlements on an interdistrict basis. Without effective automated mechanisms to monitor and control credit risk at the time it is incurred on the settlement day, the Reserve Banks could be exposed to heightened risk.

Fedwire-based service - The main advantage to the private sector of the current Fedwire-based national net settlement service is that it provides intraday finality to clearinghouse participants and their customers on the settlement day. The main disadvantage is that it is logistically complex for certain clearing arrangements. For example, a settlement for a clearinghouse with a large number of participants would involve hundreds of individual Fedwire funds transfers having to be sent and received within narrow time frames, and with limited coordination, in order to complete scheduled settlements. In contrast, for the net settlement service with next-day finality, Reserve Bank staff posts entries to settling participants' Federal Reserve accounts in order to simplify the settlement process and help ensure its orderly completion.

The main advantage to the Federal Reserve of the current Fedwire-based service is that Reserve Banks have significantly greater control over credit risk because of the use of Fedwire and the associated (intraday) Account Balance

Monitoring System. Fedwire funds transfers can be monitored in real time against available account balances.³ Transfers that would cause overdrafts beyond established parameters can be rejected. These capabilities permit Reserve Bank risk managers to perform automated intraday risk management on day T, when settlement information becomes available and before settlement entries are posted to Federal Reserve accounts.

III. Proposed Net Settlement Service Enhancement

The Board proposes to enhance the net settlement services offered by the Reserve Banks to depository institutions. A net settlement service would be offered to depository institutions that would require the settling participants in a clearing arrangement, or their agent, to submit electronically to a designated Reserve Bank a file containing a net debit or credit for each participant. A Fedline terminal or other on-line mechanism would be used for submitting settlement files. Each settlement file would be identified by a code unique to that clearing arrangement and that particular settlement file.⁴ Files could be submitted at any time during an 8:30 a.m. to 4:00 p.m. Eastern Time (ET) settlement window, although each clearing arrangement would be expected to indicate a regular deadline for submitting its settlement files.

The service would include controls to ensure that a file has been submitted by a party authorized by the clearing arrangement, that the file contains net settlement entries for authorized settling participants only, that the sum of the net settlement debits equals the sum of the net settlement credits, and other edits. Once all initial edits have been completed, the service would check the Federal Reserve account balance of each settling participant with a net debit position. If it is determined that sufficient balances are available to fund a participant's net debit, the Federal Reserve account of the participant would be debited and funds would be transferred to a settlement account held on the books of the designated Reserve Bank on behalf of the settling participants for the clearing arrangement. The transfer of funds from the Federal Reserve account of a settling participant in a net debit position would

³As used throughout this Federal Register notice, the term "available account balance" refers to a depository institution's Federal Reserve account balance plus any available intraday credit.

⁴The service would support clearing arrangements that perform one or more settlements per day.

be treated as a final and irrevocable transaction from the perspective of that settling participant. Once the Federal Reserve accounts of all settling participants with net debit positions have been debited and the settlement account has been fully funded, the service would transfer funds out of the settlement account and credit the Federal Reserve account of each settling participant having a net credit position.⁵ These transfers would also be final and irrevocable.

The service might be designed to offer clearing arrangements different options to address potential situations in which a settling participant in a net debit position did not have sufficient balances in its Federal Reserve account to fund its settlement obligation. Under one scenario, the Federal Reserve would notify the designated agent for the clearing arrangement that settlement could not be completed and the service would automatically return funds from the settlement account to the settling participants whose Federal Reserve accounts had been debited. If desired, the agent could submit a revised settlement file to the Reserve Bank for processing.

Under a second scenario, the service would offer features that provide for one or more attempts to complete settlement without requiring the resubmission of settlement data (retry feature). The retry feature would allow the service (automatic retry) or the agent (optional retry) to attempt to debit the account of a settling participant with a net debit position multiple times until the debit is either covered or a predefined time interval has expired.

Under a third scenario, the clearing arrangement would request that the service retain the funds in the settlement account for a period of time awaiting specific instructions from the clearinghouse agent. Depending on the final design of the proposed service, the agent might be able to direct the transfer of additional funds to the settlement account in order to complete the settlement, for example, by drawing on a preestablished line of credit. The settlement agent might also have the ability to request that funds in the settlement account be transferred to the account of a predetermined depository

⁵For purposes of measuring the daylight overdraft positions of settling participants, the net debit and net credit entries would be posted to participants' Federal Reserve accounts on a flow basis, as they are processed. In the net settlement service with next-day finality currently offered by the Reserve Banks, all net debit and net credit entries are posted at one predefined time chosen by the clearinghouse.

institution to hold overnight for the purpose of attempting to complete settlement the next business day.

In any event, after a predefined period of time, if settlement could not be completed, action would be taken to transfer funds out of a settlement account either by returning them to participants or by transferring funds to a designated depository institution. As noted above, the settlement agent would likely be permitted to submit a revised settlement file in the event of a settlement failure.

Extensions of the settlement window might be granted to accommodate operational disruptions or temporary funding problems. However, these occurrences are expected to be rare and not to extend beyond the operating hours of the Fedwire funds transfer service.

The enhanced service would improve the quality of the current net settlement services offered by the Reserve Banks in two important ways. First, it would improve operational efficiency and reduce the operational risks of conducting settlements with same-day finality by offering a settlement service with same-day finality that does not require the sending and receipt of individual Fedwire funds transfers. Instead, the proposed service would permit a clearinghouse or a settlement agent to submit settlement data to a Reserve Bank, as is now permitted in the traditional, next-day settlement service. This feature would help ensure that settlement debits and credits are addressed according to agreed procedures and in a timely and coordinated manner.

Second, the proposed service would reduce the duration of settlement risk to participants in clearing arrangements by providing finality for credits virtually immediately after it has been determined that sufficient balances to settle are available in the Federal Reserve accounts of the settling participants on day T. If widely employed, the enhanced service could significantly reduce the duration of settlement risk for check and ACH clearinghouses and other clearing arrangements.

To manage and limit risk to the Reserve Banks, the enhanced service would incorporate effective credit risk monitoring procedures and controls, which involve the automated checking of Federal Reserve account balances, before final intraday settlement debits and credits are posted to settling participants' Federal Reserve accounts. As currently envisioned, the credit risk monitoring controls would be as robust as those used currently in the Fedwire-based net settlement model.

The Board expects that the proposed service would meet a number of key requirements. In particular, the proposed service should:

1. Provide a standardized nationwide net settlement service to private-sector clearing arrangements that also supports interdistrict net settlements;
2. Reduce settlement risks to participants in clearing arrangements that use the service, and to their customers, by providing final settlement on the same day that settlement information is submitted (day T);
3. Control and minimize credit risk to the Reserve Banks and the potential for settlement disruptions by using appropriate account balance monitoring tools to check balances in depository institution Federal Reserve accounts before granting finality to settlement entries;
4. Improve operational efficiency for participants in clearing arrangements by offering a service that does not require the sending of individual Fedwire funds transfers by participants to achieve settlement;
5. Provide a mechanism that facilitates the timely completion of daily settlements and that accommodates well-defined options for clearing arrangements to achieve orderly settlements in the event of settlement problems;
6. Enhance data security, including access controls, by including appropriate tools and procedures in a uniform, automated system;
7. Improve analysis of settlement activity and trends over time by incorporating statistical reporting capabilities; and
8. Provide for a clear legal basis and uniform understanding of the terms and conditions under which the service is offered by developing a standard Federal Reserve operating circular.

Time frame for implementation. The Federal Reserve expects to make the necessary system changes to be able to offer the proposed net settlement service by the end of 1998.

IV. Request for Comment

The Board requests comment on all aspects of the proposed service enhancement. The Board is also requesting specific comments on the following questions:

1. If the proposed service with same-day finality is offered, should the Federal Reserve continue to offer its existing net settlement service with next-day finality? What features, if any, of the existing service with next-day finality would make it preferable to some clearing arrangements over the proposed service with same-day finality?
2. If the proposed service is offered, should the Federal Reserve continue to offer the Fedwire-based net settlement service with same-day finality that is currently offered to national, small-dollar clearinghouses for check and ACH transactions?
3. If the proposed service is offered, files of settlement data would be submitted to a Reserve Bank for processing in a well-defined period during which the service would be available. If files were generally accepted between 8:30 a.m. and 4:00 p.m. ET, would this service period be adequate to support current and future needs of potential users of the service? Should there be a capability for the receipt and storage (also known as "warehousing") of settlement files prior to the opening of the settlement window? If files can be warehoused prior to the opening of the settlement window, what is the maximum period during which the service should permit files to be warehoused (for example, for a specified number of hours less than one business day, or possibly for one or more business days prior to the beginning of the settlement window)?
4. In order to provide high levels of data security, as well as operational efficiency, would it be reasonable to require clearing arrangements or their settlement agents to use a Fedline device, or other on-line electronic mechanism, to submit settlement data?
5. In the current Fedwire-based net settlement service with same-day finality, a settlement account is established at a Reserve Bank and a settlement agent for a clearing arrangement has the capability of monitoring whether individual participants have transferred funds to the settlement account to cover their settlement debits. In the

proposed service, should a similar monitoring capability be provided to a settlement agent?

6. As described in Section III above, the settlement file submitted to the net settlement service would contain only net settlement debits or credits for settling participants in a clearing arrangement. Should value-added services be offered that would provide information to settling participants regarding the individual settlement debit or credit positions of non-settling participants for which they settle? Should value-added services be offered that would provide a non-settling participant with information regarding its individual net debit or credit position?

7. In the event that a settlement account cannot be fully funded in the first automated attempt to debit the Federal Reserve accounts of settling participants, should the proposed service offer features that provide for one or more additional attempts to complete settlement without requiring the resubmission of settlement data (retry feature) or should the service automatically return all funds to the settling participants that have transferred funds to the settlement account and notify the agent that a settlement cannot be completed? Some of the retry features being considered are:

a. an automated retry feature that would attempt to debit the account of a settling participant with a net debit position multiple times during a predetermined time interval until the debit is either covered or a predefined time interval has expired;

b. a retry feature controlled by a settlement agent for the clearing arrangement that would allow the agent to instruct electronically the service to retry the debiting of accounts of settling participants that have not covered their net debits (the number of retries and the time interval between retries would be controlled by the agent within a "retry window" provided as part of the service).

8. If the service is designed with retry capabilities as described in the question above, how long should the retry window be (for example, 15 minutes, one hour)? In addition to the retry window, should there be a maximum number of retry attempts designated after which, if the settlement is not completed, funds in the settlement account would be returned to the appropriate settling participants?

9. In the proposed service, should the debit and credit entries to the Federal Reserve accounts of the settling participants be considered funds transfers under Regulation J and other laws applicable to funds transfers?

10. In the case of a default by a settling participant, should the service provide the capability for another settling participant or depository institution to transfer additional funds (for example, from a preestablished line of credit or other liquidity facility) into the settlement account in order to complete the settlement?

11. To what types of clearing arrangements should the proposed service be offered (for example, check clearinghouses, ACH clearinghouses, ATM networks, POS networks, credit card arrangements, or clearing arrangements for emerging types of electronic payment transactions)? Should the service potentially be available for conducting money settlements between depository institutions in connection with arrangements for clearing financial contracts in the wholesale financial markets or for conducting interbank settlements of obligations arising from nonfinancial markets?

Competitive Impact Analysis:

The Board has established procedures for assessing the competitive impact of rule or policy changes that have a substantial impact on payments system participants.⁶ Under these procedures, the Board will assess whether a 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 differences. If no reasonable modifications would mitigate adverse competitive effects, the Board will determine whether the anticipated benefits are significant enough to proceed with the change despite the adverse effects.

The Board's proposed enhancements to the net settlement service are intended to improve the clearance and settlement process for private sector clearing arrangements by increasing the efficiency of the services currently offered by the Federal

⁶These procedures are described in the Board's policy statement "The Federal Reserve in the Payments System," as revised in March 1990. (55 F.R. 11648, March 29, 1990).

Reserve and by reducing the duration of settlement risk to private-sector participants in such arrangements. The proposed net settlement service could indirectly enhance the ability of private-sector depository institutions to compete with the Reserve Banks in the provision of payment services such as check and ACH clearing.

The risk management features that would be implemented for the enhanced service would help protect the Federal Reserve Banks from the risk of loss. Certain features would help provide for orderly settlements in case of settlement difficulties. Overall, the Board believes that the proposed enhancements to the Federal Reserve's net settlement services would increase efficiency and reduce risk for private-sector clearing arrangements and their participants, while providing for the more efficient management of risk by the Reserve Banks.

Paperwork Reduction Act:

No collection of information pursuant to the Paperwork Reduction Act (44 U.S.C. 3501 et seq.) is contained in this notice.

By order of the Board of Governors of the Federal Reserve System, June 9, 1997.

William W. Wiles
Secretary of the Board