

Payment Systems

Wire Transfers and Automated Clearing House (ACH)

Introduction

In the United States, payment and securities settlement systems consist of numerous financial intermediaries, financial services firms, and non-bank businesses that create, distribute, and process electronic transactions to purchase, sell, or finance securities transactions; disburse or repay loans; settle real estate transactions; and make large-value time-critical payments, such as payments for the settlement of Interbank purchases and sales of federal funds, settlement of foreign exchange transactions, or other financial market transactions. Wire transfers are used for making large-value payments by both financial and non-financial organizations.

The automated clearing house (ACH) is a nationwide mechanism that processes electronically originated batches of high-volume, low-value credit and debit transfers. Rather than sending each payment separately, ACH transactions are accumulated and sorted by destination for transmission during a predetermined time period. This provides significant economies of scale and faster processing than paper checks. More recently, the ACH network is used to convert check payments into ACH debit transfers which provides faster processing and reduces payment processing costs.

A discussion of wire transfers and ACH follows below:

Wire Transfers

The primary function of wire transfer systems is to transfer assets from the control and guardianship of one institution to the control and guardianship of another institution in a timely and efficient manner. Most financial transactions are conducted through telecommunications systems designed to handle the daily exchange of large volumes of funds and securities. Although several different mechanisms comprise the U.S. payments system, most of the dollar value of all funds transfers and much of the associated risk is concentrated in two electronic systems used principally to transfer large-dollar payments between financial institutions. Foremost is the Federal Reserve Banks' Fedwire[®] Funds Service (Fedwire). The Clearing House InterBank Payments System (CHIPS), operated by the New York Clearing House Association, is utilized primarily for international transfers.

A given funds transfer is a series of payment orders, beginning with the originator's instruction to its "sending bank" and ending with the acceptance by the "receiving bank" of the payment order for the benefit of a beneficiary. A "payment order" is an instruction from a sending bank to a receiving bank to pay or cause another bank to pay a fixed amount to a beneficiary. The order must be transmitted directly or through an agent to the receiving bank.

Controls at both sending and receiving banks must focus on the authentication of payment orders. Acceptance of a payment order by the receiving bank is based on a

Payment Systems

Wire Transfers and Automated Clearing House (ACH)

belief that the sender properly authorized the order. Acceptance means that the receiving bank is obliged to pay the beneficiary.

Whether a loss resulting from the transmission of an erroneous or fraudulent payment order will be borne by the receiving bank or the sending bank depends on whether a "commercially reasonable security procedure" was in place by the respective financial institutions and whether practice complied with the security procedure. A material erroneous or fraudulent transaction could have a significant impact on the financial condition of the FHLBank and result in a poor image and reputation in the marketplace.

Automated Clearing House (ACH)

The following are examples of payment transactions that can be conducted through the ACH Network:

- a) Payroll payments;
- b) Cash concentrations and disbursements;
- c) Pension payments;
- d) Loan and interest payments;
- e) Tax payments;
- f) Corporate-to-corporate payments;
- g) Vendor payments;
- h) Point-of sale-payments;
- i) Insurance payments;
- j) Utility payments; and
- k) Customer initiated transactions.

It is important to identify the role played by the FHLBank in the ACH transaction as there are different rules and requirements for the various participants. In addition, different rules and requirements exist for corporate and consumer accounts. The primary participants in an ACH transaction are described below.

1) Originator

An originator (Originator) is a person or entity that agrees to initiate ACH entries into the payment system according to an arrangement with a receiving person or entity (Receiver). The Originator is usually a company or an individual directing a transfer of funds to or from a consumer's or a company's account. Examples of Originators are:

- a) A corporate employer offering its employees direct deposit of payroll;
- b) A merchant or financial institution that offers point-of-sale activity to consumers; and
- c) An individual that initiates an entry through a bill payment service to a company

Payment Systems
Wire Transfers and Automated Clearing House (ACH)

for monies owed.

The Originator must initiate the transmission of batches into the ACH Network according to an arrangement with an originating depository financial institution (ODFI). The primary participant relationships for the Originator are with the Receiver and the ODFI, both of which should be identified and defined in relevant legal agreements.

2) *Originating Depository Financial Institution (ODFI)*

The ODFI is the institution that receives payment instructions from Originators and forwards the entries to an ACH operator (ACH Operator). A depository financial institution (DFI) may participate in the ACH system as a receiving depository financial institution (RDFI) without acting as an ODFI; however, if a DFI chooses to originate ACH entries, it must also agree to act as an RDFI.

Primary ODFI responsibilities include:

- a) Ensuring that all entries are authorized;
- b) Transmitting the entries to the ACH Network in a timely manner in order to effect the transfer of funds on the appropriate date;
- c) Terminating the origination of entries when appropriate;
- d) Meeting the requirements for data security and personal identification numbers when applicable;
- e) Ensuring that the entries contain the appropriate information;
- f) Ensuring that information contained within reclamation entries is accurate;
- g) Ensuring that an agreement has been entered into with a sending point when a sending point is used to transmit ACH entries;
- h) Ensuring that the ODFI and any third-party service provider that performs a function of ACH processing on behalf of the ODFI are in compliance with the audit requirements as defined by National Automated Clearing House Association (NACHA); and
- i) Compliance with ACH operating rules adopted by NACHA (NACHA ACH Operating Rules).

The ODFI is solely responsible for entries originated by its corporate customers. The ODFI must execute a written agreement with its corporate customer that will, at a minimum, require the latter to adhere to NACHA ACH Operating Rules.

ODFIs are required to establish limits upon and monitor their exposure to risk when transmitting ACH credit and debit entries on behalf of their corporate customers. The limits should reflect ACH processing activity and should be monitored as a part of daily operations.

Payment Systems
Wire Transfers and Automated Clearing House (ACH)

3) *Automated Clearing House Operator*

The ACH Operator is the central clearing facility operated by a private organization or a Federal Reserve Bank acting on behalf of DFIs, to or from which participating DFIs transmit or receive ACH entries. In some cases, there are two ACH Operators involved in a transaction, one operating as an originating ACH Operator and the other as a receiving ACH Operator. ACH Operators provide ACH processing services to DFIs under a written agreement or contract.

4) *Receiving Depository Financial Institution (RDFI)*

An RDFI is a participating depository financial institution that receives entries directly or indirectly from its ACH Operator for debit or credit to the accounts of its customers as Receivers.

An RDFI's responsibilities include the following in regard to receipt of ACH files:

- a) Timely receipt and validation of all ACH entries;
- b) Timely posting to the Receiver's accounts;
- c) Timely validation of prenotifications;
- d) Timely return of entries not posted;
- e) Timely return of prenotification entries;
- f) Notification to Originators of incorrect information on accepted entries;
- g) Timely handling of remittance data as required by NACHA ACH Operating Rules; and
- h) Transmission to a federal government agency of a consumer's or company's automated enrollment for a future credit or debit application.

The RDFI must execute the appropriate agreements with its ACH Operator in order to have ACH files delivered to the proper receiving point (Receiving Point).

5) *Receiver*

A Receiver is a natural person or an organization that has authorized an Originator to initiate an ACH entry to the Receiver's account with the RDFI.

6) *Receiving Point*

A Receiving Point is any site where entries are received from an ACH for processing. This may be a financial institution, its data center, or a data processing service authorized to receive entries on behalf of the financial institution.

Payment Systems
Wire Transfers and Automated Clearing House (ACH)

7) *Net Settlement*

Net settlement (Net Settlement) allows participants in private-sector clearing arrangements to exchange and settle transactions on a net basis through reserve or clearing account balances. Net Settlement is available to transactions that settle across Federal Reserve Districts as well as transactions that settle entirely within a single Federal Reserve Bank.

The net debit and credit positions of the financial institutions are calculated and debited or credited to the reserve accounts of the financial institutions. A daily settlement occurs with the Federal Reserve Bank unless the financial institutions designate another member to settle on its behalf.

An agreement should exist between the financial institutions and the Federal Reserve Bank that establishes the terms of ACH funds transfers.

8) *Sending Point*

A sending point (Sending Point) is a processing site that sends entries to an ACH. This may be a financial institution or a data processing service operating on its behalf. An agreement should exist between the financial institutions and/or the data processing service and the Federal Reserve Bank that establishes the terms of the ACH funds transfers.

9) *Third-Party Service Providers and Third-Party Senders*

A third-party service provider (Third-Party Service Provider) is an entity other than an Originator, ODFI, or RDFI that performs any functions on behalf of the Originator, the ODFI, or the RDFI related to the ACH processing of entries, including but not limited to, the creation of ACH files or acting as a Sending Point or Receiving Point on behalf of a participating DFI.

A third-party sender (Third-Party Sender) is an entity that is not an Originator that has authorized an ODFI or another Third-Party Sender to transmit, for the account of the Third-Party Sender or another Third-Party Sender, (i) a credit entry to the account of a Receiver with an RDFI in order to effect a payment from the Originator to the Receiver, or (ii) a debit entry to the Receiver's transaction account or general ledger account with an RDFI in order to effect a payment from the Receiver to the Originator.

In distinguishing between a Third-Party Service Provider and a Third-Party Sender, ACH participants should understand that Third-Party Senders are a subset of Third-Party Service Providers. A Third-Party Sender is always a Third-Party Service Provider that acts on behalf of an Originator, but a Third-Party Service Provider does

Payment Systems

Wire Transfers and Automated Clearing House (ACH)

not always act as a Third-Party Sender.

NACHA's ACH Operating Rules require that an Originator and an ODFI have an agreement that binds the Originator to these rules. However, in today's environment, it is a common practice among some Originators and ODFIs to have agreements with a Third-Party Service Provider that stands between the Originator and the ODFI and acts in an intermediary capacity between these two parties. In such circumstances, the lack of a direct contractual relationship between the Originator and the ODFI has the potential to increase the risk incurred by the ODFI since it may be unable to establish a claim against the Originator in the event of loss.

Examples of a Third-Party Service Provider include a data processing service bureau, payroll processor, correspondent bank, payable-through bank, or a financial institution acting as an agent on behalf of another financial institution. Specific duties and responsibilities should be detailed in the applicable legal agreements.

10) Gateway Operators

A gateway operator (Gateway Operator) is a financial institution that receives an ACH file from a customer and transmits the file to another financial institution which, in turn, sends the file to a foreign financial institution.

Regulatory Environment

The primary authorities governing, or relevant to, wire transfer and ACH activities of the FHLBanks are set forth below. The discussion does not address the application of authorities other than the FHLBank Act and the regulations, interpretations and issuances of the Finance Board to the FHLBanks. The examiner should ensure that the application of such authorities to an FHLBank has been considered by the FHLBank and its legal counsel.

1) ***Rules and Regulations of the Federal Housing Finance Board***, which include the following parts and sections relevant to wire transfers and ACH activities:

Part 917 of the Finance Board regulations addresses powers and responsibilities of FHLBank boards of directors and senior management. In particular, Section 917.3, Risk Management, Section 917.4, Bank Member Products Policy, and Section 917.6, Internal Control System, are pertinent.

2) ***Advisory Bulletins of the Federal Housing Finance Board*** that provide supervisory guidance relating to the topic of wire transfer and ACH activities are:

Advisory Bulletin 03-2, dated February 10, 2003 and Advisory Bulletin 02-3, dated February 13, 2002, which offer guidance on specific attributes to be considered by

Payment Systems

Wire Transfers and Automated Clearing House (ACH)

FHLBanks in the formulation of their business continuity plans, and the establishment of bilateral agreements with other FHLBanks.

Advisory Bulletin 04-01, dated March 10, 2004, which offers guidance on the evaluation of a service organization providing services to an FHLBank whose activities could affect the FHLBank's financial condition. This includes the performance of an assessment of the service organization's internal controls, such as the procurement of a service auditor's report in accordance with Statement of Auditing Standards No. 70 (SAS 70) or the performance of alternative methods necessary to gain confidence in the service organization's internal controls.

Advisory Bulletin 04-05, dated September 29, 2004, and Advisory Bulletin 05-05, dated May 18, 2005, which provide guidance on the risk management responsibilities of the board of directors, senior management and risk management function.

- 3) ***Regulation J of the Board of Governors (Board of Governors) of the Federal Reserve System (Regulation J), Collection of Checks and Other Items by Federal Reserve Banks and Funds Transfer through FedWire, and Article 4A of the Uniform Commercial Code (Funds Transfer) (UCC- 4A).***

Regulation J and UCC-4A promote efficient payment systems by establishing the respective responsibilities of sending and receiving banks and establish incentives to ensure appropriate controls against unauthorized transactions. In the process, they allocate liability for failure of transaction participants to comply with their assigned responsibilities under each.

The UCC is a uniform nonbinding code which, to be effective in any domestic jurisdiction, must be adopted into law by that jurisdiction. As a result, there are sometimes variations in the UCC's provisions in particular jurisdictions. The FHLBanks should coordinate periodic reviews of their documents and operating practices with legal counsel to ensure compliance with current UCC requirements.

- 4) ***NACHA ACH Operating Rules.*** NACHA oversees the ACH network and its primary roles are to develop and maintain the NACHA ACH Operating Rules, promote growth, and provide educational services to its members.
- 5) ***Federal Reserve Bank Operating Circulars and Appendices that set forth the terms for maintaining accounts with and obtaining other services from the Federal Reserve Banks. Specifically:***
- a) Operating Circular No. 1-Account Relationships, Agreements and Forms;
 - b) Operating Circular No. 4-Automated Clearing House Items (Applies to ACH only);
 - c) Operating Circular No. 5-Electronic Access, Certification Practice Statement, and

Payment Systems
Wire Transfers and Automated Clearing House (ACH)

- Password Practice Statement; and
 - d) Operating Circular No. 6-Funds Transfers Through the Fedwire Funds Service (Applies to wire transfers only).
 - e) Operating Circular No. 9-Federal Tax Payments and Treasury Tax and Loan Depositories (Applies to ACH only); and
 - f) Operating Circular No. 12-Multilateral Settlement (Applies to ACH only).
- 6) *Issuances by the Federal Reserve Banks and Federal Financial Institutions Examination Council (FFIEC) that address specific controls and procedures as to Fedwire, FedACH Services, privately operated payment systems and the Electronic Payments Network. Specifically:***
- a) Federal Reserve Banks' FedLine Advantage References;
 - b) FFIEC Information Technology Handbooks such as Information Security, Business Continuity Planning, Wholesale Payment Services and Retail Payment Systems; and
 - c) FFIEC Guidance-Authentication in an Internet Bank Environment.
- 7) *Issuance of the Board of Governors of the Federal Reserve System that addresses Intraday Liquidity Management and Payment System Risk Policy.***

In July 2006, the Board of Governors implemented changes in its daylight overdraft policy for government sponsored enterprises and certain international organizations. The changes require these organizations to eliminate their daylight overdrafts at the Federal Reserve Banks relating to their interest and redemption payments and to pay a penalty fee and post collateral if daylight overdrafts occur in their accounts as a result of their general corporate payment activity.

- 8) *The Bank Secrecy Act (BSA), as amended by the USA Patriot Act, and the regulations and interpretations of the U.S. Department of the Treasury and Financial Crimes Enforcement Network (FinCEN) thereunder.***

The BSA was enacted to address money laundering and other illegal activity. Specific requirements under the BSA for wire transfer include the procurement and retention of specific information on transactions of \$3,000 or more that include:

- a) The name and, if payment is ordered from an account, the account number of the transmitter;
- b) The address of the transmitter;
- c) The amount of the transmittal;
- d) The execution date of the transmittal;
- e) The identity of the recipient's financial institution;
- f) The name and address of the recipient, the account number of the recipient, and any other specific identifier of the recipient; and

Payment Systems
Wire Transfers and Automated Clearing House (ACH)

- g) Either the name and address or numerical identifier of the transmitter's financial institution.

Other requirements include the identification and reporting of suspicious activity to FinCEN.

9) Statutes and Regulations administered by the Office of Foreign Asset Control (OFAC).

OFAC administers and enforces a series of laws that impose economic sanctions against targeted foreign countries, terrorist sponsoring organizations, and narcotics traffickers. These are described in "Foreign Assets Control Regulations For The Financial Community," a brochure issued by OFAC which is available on its website. Financial institutions are prohibited from conducting transactions with businesses or individuals that have been identified by OFAC. Prohibited transactions are defined broadly and include the provision of deposit, lending, letter of credit, wire transfer, and ACH services. If a financial institution's counterparty to a banking transaction is identified by OFAC, the financial institution is required to follow specific procedures such as blocking or freezing the counterparty's assets and providing reports to OFAC and the institution's board of directors.

Failure by an institution to comply with the NACHA, BSA and OFAC requirements can result in the imposition of severe civil and criminal penalties and damage the institution's reputation in the marketplace.

10) State privacy laws that require disclosures to customers of the recording of conversations to which they are a party.

Specific requirements may vary by state jurisdiction.

FHLBank Environment

Wire transfers

Wire transfers are a critical operation in an FHLBank's activities for purposes of the purchase/sale of money market transactions and on behalf of its customers. FHLBank customers use the wire system to transfer funds between their accounts at other financial institutions, purchase/sale of advances, securities, money market instruments, and to make payments to the customer's third-party relationships. The FHLBanks do not participate in the CHIPS network. Therefore, international wires are processed through a correspondent bank relationship and others.

The FHLBanks often rely on vendor software to process wires. The software provides an audit trail necessary to comply with UCC-4A and BSA requirements. There are several

Payment Systems

Wire Transfers and Automated Clearing House (ACH)

different vendors of funds transfer software packages. Each package offers a variety of control features such as automated segregation of duties, risk and OFAC queues. The Federal Reserve Banks have replaced DOS-based FedLine terminals with its internet product, FedLine Advantage[®] (FedLine Advantage). This will provide access to the Federal Reserve Banks' payment services in an on-line environment.

Vendor software is customarily used by the FHLBanks to ensure compliance with OFAC requirements. The software must be compatible with the functionality of the wire system.

ACH

Transactional Capacity

The capacities in which FHLBanks are principally involved in ACH transactions follow below.

- a) Originator. In this capacity, an FHLBank coordinates the processing of FHLBank's payroll with an outside service provider, who will transmit the file to an ODFI. Generally, the FHLBank's human resource function has the responsibility for the review, processing and reconciliation of the payroll.
- b) Receiving Point and RDFI. In these capacities, an FHLBank receives debit and credit entries on behalf of its customers.
- c) Net Settlement. In this capacity, an FHLBank initiates the settlement of the FHLBank customer's ACH files through a Federal Reserve Bank.
- d) Sending Point. In this capacity, an FHLBank creates entries using the routing number of the ODFI, which is transmitted to the ACH Operator on behalf of the ODFI.

ACH responsibility is usually assigned to the demand deposit or the correspondent bank services functions of an FHLBank. The systems principally used for ACH transactions that provide access to the Federal Reserve System's on-line services and information include the following:

- a) Fedwire and FedLine Web[®] (FedLine Web) and/or FedLine Advantage operated by the Federal Reserve System. Transactions carried out through these systems are processed through the Federal Reserve System's website.
- b) Electronic payment network operated by the local automated clearing house. These transactions are processed through its website and transmitted through the Federal Reserve System.

Payment Systems
Wire Transfers and Automated Clearing House (ACH)

Settlement Processing and Reconciliation

ACH files are usually received, processed and reconciled in the manner set forth below.

- a) An ACH file is transmitted from a Federal Reserve Bank and/or an electronic payment network. It is processed in batch form through the FHLBank's demand deposit account system by an FHLBank's information technology personnel. Financial information should not be posted to the individual accounts until it has been reviewed/reconciled by designated personnel.
- b) Designated personnel of an FHLBank reconcile the batch that was processed by information technology personnel to ACH summary reports, deposit reports, general ledger and the Federal Reserve Bank's statements.
- c) Exceptions, as well as rejected and returned items, are researched and resolved prior to posting. Rejected transactions are transactions that cannot be sent through the Federal Reserve Bank or that the Federal Reserve Bank has rejected. Rejected transactions can occur for the following reasons:
 - (1) There is an error in the routing number or the account number.
 - (2) The account is a "problem" account. The account may be coded "Post No Debits" due to being overdrawn. The FHLBank should review all ACH transactions prior to their posting to an account to determine if the account will become overdrawn if the transaction is posted.
 - (3) The account may be in the process of closing. The FHLBank should review any or all transactions that will post to the account to ensure there are sufficient funds for the transactions.
- d) The RDFI has the responsibility to verify and confirm to the Originator that the account number in the prenotification is for a valid account. A "prenotification" is a non-dollar entry sent through the ACH Network by an Originator to an RDFI.

A "notification of change" is a non-dollar entry transmitted by an RDFI to the ACH Operator for transmission back to the Originator through the ODFI. It is created when the RDFI receives a prenotification or a live dollar entry that contains incorrect information.
- e) The existence of overdrafts should be communicated to key line management, such as FHLBank operations and treasury operations. FHLBank treasury operations personnel should conduct ongoing monitoring to prevent the creation of daylight overdrafts.

Payment Systems
Wire Transfers and Automated Clearing House (ACH)

Risks Associated with Wire Transfer and ACH Activities

An FHLBank's primary risks relating to wire transfer and ACH activities are set forth below.

1) Lack of Sound Corporate Governance (Board of Directors and Senior Management Oversight)

- a) Key risks and controls are not adequately identified, assessed, and monitored.
- b) Information technology is not aligned with wire transfer and ACH department goals and strategies.
- c) Internal control weaknesses potentially affecting financial reporting have not been adequately identified, assessed and disclosed.
- d) Duties, responsibilities, and staff expertise, including segregation of operational and control functions, are not adequately defined.
- e) Background and credit investigations are not performed on personnel prior to their retention. Periodic credit investigations are not performed and mandatory leave policies have not been established.
- f) Duties, responsibilities, and liabilities are not adequately addressed with vendors.
- g) Losses due to errors and fraud are not effectively mitigated through insurance or other means.
- h) A business continuity and recovery plan has not been developed and tested.
- i) Independent audit coverage and testing is limited; auditors are inexperienced or lack the technical expertise to test the control environment.

2) Operational Risk

- a) Unauthorized (FHLBank and/or customer) wire transfers and ACH transactions are processed.
- b) Wire transfer and ACH transactions are not properly recorded and reconciled.
- c) Lack of compliance with internal controls, policies, procedures, and specific requirements of insurance policies, resulting in rejection of claims by insurers and incurrence of losses.
- d) The FHLBank's liquidity needs are not being met owing to impaired wire transfer and ACH operations and its financial obligations are not satisfied.
- e) Data cannot be readily recreated and/or required tasks readily performed in the event of a disaster or personnel turnover.
- f) Agreements have not been completed for wire transfer and ACH services.
- g) Fines and/or losses are sustained due to noncompliance with UCC-4A, NACHA, OFAC and BSA requirements.
- h) Losses sustained due to noncompliance with Federal Reserve Bank Operating Circulars.
- i) Daylight overdrafts are not monitored and minimized resulting in discontinuation of Federal Reserve Bank services.

Payment Systems
Wire Transfers and Automated Clearing House (ACH)

j) Record retention requirements are not complied with.

3) ***Credit Risk***

Daylight and customer deposit overdrafts are not monitored and minimized.

Specific Risk Controls Relating to Wire Transfer and ACH Activities

An FHLBank's controls relating to wire transfer and ACH activities are set forth below.

1) **Origination and Authorization**

The primary control for processing wires is the adequate segregation of duties that relate to the input of the wire request, the review and release of the wire, the review and release of wires that require supervisory review such as risk and OFAC queues, the establishment and maintenance of customer profiles, and the establishment and distribution of personal identification numbers and testcodes.

Customers may originate outgoing wires by telephone, fax, FedLine, and the internet. Outgoing wire transfers are categorized as repetitive or non-repetitive. Repetitive wires are wire transfers sent to destinations with the same bank and account number to be credited that has been preauthorized and is generally used as a routine matter by the customer. A non-repetitive wire is not preauthorized and requires closer review and performance of callbacks to ensure proper authorization.

Wire requests that lack necessary information and/or contain incorrect information such as the routing number or the customer's account number, or requests that seek to transfer funds from accounts containing insufficient funds, are transferred to the risk queue, which requires supervisory review and release of the transaction. A similar process occurs with the OFAC queue if potential "hits" are identified.

Non-repetitive wire requests represent a higher degree of risk due to error and the potential for defalcation. Therefore, such requests must require two, and sometimes three, levels of authorization, and callback verifications. For a non-repetitive wire, there must be segregation of duties between the employee that inputs the wire transaction and the employee that verifies and releases the wire transaction. Wire transfer agreements and applicable addenda such as resolutions, repetitive agreements, and authorizations schedules for each customer must be maintained by the FHLBank.

In accordance with UCC-4A, the agreements should detail the duties, responsibilities, and liabilities of the FHLBank and its customers. The repetitive wire addendum details the account(s) at other financial institutions to which the customer wishes to transfer funds, and the authorization schedules detail the personnel that the customer

Payment Systems
Wire Transfers and Automated Clearing House (ACH)

has authorized to either initiate and/or verify wire transfers on the customer's behalf. The FHLBanks should review and update the customer's authorization schedules on a regular basis.

Once completed, repetitive wire information is automated and controlled through wire templates. Specific authorizations are required to add or change a repetitive wire template. This responsibility should be assigned to personnel who are not involved with the daily processing of wire transactions. Once established, a single person may process them, and unless required by the wire transfer authorization schedules, a callback verification does not have to be performed.

As it pertains to originating ACH transactions, the primary control is the adequate segregation of duties that relate to the input, review and release of the ACH request, the completion of agreements and establishment of security procedures in accordance with UCC-4A and NACHA requirements.

2) Recording and Reconciliation

Wire transfer and ACH entries are processed and recorded to the members' demand deposit accounts and applicable FHLBank general ledger accounts such as the "Federal Reserve Bank," or "correspondent." The responsibility for the review and reconciliation of the entries should be segregated from that for the processing of the daily transactions.

Critical access controls and segregation of duties must be in place to prevent the processing of erroneous and fraudulent transactions. A material erroneous or fraudulent transaction could have a significant impact on the financial condition of the FHLBank and result in a poor image and reputation in the marketplace.

3) Daylight and Customer Deposit Overdrafts

The Federal Reserve Banks provide the unsecured intraday credit needed to support clearing of the large transactional volumes. Such credit extensions occur when a Federal Reserve Bank allows institutions to initiate transactions that exceed, at a given moment, the balance in their reserve or clearing accounts, which leaves the institution in a net debit position with the Federal Reserve Bank. These intraday overdrafts of accounts are referred to as "daylight overdrafts."

The amount of credit available to any institution is usually limited by "net debit sender caps," which establish the maximum unsecured exposure that a Federal Reserve Bank is willing to accept. As the FHLBanks do not have any net debit sender caps, they must monitor their position with the Federal Reserve Bank continuously.

Payment Systems

Wire Transfers and Automated Clearing House (ACH)

Although FHLBanks are not allowed to incur daylight overdrafts, repeated daylight overdrafts may result in discontinuation by the Federal Reserve Bank of services such as wires, ACH, securities, and access to capital markets, which could limit an FHLBank's ability to meet its financial obligations and provide services to its customers.

The responsibility for monitoring the FHLBank's position with a Federal Reserve Bank is usually assigned to cash management/treasury personnel. Such personnel customarily have inquiry access to the wire system, which allows them to monitor large incoming/outgoing activity. In addition, the automated wire system has software controls that establish internal dollar limits and mitigate daylight overdraft possibilities. Customer deposit overdrafts represent an unsecured credit exposure, and should require the approval of credit personnel and line management.

4) Legal

In connection with wire transfer and ACH activities, FHLBank legal staff reviews applicable regulatory requirements, vendor contracts and other FHLBank documentation to protect the FHLBank's interests. In addition, the business units coordinate a periodic review with legal staff to ensure current operating practices comply with regulatory requirements.

5) Business Continuity and Recovery

The FHLBank should have written procedures for operations at its designated hot-site. Back-up tapes should be stored off-site and be easily retrievable. If the automated wire system is not available at the hot-site, FedLine terminals, off-line codeword authorizations, and bilateral agreements with one or more FHLBanks may need to be used to effectuate the FHLBank's wire transfer and ACH activities. Each FHLBank must have at least one back-up system and must test it periodically to ascertain its reliability.

Examination Guidance

A work program for Payment Systems-Wire Transfers and ACH accompanies this narrative. What follows below are illustrative examples of attributes that should be considered by the examiner in completing the analyses required in that work program. In determining the extent of review and testing to be conducted in completing each analysis, the examiner should take into account his or her assessment of the quality and effectiveness of corporate governance, risk management, internal controls and audit coverage relating to the institution's payment systems activities.

Payment Systems
Wire Transfers and Automated Clearing House (ACH)

1) Organizational structure

- a) Functional organization and reporting structure;
- b) Identification of key personnel;
- c) Primary duties, responsibilities and technical expertise of personnel;
- d) Segregation of duties;
- e) Cross-training of personnel;
- f) Coordination with other departments such as risk management, information technology, treasury and cash management, accounting, credit and human resources; and
- g) Significant changes in the foregoing since the last examination.

2) Establishment of risk tolerances and development of key policies and oversight by the board of directors. Evaluate the adequacy of senior management oversight and the risk management function for wire transfer and ACH activities, which may include the following:

- a) Prohibiting or limiting specific types of wire transactions such as international and/or third-party wires;
- b) Limiting or restricting ACH services offered;
- c) Establishing timeframes and requiring customer notification for estimated large dollar wire activity;
- d) Requiring specific procedures to authenticate wire transfer requests such as agreements, personal identification numbers, passwords, tokens and the performance of callback procedures;
- e) Requiring the completion of specific agreements to ensure compliance with UCC-4A and NACHA requirements.
- f) If operating as an ODFI, requiring specific security procedures to authenticate ACH requests received from an Originator or a Third-Party Sender, and establishing policies and procedures to review and monitor credit exposure limits for each of its corporate Originators;
- g) Requiring supervisory reviews of exceptions such as rejected items, deposit and daylight overdrafts, transactions with parties identified on OFAC's "Specially Designated Nationals and Blocked Persons" list, and wire requests that exceed a specific dollar amount;
- h) Restricting system access and function capabilities;
- i) Segregating processing, recording and reconciliation duties in transactions;
- j) Requiring periodic reissuance of wire transfer personal identification numbers and testcodes and reconfirming authorizations with customers;
- k) Mitigating risks and liability with the purchase of specific insurance and bond coverage such as directors and officers liability, errors and omissions, computer cyber crime policies and fidelity bond coverage, and establishing compensating procedures and controls to address any exclusions in the policies;
- l) Reviewing key management reports of wire transfer and ACH activities; and

Payment Systems
Wire Transfers and Automated Clearing House (ACH)

- m) Periodic managerial monitoring and reporting of key operating procedures controls and deviations to senior management and operations committee.
- 3) *Key FHLBank policies and procedures, which may include those relating to the following:***
- a) Wire transfer and ACH operations;
 - b) Risk management;
 - c) Information security;
 - d) Fraud prevention;
 - e) Whistleblower provisions of SARBOX;
 - f) Background and credit investigations;
 - g) Business conduct and ethics;
 - h) Business continuity and recovery;
 - i) Member products; and
 - j) Vendors' risk.
- 4) *Risk assessment under Part 917 and internal control evaluation under SARBOX***
- a) Evaluate the effectiveness of the annual risk assessment under Part 917 that identifies the key risks arising from and controls established by the FHLBank over wire transfer and ACH activities and includes quantitative and qualitative evaluations; and
 - b) Evaluate the effectiveness of evaluations conducted pursuant to SARBOX that identify the key risks and controls pertaining to financial reporting and evaluate potential fraud, and procedures implemented to periodically attest to the adequacy of the control environment.
- 5) *Testing performed by external and internal auditors and outside consultants***
- a) Evaluate the adequacy of the scope and testing performed by external and internal auditors on wire transfer and ACH activities. In addition, verify that an annual audit was conducted to determine compliance with ACH rules no later than December 1 of each year.
 - b) Evaluate the adequacy of the scope and testing performed by outside consultants such as penetration testing.
- 6) *Information technology and controls***
- Identify and assess the automated and manual systems and applicable controls by wire transfer and ACH activities for processing transactions, including:
- a) Authorized users;
 - b) Vendor technical support and access to the automated wire system;

Payment Systems
Wire Transfers and Automated Clearing House (ACH)

- c) Utilization of spreadsheets;
- d) Exception tracking, escalation, and reporting; and
- e) Business continuity and recovery.

7) Identification and evaluation of controls and significant changes to the activity or function

- a) Evaluate workflow and processes as well as controls, including the level and direction of risk and the quality of risk management; and
- b) Evaluate any significant changes to wire transfer and ACH activities that have been implemented since the last examination or are being considered that may affect the FHLBank's risk profile such as management, systems, key personnel, regulatory requirements and processing.

8) Testing

Conduct testing as appropriate. The scope of testing should be based on the preliminary review of governance, risk management, internal controls and audit coverage. Specific examples include, but are not limited to, the following:

Wire Transfers

- a) Restrictions upon physical access to the wire terminals or, in their absence, compensating controls to ensure proper authorization of transactions such as dual control, limitations upon system access or function capabilities, and managerial review;
- b) Verification procedures to ensure proper authorization of wire requests received by telephone, fax, internet, letter and departmental communication such as agreements, personal identification numbers, testcodes, tokens, callback procedures, and customer confirmations;
- c) System controls applicable to the automated wire system such as the review and establishment of employees' system capabilities, access and function capabilities, system defaults pertaining to user identifications, password composition and length, number of attempts before being locked-out, expiration and timeout, and dollar limitations;
- d) Timely recording and reconciliation of wire transactions;
- e) Evaluation of deposit and daylight overdrafts that were the result of wire transfer activity and whether the occurrences were isolated or the result of weaknesses in the internal control environment;
- f) Periodic coordination with legal counsel to ensure that governing agreements and addenda adequately address UCC 4A requirements;
- g) Adequacy of software to identify potential suspects on OFAC's "Specially Designated Nationals and Blocked Persons" list;
- h) Recoverability of telephone recordings and compliance with applicable state

Payment Systems
Wire Transfers and Automated Clearing House (ACH)

- privacy requirements mandating disclosures to customers when conversations are being recorded;
- i) Background and credit investigations and fraud prevention;
 - j) Reissuance of wire transfer personal identification numbers and testcodes as well as confirmation of authorizations with the customers;
 - k) Completion of applicable vendor agreements and compliance with vendors' risk policies; and
 - l) Establishment of record retention procedures that pertain to automated and manual records.

ACH

- a) ACH transactions are requested and processed by authorized personnel. Observe that physical security has been established over the terminals, or in their absence, compensating controls to ensure proper authorization has been established. Specific attributes to consider are as follows:
 - (1) Identify the FHLBank's ACH transactional capacity and evaluate the methodology of receiving the ACH request, such as FedLine Advantage, telephone, fax, internet, or letter. If the FHLBank is operating as an ODFI, evaluate the adequacy of the security procedures established with the Originator and/or Third-Party Sender, and limiting credit risk exposures with its corporate Originators.
 - (2) Review the system controls applicable to the terminals such as the review and establishment of employees' system capabilities, access and function capabilities, system defaults pertaining to user identification, password composition and length, number of attempts before being locked-out, expiration and timeout.
 - (3) Observe the processing of an ACH transaction. If applicable, verify compliance with dual control requirements.
 - (4) Review a sample of incoming, outgoing and future-dated ACH transactions. Verify member authorization, including agreements and resolutions, and the timeliness and accuracy of posting to the member's account. Also, if applicable, select a current transaction and trace to a member's confirmation.
 - (5) If applicable, review the supporting documentation of a recently completed pre-notification and determine compliance with NACHA's requirements.
 - (6) If applicable, review the supporting documentation of a recently completed Notification of Change and determine compliance with NACHA requirements.

- b) ACH Transactions are properly recorded and reconciled.

Review the ACH reconciliation as of the examination date. In addition, evaluate the adequacy of the following attributes:

Payment Systems
Wire Transfers and Automated Clearing House (ACH)

- (1) Segregation of duties;
 - (2) In the event the assigned employee is absent, another employee has been designated to reconcile the accounts;
 - (3) Timely review, reconciliation of balances and resolution of differences and rejected items;
 - (4) Managerial review of the reconciliations; and
 - (5) Periodic reporting to accounting personnel.
- c) Daylight and customer overdrafts are minimized.

Review the most recent deposit overdraft report and daylight overdrafts. If the overdrafts were the result of ACH activity, review with line management the situations that caused the customer deposit and/or daylight overdraft, and corrective action implemented. Evaluate whether the overdrafts were isolated, and whether they were the result of weaknesses in the design of the internal control environment, or lack of compliance with existing policies and procedures.

- d) Compliance with federal and state regulatory requirements

Review a sample of ACH agreements and applicable resolutions. Verify that legal counsel conduct periodic reviews to ensure that the agreements adequately address NACHA, UCC-4A and OFAC requirements.

9) Assessment of Risks

Summarize the results of the activity or function examined in a separate memorandum. The memorandum must articulate the risks and the management of those risks. It should also clearly and specifically describe the basis and analysis for the assessment. The memorandum should discuss the type(s) of risk (market, credit, operational); the level of the risk (low, moderate, high); the direction of the risk (stable, decreasing, increasing); and the quality of risk management (strong, adequate, weak). A memorandum must be prepared irrespective of whether the examiner's assessment is positive or negative.

10) Items requiring follow-up at the next on-site visitation

Identify key issues that have been communicated to management (written or oral) that require follow-up during the next on-site visitation.