FEDERAL RESERVE BANK
OF NEW YORK

[Circular No. **10761**
January 18, 1995]

PAYMENT SYSTEM RISK REDUCTION

Policy Statement on Privately Operated Large-Dollar Multilateral Netting Systems

To All Depository Institutions, and Others Concerned, in the Second Federal Reserve District:

Following is the text of a press release by the Board of Governors of the Federal Reserve System:

The Federal Reserve Board has approved a policy statement on "Privately Operated Large-Dollar Multilateral Netting Systems" as part of its overall payment system risk reduction program.

The policy statement is effective immediately.

The statement incorporates the minimum standards for the design and operation of privately operated large-dollar multilateral netting systems set forth in the *Report of the Committee on Interbank Netting Schemes of the Central Banks of the Group of Ten Countries* (Lamfalussy Report), which was published in November 1990 by the Bank for International Settlements.

Multilateral netting systems, including clearing house arrangements, have the potential to improve the efficiency of interbank settlements by reducing the costs of credit, liquidity, and operations. However, these systems concentrate settlement and operational risks at a single point in the financial system. The standards set out in the Lamfalussy Report are designed to provide a set of minimum standards that permit the advantages of multilateral netting to be gained, while controlling systemic risks.

The Board's policy statement generally applies to domestic, privately operated, large-dollar multilateral netting systems; offshore large-dollar multilateral payment netting systems; multilateral foreign exchange clearinghouses involving settlements in U.S. dollars; and multicurrency payment netting systems involving settlements in U.S. dollars.

At this time, the Board is not applying this policy statement to privately operated large-dollar multilateral netting systems for batch processed paper-based or electronic payments. However, the Board intends to study further the implications of the standards contained in this policy statement as well as other risk management standards for such systems.

Printed on the following pages is the text of the Board's official notice in this matter, including the changes in the policy statement, as submitted for publication in the *Federal Register*. Questions may be directed, at this Bank, to Michael S. Nelson, Counsel (Tel. No. 212-720-8839) or Christopher J. McCurdy, Senior Vice President (Tel. No. 212-720-5446).

William J. McDonough,
President.

FEDERAL RESERVE SYSTEM

[Docket No. R-0842]

Policy Statement on Privately Operated

Large-Dollar Multilateral Netting Systems

AGENCY: Board of Governors of the Federal Reserve System.

ACTION: Policy Statement.

SUMMARY: As part of its payment system risk reduction program, the Board of Governors is updating its policies on "Privately Operated Large-Dollar Funds Transfer Networks" and "Offshore Dollar-Clearing and Netting Systems" and integrating those policies into a single policy statement on "Privately Operated Large-Dollar Multilateral Netting Systems." The Board is incorporating into the new policy statement the minimum standards for the design and operation of privately operated large-dollar multilateral netting systems set forth in the Report of the Committee on Interbank Netting Schemes of the Central Banks of the Group of Ten Countries, which was published in November 1990 by the Bank for International Settlements.

EFFECTIVE DATE: December 21, 1994.

FOR FURTHER INFORMATION CONTACT: Jeffrey C. Marquardt, Assistant Director (202/452-2360), Paul Bettge, Manager (202/452-3174), Kelly Shaw, Project Leader (202/452-3054), Division of Reserve Bank Operations and Payment Systems; or Oliver Ireland, Associate General Counsel (202/452-3625), Stephanie Martin, Senior Attorney (202/452-3198), Legal Division, Board of Governors of the Federal Reserve System; for the hearing impaired only, Telecommunications Device for the Deaf, Dorothea Thompson (202/452-3544).

SUPPLEMENTARY INFORMATION:

I. Background

On July 18, 1994 the Board issued for public comment a proposal to update its existing policies on "Privately Operated Large-Dollar Funds Transfer Networks" and "Offshore Dollar-Clearing and Netting Systems" and to integrate those policies into a single policy statement on "Privately Operated Large-Dollar Multilateral Netting Systems." (59 Fed. Reg. 36438) At the same time, the Board proposed to apply to such arrangements the minimum standards for multilateral netting systems identified in The Report of the Committee on Interbank Netting Schemes of the Central Banks of the Group of Ten Countries (Lamfalussy Report).

The proposed policy statement was developed to apply to such arrangements as domestic, privately operated, large-dollar multilateral payment netting systems; offshore large-dollar multilateral payment netting systems; multilateral foreign exchange clearinghouses involving settlements in U.S. dollars; and multicurrency payment netting systems involving settlements in U.S. dollars. Application of the policy statement to such arrangements would cover more completely the range of multilateral netting systems involving settlements in U.S. dollars that have the potential to increase systemic risk in the financial markets. The inclusion of multilateral foreign exchange clearinghouses and multicurrency payment netting systems involving settlements in U.S. dollars represented an expansion of the Board's existing PSR policy. Neither of these types of arrangements is covered explicitly by the Board's current policy, yet both types of arrangements have the potential to generate the same kinds of systemic risks as single currency netting systems.

II. The Proposed Policy Statement

The Board requested comment on a policy statement that would apply to multilateral netting systems that: (1) have three or more participants that net payments or foreign exchange contracts involving the U.S. dollar, whether or not netted amounts are legally binding; and either (2) have, or are likely to have, on any day, settlements with a system-wide aggregate value of net settlement credits (or debits) larger than $500 million (in U.S. dollars and any foreign currencies combined); or (3) routinely process individual payments or foreign exchange contracts, with a stated dollar value larger than $500,000. Further, a multilateral netting system that met the above threshold criteria would be subject to the policy if (1) it were a state-chartered member of the Federal Reserve System, (2) any of its agent(s) or participants were state-chartered members of the Federal Reserve System, (3) its participants' net positions were settled through a Federal Reserve settlement account, (4) its participants settled their net positions in the multilateral netting system through their individual Federal Reserve accounts or the Federal Reserve account of the settlement agent(s), or (5) one or more bank holding companies had an investment in the multilateral netting system.

The Board recognized that in the case of privately operated large-dollar multilateral netting systems for batch processed paper-based or electronic payments, including privately operated Automated Clearing House (ACH) systems, certain electronic controls that would be required to implement the Lamfalussy Minimum Standards might not be feasible. In addition, the characteristics of the instruments cleared in such systems, along with the scale of systemic risk, might differ from large-dollar electronic systems. Consequently, the Board proposed to study further the implications of the Lamfalussy Minimum Standards, and various arrangements that might be used to implement the Lamfalussy Minimum Standards, for privately operated multilateral netting systems for batch processed paper-based or electronic payments.

The proposed policy statement also contained five risk management measures that large-dollar multilateral netting systems would be expected to utilize in order to satisfy Lamfalussy Minimum Standards III and IV, which deal with risk management and settlement completion. The risk management measures were: (1) require each participant to establish bilateral net credit limits vis-à-vis each other participant in the system; (2) establish and monitor in real time system-specific net debit limits; (3) establish a system to reject or hold any payment or foreign exchange contract that would exceed the relevant bilateral and net debit limits; (4) establish liquidity resources, such as cash, committed lines of credit secured by collateral, or a combination thereof, at least equal to the largest single net debit position; and (5) establish rules and procedures for the sharing of credit losses among the participants in a netting system.

The Board proposed an eighteen-month transition period for large-dollar multilateral netting systems operating on the date of any final action by the Board, following which such systems would be expected to comply fully with the policy statement. Large-dollar multilateral netting systems established subsequent to the date of final adoption of the policy by the Board would be expected to comply fully with the policy statement, without benefit of a transition period.

Finally, the Board requested comment on the application of a higher standard than Lamfalussy Minimum Standard IV for individual large-dollar multilateral netting systems that present a high degree of systemic risk. Lamfalussy Minimum Standard IV states that "multilateral netting systems should, at a minimum, be capable of ensuring the timely completion of daily settlements in the event of an inability to settle by the participant with the largest single net debit position." The Board requested comment on whether certain systems should be expected to ensure settlements in the event, for example, that participants with the first, second, and third largest net debit positions are simultaneously unable to settle these positions. The Board also asked what factors should be considered in analyzing the incremental costs and benefits of requiring multilateral systems to meet a higher standard, and whether a quantitative threshold should be employed to identify systems that might present a high degree of systemic risk.

III. The Final Policy Statement

The final policy statement adopted by the Board, with slight modifications, is essentially unchanged from the draft policy statement issued last July. The Board has made certain technical modifications to the policy statement to clarify both the threshold criteria for identifying multilateral netting systems subject to the policy and the risk management measures for implementing Lamfalussy Minimum Standards III and IV. These modifications are discussed below.

Scope and Application of the Policy. The Board has retained the threshold criteria, with one modification, for identifying multilateral netting systems that are subject to the policy. In order to specify more clearly the size of transactions that give rise to the application of the policy statement, the criterion that systems "routinely process" transactions with a stated value larger than $500,000 has been changed to "...process payments or foreign exchange contracts, with a daily average stated dollar value, calculated over the twelve month period corresponding to the most recent fiscal year for the netting system, larger than $100,000." The jurisdictional criteria for applying the policy remain unchanged. Taken together, these criteria are designed to limit the scope and application of the policy to large-dollar multilateral netting systems for payments and foreign exchange contracts that involve settlements in U.S. dollars and have the potential to increase systemic risk in financial markets.

The Board believes that the Lamfalussy Minimum Standards may apply to all large-dollar multilateral payment netting systems irrespective of the type of financial instrument or contractual obligation netted by the system. However, the Board recognizes that in the case of privately operated large-dollar multilateral netting systems for batch processed paper-based or electronic payments, including privately operated Automated Clearing House (ACH) systems, certain electronic controls that would be required to implement the Lamfalussy Minimum Standards may not be feasible. Further, the rights and responsibilities of parties within such systems may require further analysis. Thus, the Board intends to study further the implications of the Lamfalussy Minimum Standards, and various arrangements that might be used to implement the Lamfalussy Minimum Standards, for privately operated large-dollar multilateral netting systems for batch processed paper-based or electronic payments. The Board is not, therefore, applying the Lamfalussy Minimum Standards to these systems at this time.

Implementation of the Lamfalussy Minimum Standards. The Board believes that large-dollar multilateral netting systems, whether on-shore or off-shore, should meet in full the Lamfalussy Minimum Standards, as set forth in the final policy statement. The Board's policy statement retains the five risk management measures contained in the proposed policy statement that multilateral netting systems may utilize to satisfy Lamfalussy Minimum Standards III and IV, which deal with risk management and settlement completion. Risk management devices that lead to a substantially equivalent degree of risk management and control could also be adopted, as approved by the Board on a case-by-case basis.

The Board's final policy statement makes it clear that multilateral netting systems utilizing a central counterparty would be expected to satisfy the risk management measure relating to bilateral net credit limits through the establishment by the central counterparty of net credit limits vis-à-vis each participant. In addition, each participant would be expected to establish a bilateral net credit limit for the central counterparty.

The Board has clarified its final policy statement to encourage large-dollar multilateral netting systems to establish a capability to simulate the effect on liquidity resources and risk management controls of one or more defaults by existing participants, as well as the effects of adding additional participants or products to the system. In addition, the Board has further encouraged large-dollar systems for contract netting to conduct simulation analyses of forward replacement cost risk under different assumptions about changes in market prices, volatilities, and other factors.

The Board has not adopted at this time a specific higher standard for multilateral netting systems that may present a high degree of systemic risk. Although the Board believes that it might be appropriate for such systems to meet additional standards beyond the six Lamfalussy Minimum Standards, the costs and benefits of meeting a higher standard remain unclear. Public comments, however, appear to indicate a consensus that higher standards would be appropriate when the costs are justified. Thus, the Federal Reserve will continue to work on a case-by-case basis with individual large-dollar multilateral netting systems it believes present a potentially high degree of systemic risk, by virtue of their high volume of large-value transactions or central role in the operation of the financial markets, in order to determine whether higher risk standards, including the ability to ensure settlement in the event of multiple defaults, would be appropriate. In no event, would systems be discouraged from adopting higher standards based on specific risk assessments. The Board will continue to review the experience of netting systems with risk management measures to deal with multiple defaults.

Timeframe for Implementation of the Lamfalussy Minimum Standards. Consistent with its earlier proposal, the Board's final policy statement retains an eighteen-month transition period for large-dollar multilateral netting systems that are operating on or before December 21, 1994. Such systems will be expected to comply fully with the policy statement within the eighteen-month transition period. Large-dollar multilateral netting systems established subsequent to December 21, 1994 will be expected to comply fully with the policy statement, without benefit of a transition period.

IV. Summary of Comments

The Board received twenty-one public comment letters on its proposed policy statement.[1] The commenters were distributed as follows:

Type of institution	**Number**
Clearing Organizations and Associations	10
Commercial Banking Organizations	5
Trade Associations	3
Retail Payment Networks	2
Regulatory Agencies	1
Total	21

General Comments. Twelve commenters did not respond to the application of the Lamfalussy Minimum Standards to large-dollar multilateral payment netting systems, but instead stated opposition to the application of the standards to large-dollar multilateral netting systems for batch processed paper-based or electronic payments. Some of these commenters provided important insights into the operational characteristics of such systems. These commenters noted further that the National Organization of Clearing Houses (NOCH) and the National Automated Clearing House Association (NACHA) have jointly organized a "Settlement Risk Management Task Force," the mandate of which is to conduct an analysis of "the systemic and liquidity risks associated with the clearing and settlement of batch payment transactions like ACH entries and checks." One of the twelve commenters proposed that the Board exclude batch systems from the minimum standards until it has examined further systemic risk in these systems rather than grant a temporary exemption. Another commenter proposed that the criteria that delimit the application of the policy be designed explicitly to exclude large-dollar multilateral netting systems for batch processed paper-based and electronic payments.

The Board stated in its request for comment that certain electronic controls that would be required to implement the Lamfalussy Minimum Standards might not be feasible for large-dollar multilateral netting systems for batch processed paper-based and electronic payment systems and that the rights and responsibilities of parties within such systems might require further analysis. As noted above, the Board is not applying the Lamfalussy Minimum Standards to large-dollar multilateral netting systems for batch processed paper-based and electronic payments at this time. Moreover, the Board intends to monitor closely the discussions and analysis of the NOCH/NACHA task force to supplement the Board's analysis of appropriate risk management measures for such systems.

The remaining nine commenters generally supported the adoption of the Lamfalussy Minimum Standards in the Board's policy statement on large-dollar multilateral netting systems. These commenters also stated that a specific higher standard for controlling risks in systems with a high degree of systemic risk should not be implemented as this time.

Specific Issues on which the Board Sought Comment.

1. Proposed criteria for identifying large-dollar multilateral netting systems subject to the policy statement.

The commenters generally agreed with the proposed criteria. One commenter suggested that the Board clarify whether exchange clearing systems for derivatives other than futures and options, such as interest rate swaps, would be subject to the proposed policy. The Board believes that the Lamfalussy Minimum Standards provide a useful starting point for the analysis of large-dollar multilateral netting systems irrespective of the type of financial instrument or contractual obligation netted by the system. It is premature, however, to determine whether the Lamfalussy Minimum Standards provide a sufficient framework for the development of

[1] This total does not include comment letters sent by Federal Reserve Banks.

clearinghouses for interest rate swaps. The Board notes that in its comment letter the Commodity Futures Trading Commission (CFTC) stated that "[i]n general, the Commission agrees with the FRB that the minimum standards for netting recommended by the Lamfalussy Report ("Lamfalussy Minimum Standards") represent a core of minimum requirements for multilateral netting systems."

One commenter proposed that the financial condition of the participants as well as the underlying instrument to be settled should be considered as criteria. Another commenter proposed that only new multicurrency multilateral netting arrangements should be subject to the policy and that existing netting systems should be exempt. The Board has set forth criteria that it believes are appropriate for identifying large-dollar multilateral netting systems with the potential to increase systemic risk in financial markets. The Board believes that the prospective application of the policy statement would ignore the potential for increased systemic risk posed by existing multilateral netting systems. Moreover, the application of the Lamfalussy Minimum Standards on a prospective basis only would lead to competitive inequalities between existing multilateral netting systems and those that may become operational in the future.

Several commenters suggested that the Board clarify the meaning of the words "routinely process" in the third threshold criterion that deals with individual payments or foreign exchange contracts with a stated dollar value larger than $500,000. One of these commenters proposed that the Board adopt a definite test of transaction size, and specifically suggested that systems with payments having an average size of $100,000 or more be covered by the policy statement. In support of this suggestion, the commenter noted, "[w]e believe that any funds transfer system that has an average payment size of $100,000 would "routinely" process payments of $500,000 or more."

The Board agrees that it would be helpful to the financial markets for the policy statement to articulate as clearly as possible the conditions under which a multilateral netting system would be subject to the policy statement. The Board believes that an average transaction size threshold would allow the operators of multilateral netting systems, and the participants in those systems, to determine more easily when they are covered by the policy. Accordingly, the third threshold criterion for identifying large-dollar multilateral netting systems subject to the policy statement has been modified to take account of the daily average transaction size over a twelve month time period.

One commenter proposed that a threshold greater than $500 million in daily net settlements should be considered by the Board since large-dollar multilateral netting systems are more likely to have significantly higher aggregate daily net settlements. The Board continues to believe that $500 million in daily net settlements is an appropriate threshold. It is important to recognize that, in multilateral netting systems, the value of net settlements is often less than 10 percent, and sometimes less than 5 percent, of the gross daily value of transactions. Thus, net settlements of $500,000 may represent transactions with a daily aggregate value considerably in excess of $5 billion or even $10 billion. Settlement failures of this magnitude have the potential to create significant liquidity problems for their participants and to generate systemic risks. Moreover, the Board is excluding check clearing and ACH systems that might otherwise be covered, and which raise separate issues, from the policy statement at this time.

2. The five risk management measures for implementation of the Lamfalussy Minimum Standards.

The first risk management measure is that each participant establish bilateral net credit limits vis-à-vis each other participant in the system. Two commenters proposed that the Board clarify this measure with regard to netting systems that utilize a central counterparty. These commenters suggested that such systems should be able to meet the first risk measure by establishing bilateral net credit limits between the central counterparty and each participant rather than between each participant. The Board concurs with this analysis and the final policy statement makes it clear that multilateral netting systems utilizing a central counterparty would be expected to satisfy the first risk management measure through the establishment by the central counterparty of net credit limits vis-à-vis each participant. In addition, the Board expects that each participant will establish a bilateral net credit limit for the central counterparty. The Board notes that the establishment of bilateral net credit limits between the central counterparty and each participant would not necessarily eliminate the need for traditional bilateral credit limits between participants, if bilateral exposures are incurred, or preclude the establishment of automated bilateral credit limits between participants as part of certain overall types of risk management designs for a clearinghouse.

The second and third risk management measures require large-dollar multilateral netting systems to establish and monitor in real time system-specific net debit limits and reject or hold any payment or foreign exchange contract that would exceed the relevant bilateral and net debit limits. Two commenters raised issues regarding the application of these two measures to forward-value foreign exchange contract netting systems. One commenter stated that forward-value contact netting systems would typically stop accepting contracts for a particular value date at some point prior to the start of settlement for that value date. Therefore, except for changes in the forward value of contracts as a result of changes in foreign exchange rates, the size of any unmargined settlement exposure in excess of a net debit limit would be known in advance of the settlement date. The commenter went on to argue that real time monitoring of net debit limits would be inappropriate for forward-value contract netting systems, since system operators could collect additional margin or otherwise cover any settlement exposure prior to settlement.

The Board believes that real-time monitoring is an important device for controlling the settlement and forward replacement cost risks inherent in multilateral netting systems. The capability to monitor these exposures is especially critical for netting systems that accept transactions for same day, or even possibly next day, settlement. In general, however, the strength of alternatives to real-time monitoring must be judged in the context of the risks and risk management systems of specific multilateral netting arrangements.

Two commenters contended that rejecting contracts for trades that exceed net debit limits on a contract netting system would be unfair to counterparties that did not violate net debit limits and would disrupt market liquidity. The Board believes that the ability of a netting system to reject, or possibly pend, transactions that violate risk management parameters is a critical risk management tool for multilateral netting systems, irrespective of whether the system nets payment orders or forward-value contracts. Issues relating to impacts on market liquidity need to be assessed in relation to the impact on market liquidity if a multilateral netting system were to collapse as a result of the inability of the system to protect adequately itself and its participants. Moreover, in response to the installation of systems for rejecting transactions, system participants would normally develop contingency plans to deal with rejected items. It should also be noted that the Board has the flexibility to approve on a case-by-case basis risk management devices that lead to a substantially equivalent degree of risk management and control as the five risk management measures contained in the policy statement.

Two commenters suggested that the real-time monitoring requirement should be expanded to a twenty-four hour basis. Although the Board does not discourage systems from adopting higher standards based on specific risk assessments, it believes that twenty-four hour monitoring of system specific net debit limits and netted transactions would not be necessary for all types of multilateral netting systems. The Board expects that multilateral netting systems will adopt risk management systems that are appropriate to the scale and nature of the credit, liquidity, and settlement risks inherent in the system. For example, twenty-four hour monitoring of net debit limits and netted transactions would likely be an appropriate risk management measure for any multilateral multicurrency netting system with significant foreign currency exposures.

The fourth risk measure requires multilateral netting systems to establish liquidity resources such as cash, committed lines of credit secured by collateral, or a combination thereof, at least equal to the largest single net debit position. One commenter proposed that for contract netting systems, the largest single net debit position should be defined as the aggregate of all final net settlement payments due from a single participant on the relevant value date. The Board believes that its definition of the term "largest single net debit" is sufficiently flexible to accommodate the specific operational aspects of contract netting systems.

Two commenters proposed that U.S. Treasury securities or other high-grade collateral should be acceptable as liquidity resources. The Board notes that a critical characteristic of liquidity resources that support settlement is that they be highly liquid. While it is true that high-grade securities are considered highly liquid during most hours of the trading day, it is less clear that such securities can be readily converted to cash late in the business day when a settlement failure is most likely to occur. Consequently, the Board believes that liquidity resources in support of settlement should take the form of cash, committed lines of credit secured by collateral, or some combination thereof. In individual cases, U.S. Treasury securities may provide an appropriate source of liquidity. Clearly, U.S. Treasury securities would be an important source of collateral for committed lines of credit.

Several commenters agreed with the fifth risk measure that would require system participants to establish rules and procedures for the sharing of credit losses. Several commenters also endorsed the Board's statement that it will consider, on a case-by-case basis, alternative risk measures that would lead to a substantially equivalent degree of risk management and control as the five risk management measures identified in the policy statement.

3. Timeframe for Implementation of the Lamfalussy Minimum Standards.

Most commenters agreed that 18 months is a reasonable time period in which to expect existing large-dollar multilateral netting systems to meet the Lamfalussy Minimum Standards. One commenter proposed a two year timeframe, and two others proposed that flexibility be built into the process for systems that are making a good faith effort to comply with the standards.

The Lamfalussy Report was published four years ago by the G-10 central bank Governors, and it has been clear to the financial markets for some time that large-dollar systems would ultimately be expected to meet some version of these standards. The Board has adopted an eighteen month transition period in order to provide existing multilateral netting systems sufficient time, and the incentives associated with a clear deadline, to implement any needed changes.

4. Establishment of a higher standard than Lamfalussy Minimum Standard IV for systems that present a high degree of systemic risk.

Lamfalussy Minimum Standard IV requires that a netting system be capable of ensuring the completion of daily settlement in the event that the participant with the largest net debit position is unable to settle its obligation to the system. The Board requested comment on whether this standard should be enhanced for systems that may present a high degree of systemic risk. The Board also requested comment on establishing a threshold to define such systems.

Several commenters expressed concern about the cost of requiring additional risk controls. One commenter proposed that simulations be conducted of the effects of multiple participant defaults in systems in order to analyze the costs and benefits of a higher standard. This commenter also suggested that start-up systems should not be held to a higher standard as the cost of meeting the standard may be prohibitive.

Commenters were unanimous in their opinion that quantifying a threshold to define high systemic risk would be difficult, although one commenter proposed a threshold based on the ratio of uncollateralized net debit positions to Tier One capital weighted according to credit rating. One commenter proposed that the Board defer action on adopting a higher standard, and another proposed that higher risk measures be imposed by the Board only on a case-by-case basis. As the Board has noted, it is not adopting a higher standard at this time. The Federal Reserve will continue to work on a case-by-case basis with individual large-dollar multilateral netting systems it believes present a potentially high degree of systemic risk, by virtue of their high volume of large-value transactions or central role in the operation of the financial markets, in order to determine whether higher risk standards, including the ability to ensure settlement in the event of multiple defaults, would be appropriate. In order to help quantify the risks, the Board is also encouraging netting systems to adopt regular simulation analyses in order to determine the effects, among other risks, of multiple participant defaults.

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.[2] 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

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

reasonable modifications would mitigate the 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 does not believe that the Lamfalussy Minimum Standards will have a direct and material impact on the ability of other service providers to compete effectively with the Reserve Banks' payments services. The Board notes that in several cases the payment services potentially covered by the policy statement are not offered by the Federal Reserve Banks. For example, the Federal Reserve Banks do not offer services relating to the electronic clearing and settlement of payments or contracts in foreign currencies.

In the case of domestic large-dollar multilateral netting systems, a number of the risk control measures proposed to meet the Lamfalussy Minimum Standards as well as certain of the standards themselves have grown out of the experience of the private sector in developing robust netting arrangements and are currently employed in multilateral netting systems. To the extent an incremental burden might be imposed on large-dollar systems, the need to reduce and control the large potential systemic risks of such systems would justify the adoption of prudent standards and measures to control risk. The Board does not expect at this time, however, that the adoption of the Lamfalussy Minimum Standards would have a direct and material impact on the ability of other service providers to compete with the Federal Reserve Banks.

FEDERAL RESERVE SYSTEM POLICY STATEMENT ON PAYMENTS SYSTEM RISK

The Board is amending its "Federal Reserve System Policy Statement on Payments System Risk" under the heading "II. Policies for Private-Sector Networks" by replacing in the heading the word "Networks" with the word "Systems;" deleting "A. Private Large-Dollar Funds Transfer Networks" in its entirety and replacing that part with "A. Privately Operated Large-Dollar Multilateral Netting Systems;" and deleting "C. Offshore Dollar Clearing and Settlement Systems" and redesignating "D. Private Small-Dollar Clearing and Settlement Systems" as "C. Private Small-Dollar Clearing and Settlement Systems."

II. POLICIES FOR PRIVATE-SECTOR SYSTEMS

A. Privately Operated Large-Dollar Multilateral Netting Systems

Large-dollar multilateral netting systems can create a significant degree of credit and liquidity risk for their participants and also expose the U.S. payments system and financial markets to systemic risk. In the context of large-dollar multilateral netting systems, systemic risk is the risk that the inability of one institution within such a system, including a central counterparty if one exists, to meet its obligations when due will lead to the illiquidity or failure of other institutions, either within the particular system or in the financial markets as a whole.

Large-dollar multilateral netting systems may produce efficiencies in the clearance and settlement of payments and financial contracts. At the same time, multilateral netting may obscure, concentrate, and redistribute the credit and liquidity risks associated with clearance and settlement. As the size of netted positions increases, for example, so do the potential liquidity effects on such systems and their participants, as well as third parties, in the event of a settlement failure. In addition, if the high volumes of interrelated large-value financial contracts and payments, which reflect money and capital market activity, are not settled in a timely manner, there is a significant potential for widespread financial market disruption. Certain types of netting system rules may also create sizable systemic liquidity risks, if employed by systems that process large-value payments or financial contracts that are central to the operation of financial markets. For example, privately operated payment systems that permit a system operator to unwind, recast, or otherwise reverse same-day funds transfers made by system participants, whether for reasons of general financial market stress or because of the inability of a system participant to settle its obligations on time, can obscure and greatly increase the level of systemic liquidity risk associated with the system. As a general matter, the Board does not view a same-day recast, unwind, or reversal of payments as a satisfactory mechanism for managing liquidity and settlement risks in large-dollar multilateral netting arrangements.

The Board also recognizes that the development of offshore multilateral netting systems for large-dollar payments and foreign exchange contracts may raise concerns about systemic risk that extend beyond the potential for disturbances to payment and settlement systems, or financial markets, in the United States. For example, the offshore clearing of U.S. dollar payments, for subsequent net settlement in the United States, may create transactional and other efficiencies for participants in such offshore systems. At the same time, these arrangements have the potential to concentrate settlement risks at clearing organizations and their associated settlement agents either in the United States or abroad. If the allocation of credit and liquidity risks associated with the netting is not clearly defined, understood, and managed, offshore dollar-clearing arrangements may obscure, or even increase, the level of systemic risk in U.S. and offshore large-dollar payments systems, as well as in the international dollar settlement process. Poorly designed and managed systems may, therefore, increase risks to the international banking and financial system. In addition, offshore arrangements have the potential to operate without sufficient official oversight.

As the Federal Reserve implements fees for daylight overdrafts, along with other risk management measures, it also is important that risks not simply be shifted from the Federal Reserve's payment services to private, inadequately structured multilateral netting arrangements, either domestically or in other countries. For example, the Board has been concerned that the steps being taken to reduce systemic risk in U.S. large-dollar payments systems may induce the further development of "offshore" large-dollar multilateral netting systems. These offshore systems can settle directly through payments on Fedwire or indirectly through a private large-dollar clearing system, which in turn settles on a net basis using Fedwire.

In response to potential systemic risks and the possibility that efforts to avoid risk controls will lead to inadequately structured and managed systems, the Board is adopting minimum standards for the design and operation of privately operated large-dollar multilateral netting systems. The minimum standards apply whether or not these systems operate domestically or in other countries. These minimum standards are identical to those set out in the Report of the Committee on Interbank Netting Schemes of the Central Banks of the Group of Ten Countries (Lamfalussy Report).[3] The Board recognizes that from time to time, in specific cases, questions of interpretation of these standards, as they apply to large-dollar multilateral netting systems, may have to be resolved by the Board.

It is important to note that the Board's adoption of the Lamfalussy Minimum Standards in no way diminishes the primary responsibilities of participants in, and operators of, large-dollar netting systems for ensuring that these systems have adequate credit, liquidity, and operational safeguards. In adopting this policy statement, it is the Board's intent to heighten awareness of the risks associated with multilateral netting arrangements and of the need for their prudent management. The Board also seeks to provide the financial system with a set of minimum criteria, which have been discussed by the G-10 central banks, against which structural and risk management features of large-dollar multilateral netting systems can be evaluated.

Scope and Application of the Policy. This policy statement is directed toward any privately operated, multilateral netting system that settles, or seeks to settle, U.S. dollar obligations through payments affecting one or more accounts at Federal Reserve Banks, either directly or indirectly ("multilateral netting systems"). Multilateral netting systems include clearinghouse organizations, with or without a central counterparty, for netting payments or foreign exchange contracts among financial institutions.

The scope of the policy statement is limited to multilateral netting systems that involve large-dollar settlements or payments. In particular, such systems that: (1) have three or more participants that net payments or foreign exchange contracts involving the U.S. dollar, whether or not netted amounts are legally binding; and either (2) have, or are likely to have, on any day, settlements with a system-wide aggregate value of net settlement credits (or debits) larger than $500 million (in U.S. dollars and any foreign currencies combined); or (3) process payments or foreign exchange contracts, with a daily average stated dollar value, calculated over a twelve month period corresponding to the most recent fiscal year for the netting system, larger than $100,000.

A multilateral netting system that meets the above criteria is subject to the policy if (1) it is a state-chartered member of the Federal Reserve System, (2) any of its agent(s) or participants are state-chartered

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[3]In November 1990, the Committee on Interbank Netting Schemes of the Central Banks of the Group of Ten Countries produced a report on multilateral netting schemes. The Committee was chaired by Mr. Alexandre Lamfalussy, General Manager of the Bank for International Settlements. That report recognized that netting arrangements for interbank payment orders and forward-value contractual commitments, such as foreign exchange contracts, have the potential to improve the efficiency and the stability of interbank settlements through the reduction of costs along with credit and liquidity risks, provided certain conditions are met. In this regard, the Lamfalussy Report developed and discussed, in some detail, both "Minimum Standards for Netting Schemes" and "Principles for Co-operative Central Bank Oversight" of such arrangements.

members of the Federal Reserve System, (3) its participants' net positions are settled through a Federal Reserve settlement account, (4) its participants settle their net positions in the multilateral netting system through their individual Federal Reserve accounts or the Federal Reserve account of the settlement agent(s), or (5) one or more bank holding companies have an investment in the multilateral netting system. The Board also reserves the right to apply the elements of this policy to any non-dollar system based, or operated, in the United States that engages in the multilateral clearing or netting of non-dollar payments among financial institutions and that would otherwise be subject to this policy. This policy does not apply to systems dealing with exchange-traded futures and options.

In applying the policy, the Board seeks to distinguish between routine banking relationships and arrangements that create a multilateral "system" for clearing and settling U.S. dollar payment and other obligations. This policy statement is not intended to apply to routine bilateral relationships between financial institutions, such as those involved in correspondent banking. In certain borderline cases, for example involving netting systems operated by a single financial institution and that combine elements of bilateral and multilateral netting, a case-by-case determination that an arrangement is a large-dollar multilateral netting system may be necessary for the purpose of applying this policy statement.

In general, the participation in, and operation of, a multilateral netting system is governed by rules and procedures designed to facilitate multilateral clearance and settlement. Settlement risks are typically shared by the participants in some fashion, either implicitly or through employment of explicit loss-sharing and liquidity arrangements. In contrast, correspondent banking relationships generally focus on bilateral relationships and risks; the risk of a settlement failure typically falls, at least initially and sometimes primarily, on the service provider's or settlement agent's liquidity resources and capital.

The Board believes that the Lamfalussy Minimum Standards may apply to all large-dollar multilateral payment netting systems irrespective of the type of financial instrument or contractual obligation netted by the system. However, the Board recognizes that in the case of privately operated large-dollar multilateral netting systems for batch processed paper-based or electronic payments, including privately operated Automated Clearing House (ACH) systems, certain electronic controls that would be required to implement the Lamfalussy Minimum Standards may not be feasible. Further, the rights and responsibilities of parties within such systems may require further analysis. The Board intends to study further the implications of the Lamfalussy Minimum Standards, and various arrangements that might be used to implement these standards, for privately operated large-dollar multilateral netting systems for the batch processing of paper-based as well as electronic payments. The Board is not, therefore, applying the Lamfalussy Minimum Standards to these systems at this time.

Lamfalussy Minimum Standards for the Design and Operation of Privately Operated Large-Dollar Multilateral Netting Systems. The Federal Reserve's policy on privately operated large-dollar multilateral netting systems is designed to strike an appropriate balance between the requirements of market efficiency and payments system stability. A direct means of achieving this balance is to ensure that large-dollar multilateral netting systems are designed and operated so that the participants and service providers have both the incentives and the ability to manage the associated credit and liquidity risks. The Board's approach to privately operated large-dollar multilateral netting systems will be guided by the following minimum standards for such systems:[4]

1. Netting systems should have a well-founded legal basis under all relevant jurisdictions.

2. Netting system participants should have a clear understanding of the impact of the particular system on each of the financial risks affected by the netting process.

[4]These standards are identical to the minimum standards for netting systems in the Lamfalussy Report, with the exception that the words "netting system" have been substituted for "netting scheme" in minimum standards one, two, and six, and the words "particular system" have been substituted for "particular scheme" in standard two.

3. Multilateral netting systems should have clearly-defined procedures for the management of credit risks and liquidity risks which specify the respective responsibilities of the netting provider and the participants. These procedures should also ensure that all parties have both the incentives and the capabilities to manage and contain each of the risks they bear and that limits are placed on the maximum level of credit exposure that can be produced by each participant.

4. Multilateral netting systems should, at a minimum, be capable of ensuring the timely completion of daily settlements in the event of an inability to settle by the participant with the largest single net debit position.

5. Multilateral netting systems should have objective and publicly-disclosed criteria for admission which permit fair and open access.

6. All netting systems should ensure the operational reliability of technical systems and the availability of backup facilities capable of completing daily processing requirements.

The Federal Reserve reserves the right to prohibit the use of Federal Reserve payment services to support funds transfers that are used to settle, directly or indirectly, obligations on large-dollar multilateral netting systems that do not meet the Lamfalussy Minimum Standards. The Federal Reserve will also take appropriate supervisory steps, or refer matters to the appropriate supervisory or regulatory authority, in cases of systems not in compliance with the aforementioned Lamfalussy Minimum Standards, or their equivalent. Moreover, in order for Federal Reserve Banks to monitor the use of intraday credit, no future or existing privately operated large-dollar multilateral netting system will be permitted to settle on the books of a Federal Reserve Bank unless its participants authorize the system to provide position data to the Reserve Bank on request.

Implementation of the Lamfalussy Minimum Standards. The Board believes that large-dollar multilateral netting systems, whether onshore or offshore, should meet in full the Lamfalussy Minimum Standards, as set forth in this policy statement. In order to satisfy the Lamfalussy Minimum Standards, the Board expects that individual large-dollar multilateral netting systems will utilize the following risk management measures, or their equivalent: (1) require each participant to establish bilateral net credit limits vis-à-vis each other participant in the system; (2) establish and monitor in real-time system-specific net debit limits for each participant; (3) establish real-time controls to reject or hold any payment or foreign exchange contract that would cause a participant's position to exceed the relevant bilateral and net debit limits; (4) establish liquidity resources, such as cash, committed lines of credit secured by collateral, or a combination thereof, at least equal to the largest single net debit position;[5] and (5) establish rules and procedures for the sharing of credit losses among the participants in the netting system. The Board will consider, on a case-by-case basis, alternative risk management measures that provide for risk management systems and controls that are equivalent to the five measures listed above. The Board notes that the Lamfalussy Minimum Standards and the arrangements to implement the Lamfalussy Minimum Standards, as discussed above, in no way diminish the responsibilities of the participants in, and the operator of, a large-dollar multilateral netting system to determine if additional safeguards would be appropriate.

The Board recognizes that there are differences between decentralized and centralized risk management structures for multilateral netting systems. Some multilateral netting systems utilize a clearinghouse or similar entity as the central counterparty to transactions submitted by the system's participants for netting. Depending upon the design of a particular system, the central counterparty may bear directly both settlement

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[5]The term "largest single net debit position" means the largest intraday net debit position of any individual participant at any time during the daily operating hours of the netting system.

exposures and forward replacement cost exposures vis-à-vis participants.[6] Consequently, multilateral netting systems utilizing a central counterparty would be expected to satisfy the first risk management measure through the establishment by the central counterparty of net credit limits vis-à-vis each participant. In addition, each participant would be expected to establish a bilateral net credit limit for the central counterparty. The establishment of bilateral net credit limits between the central counterparty and each participant would not necessarily eliminate the need for traditional bilateral credit limits between participants, if bilateral exposures are incurred, or preclude the establishment of automated bilateral net credit limits between participants as part of certain overall types of risk management designs for a clearinghouse.

The Board encourages large-dollar multilateral netting systems to establish a capability to simulate the effect on liquidity resources and risk management controls of one or more defaults by existing participants, as well as the effects of adding additional participants or products to the system. In view of the complexity of multilateral netting and the potential systemic risks of such systems, the Board believes the capability to simulate the effects of participant defaults as well as adding additional participants and products is a prudent risk management device that should be employed by large-dollar multilateral netting systems.

In addition, the Board encourages large-dollar systems for contract netting to conduct simulation analyses of forward replacement cost risks under different assumptions about changes in market prices, volatilities, and other factors. Such analyses will help to determine the sensitivity of the netting system to changes in market factors and help ensure that a netting system is able to withstand a default by the participants with one or more of the largest net debits on the system.

<u>Timeframe for Implementation of the Lamfalussy Minimum Standards</u>. The Board recognizes that not all existing large-dollar multilateral netting systems may meet the Lamfalussy Minimum Standards, and the associated requirements for implementation of those standards, set forth in this policy statement. The Board also recognizes that existing large-dollar multilateral netting systems will need a period of time in which to make any needed changes to their organization and operations. Consequently, the Board believes that an eighteen-month transition period would be appropriate for large-dollar multilateral netting systems that are operating on December 21, 1994. Such systems will be expected to comply fully with the policy statement by June 21, 1996. Large-dollar multilateral netting systems established subsequent to December 21, 1994 will be expected to comply fully with the policy statement, without benefit of a transition period.

The Board intends to review periodically the scale and nature of the credit, liquidity, and settlement risks in privately operated large-dollar multilateral netting systems. Operators of such systems should ensure that as the scale of risks in their systems increase, risk management systems are designed and operated to control the increased scale of risk. The Federal Reserve will continue to work on a case-by-case basis with individual large-dollar multilateral netting systems it believes present a potentially high degree of systemic risk, by virtue of their high volume of large-value transactions or central role in the operation of the financial markets, in order to determine whether higher risk standards, including the ability to ensure settlement in the event of multiple defaults, would be appropriate. Moreover, the Board expects that over time, whenever systems are changed or redesigned, significant attention will be given to the issue of risk management in order to ensure that high standards of risk control are achieved.

In addition, offshore, large-dollar multilateral netting systems and multicurrency netting systems should at a minimum be subject to oversight or supervision, as a system, by the Federal Reserve, or by another relevant central bank or supervisory authority. The Board recognizes that central banks have common policy objectives with respect to large-value netting arrangements. Accordingly, the Board expects that it will cooperate, as necessary, with other central banks and foreign banking supervisors in the application of the Lamfalussy Minimum Standards to offshore and multicurrency systems. In this regard, the Principles for Co-operative Central Bank Oversight outlined in the Lamfalussy Report provide an important international framework for cooperation.

By order of the Board of Governors of the Federal Reserve System, December 21, 1994.

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[6]For example, the central counterparty in a foreign exchange contract netting system would face forward replacement cost exposures as well as settlement exposures.