

# UNDERSTANDING THE ACH NETWORK: AN ACH PRIMER

This article is designed to provide those who are not familiar with the ACH Network with a basic understanding of the fundamentals of the ACH Network, briefly summarizing the Network's operation, participants, ACH products and services, settlement and posting mechanism, legal framework, and history. For complete information on ACH processing, please refer to the *NACHA Operating Rules* and the *NACHA Operating Guidelines*.

## A. ACH Network Operation

The ACH Network is a batch processing, store-and-forward system. Transactions received by the financial institution during the day are stored and processed later in a batch mode. 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. It also provides faster processing than paper checks,

which must be physically handled. Instead of using paper to carry necessary transaction information, ACH transactions are transmitted electronically between financial institutions through data transmission.

### 1. Participants

Typically, five participants are involved in an ACH transaction:

- (a) the originating company or individual (Originator),
- (b) the Originating Depository Financial Institution (ODFI),
- (c) the ACH Operator,
- (d) the Receiving Depository Financial Institution (RDFI), and
- (e) the receiving company, employee or customer (Receiver).

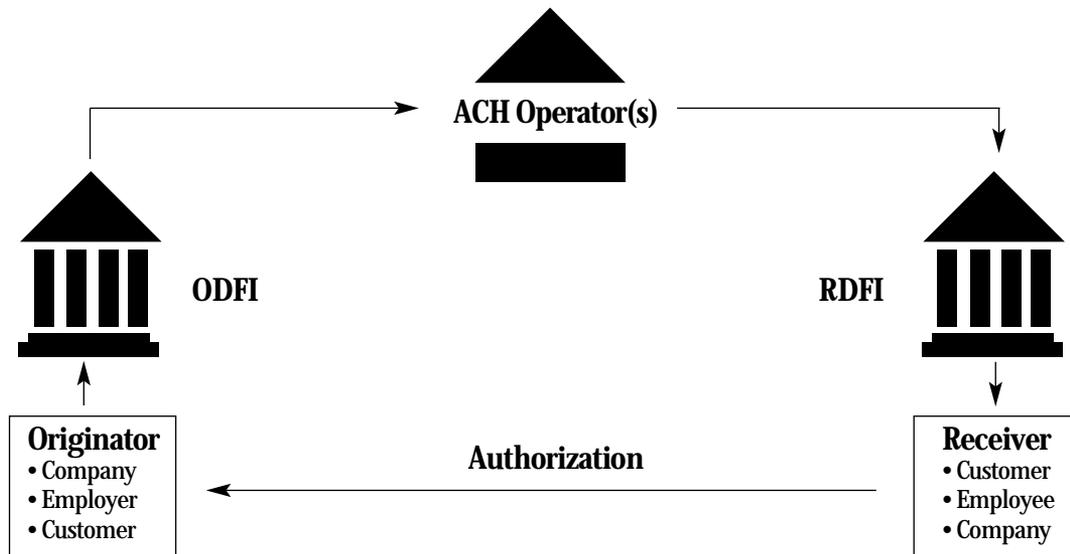
### Definitions of the Participants:

(a) *Originator*: The Originator is the entity that agrees to initiate ACH entries into the payment system

according to an arrangement with a Receiver. The Originator is usually a company directing a transfer of funds to or from a consumer's or another company's account. In the case of a Customer Initiated Entry (CIE), the Originator may be an individual initiating funds transfer activity from his or her own account. The term "company" is intended to represent the Originator of electronic ACH entries and does not imply exclusion of other types of organizations (i.e., Federal, state and local government agencies). An Originator may be either a company or a consumer.

(b) *Originating Depository Financial Institution*. The Originating Depository Financial Institution (ODFI) is the institution that receives payment instructions from Originators and forwards the entries to the 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

Figure 1. ACH Participants



originate ACH entries, it must also agree to act as an RDFI.

(c) *Automated Clearing House Operator.* An Automated Clearing House (ACH) Operator is the central clearing facility operated by a private organization or a Federal Reserve Bank (FRB) 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 the Originating ACH Operator and the other as the Receiving ACH Operator.

(d) *Receiving Depository Financial Institution.* The Receiving Depository Financial Institution (RDFI) is the DFI that receives ACH entries from the ACH Operator and posts the entries to the accounts of its depositors (Receivers).

(e) *Receiver.* A Receiver is a natural person or an organization which has authorized an Originator to initiate an ACH entry to the Receiver's account with the RDFI. A Receiver may be either a company or a consumer, depending on the type of transaction.

**2. ACH Transaction Flow**

In ACH terminology, Originator and Receiver refer to the participants that initiate and receive the ACH entries rather than the funds. Unlike a check, which is always a debit instrument, an ACH entry may be either a credit or a debit entry. By examining what happens to the Receiver's account, one can distinguish the difference between an ACH credit and an ACH debit transaction. If the Receiver's account is debited, then the entry is an ACH debit. If the Receiver's account is credited, then the entry is an ACH credit. Conversely, the offset to an ACH debit is a credit to the Originator's account and the offset to an ACH credit is a debit to the Originator's account.

(a) *ACH Credits*

ACH credit entries occur when an Originator initiates a transfer to move funds into a Receiver's account. For example, when a consumer uses an automated bill payment service at a financial institution to pay cable access charges each month, the consumer originates the payment through the ODFI which then initiates the credit transaction to transfer the money into

the cable company's account; the cable access company is the Receiver.

ACH credit transactions involve both consumer and corporate payments with separate rules and regulations for each. The most typical consumer ACH application is Direct Deposit of Payroll.

Figure 2 lists some of the more common credits processed through the ACH system today.

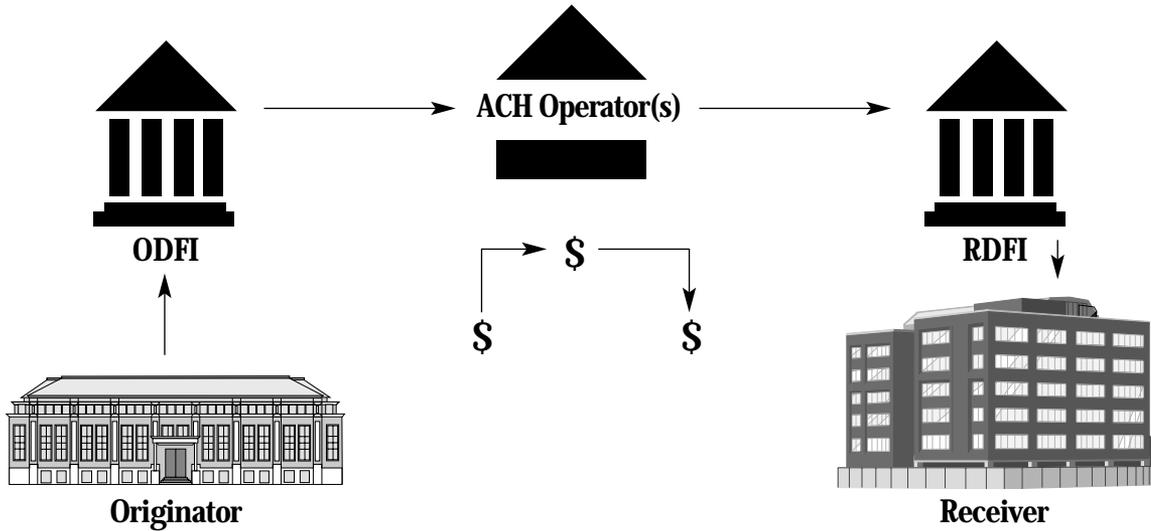
The example in figure 3 illustrates the ACH credit process.

*Example:* As illustrated in Figure 3, a payroll deposit (PPD) credit flows from an account at a company's financial institution to an account at an employee's financial institution. Figure 3 also illustrates the flow of a corporate trade exchange (CTX) credit from an account at a company's financial institution to an account at a vendor's financial institution. Credit entries must be posted to a Receiver's account no later than Settlement Date. Consumer (PPD) entries which are made available to the RDFI by its ACH Operator by 5:00 p.m. (RDFI's local time) on the banking day prior to Settlement Date must be made available by opening of business on the Settlement Date.

*Figure 2. ACH Credits*

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- annuities
  - customer-initiated transactions (e.g., telephone bill payments)
  - corporate-to-corporate payments
  - dividends
  - interest payments
  - payrolls-private and government
  - pensions-private and government
  - Social Security payments
  - tax payments
  - government vendor payments
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**Figure 3. ACH Credit Transaction - Information and Funds Flow**



**(b) ACH Debits**

In an ACH debit transaction, funds flow in the opposite direction. Funds are collected from a Receiver's account and transferred to an Originator's account, even though the Originator initiated the entry. For example, the Originator of a preauthorized debit is the company to which the amount is owed. Consumers authorize a cable access company to debit their accounts for their monthly bills. Once a month the cable access company initiates a debit file through its ODFI to withdraw the money from the consumers' accounts. The cable company is the Originator, and the consumers are the Receivers.

Consumer acceptance is highest in the area of pre-authorized transfers involving regular, recurring payments, such as mortgage payments, installment loans and insurance premiums. Many corporations also use ACH debits to consolidate funds deposited in outlying divisions by operating branches or subsidiaries.

Figure 4 lists some of the more common debit applications processed through the ACH Network today.

The example in figure 5 illustrates the ACH debit process.

*Example:* In figure 5, a preauthorized mortgage payment flows from a con-

sumer's account at a financial institution to a mortgage company's account. Figure 5 also illustrates a corporate cash concentration flow from a company's local or regional financial institution account to a company's regional or national financial institution account. Debit entries must not be posted to a Receiver's account prior to the settlement date.

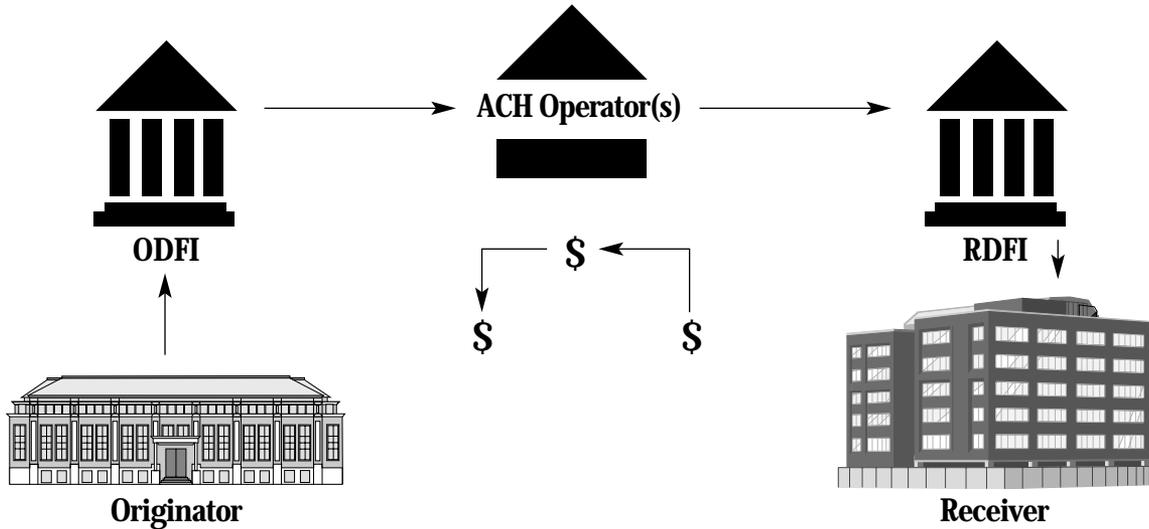
A typical transaction as it flows through the ACH Network might follow the path described below:

- The Originating Depository Financial Institution (ODFI) and the originating company determine, by

**Figure 4. ACH Debits**

- association/club dues
- cash concentration
- distributor/dealer payments
- corporate-to-corporate payments
- contributions to Individual Retirement Accounts, SEP's, 401Ks, etc.
- government savings bonds purchases
- holiday or vacation club payments
- insurance payments
- mortgage and installment loan payments
- point of sale purchases
- safe deposit box rentals
- utility payments
- tax payments

Figure 5. ACH Debit Transaction – Information and Funds Flow



agreement, how the information must be delivered to the ODFI. Ideally, the Originator would format the data in accordance with the requirements of the *NACHA Operating Rules* and transmit the information to the ODFI, but some financial institutions may take unformatted data as a service to their client companies. The ODFI establishes processing schedules and cutoff times with its Originators so that entries may be processed and transmitted in sufficient time for settlement to occur on the dates desired by its Originators.

- The company delivers the file to its ODFI. The timing of delivery must conform to appropriate schedules in order for the payment to settle on the intended date.
- The ODFI generally removes “on-us” entries and transmits the remaining entries to the originating ACH Operator by the ACH Operator’s processing deadline. An “on-us” transaction is one in which the Receiver and the Originator both have accounts at the same financial institution. Therefore, the transaction need not be sent through the ACH Network but instead may be

simply retained by the financial institution and posted to the appropriate account.

- The ACH Operator sorts the entries by RDFI routing number and transmits the payment information to the appropriate RDFI(s) for posting.
- On Settlement Date, all parties to the transaction effect the appropriate settlement of funds.

**B. Consumer vs. Corporate Payments**

ACH transactions are typically categorized as either consumer payments or corporate payments, depending on the relationship of the parties involved in the transaction and the type of Receiver account. In addition, payments are distinguished as Federal Government payments (representing automated disbursements originating from the United States Government, such as Social Security benefits, military and civilian payrolls, retirement benefits, tax refunds, and disbursements for state and federal revenue sharing programs) or commercial payments (initiated by both individual consumers and corporations). Consumer payments currently made via the ACH Network include credit applications such as payroll,

retirement, dividend, interest, and annuity payments, in addition to educational benefit reimbursements, payments and advances, and many others. Consumer ACH debit applications include, among others, the collection of insurance premiums, mortgage and rent payments, utility payments, installment payments, a variety of membership dues, and other recurring obligations. The ACH Network is also widely used to settle consumer transactions made at automated teller machines and point-of-sale terminals.

Corporate ACH applications include cash concentration and disbursement, corporate trade payments, state and Federal tax payments and financial electronic data interchange (EDI). Cash concentration and disbursement allows companies to achieve efficiencies in cash management through timely intra-company transfer of funds. Corporate trade payments enable corporations to exchange both data and funds with trading partners, facilitating an automated process of updating their accounts receivable and accounts payable systems.

## C. Payment Applications

The ACH Network supports a variety of payment applications. An Originator initiating entries into the system will code the entries in such a manner as to indicate the type of payment, such as a debit or credit, and whether an entry is consumer or corporate in nature (i.e., the funds transfer affects either a consumer account or a corporate account at the RDFI). Each ACH application is identified and recognized by a specific three-digit code, known as a Standard Entry Class Code (SEC Code), which appears in the ACH record format. The SEC Code identifies the specific computer record format that will be used to carry the payment and payment-related information relevant to the application. Following is a list of Standard Entry Class Codes and the different products each code supports.

### 1. Consumer Applications

#### **ARC - Accounts Receivable Entry**

Effective March 15, 2002, this new Standard Entry Class Code will enable Originators to convert to a Single Entry ACH debit a consumer check received via the U.S. mail or at a dropbox location for the payment of goods or services. The consumer's source document (i.e., the check) will be used to collect the consumer's routing number, account number, check serial number, and dollar amount for the transaction.

#### **CIE - Customer Initiated Entry**

Customer Initiated Entries are limited to credit applications where the consumer initiates the transfer of funds to a company for payment of funds owed to that company, typically through some type of home banking product or bill payment service provider.

#### **MTE - Machine Transfer Entry**

The ACH Network supports the clearing of transactions from Automated Teller Machines, i.e., Machine Transfer Entries (MTE).

#### **PBR - Consumer Cross-Border Payment**

This Standard Entry Class Code is used for the transmission of consumer cross-border ACH credit and debit entries. This SEC Code allows cross-border payments to be readily identified so that financial institutions may apply special handling requirements for cross-border payments, as desired. The PBR format accommodates detailed information unique to cross-border payments (e.g., foreign exchange conversion, origination and destination currency, country codes, etc.).

#### **POP - Point-of-Purchase Entry**

This Standard Entry Class Code is used as an ACH debit application by Originators as a method of payment for the in-person purchase of goods or services by consumers. These non-recurring debit entries are initiated by the Originator based on a written authorization and account information drawn from the source document (a check) obtained from the consumer at the point-of-purchase. The source document, which is voided by the merchant and returned to the consumer at the point-of-purchase, is used to collect the consumer's routing number, account number, and check serial number that will be used to generate the debit entry to the consumer's account. This Standard Entry Class Code enables ACH participants to readily identify point-of-purchase entries.

#### **POS/SHR - Point of Sale Entry/Shared Network Transaction**

These two Standard Entry Class Codes represent point of sale debit applications in either a shared (SHR) or non-shared (POS) environment. These transactions are most often initiated by the consumer via a plastic access card.

#### **PPD - Prearranged Payment and Deposit Entry**

##### *Direct Deposit*

Direct deposit is a credit application that transfers funds into a consumer's account at the Receiving Depository Financial Institution. The funds being deposited can represent a variety of products, such as payroll, interest, pension, dividends, etc.

##### *Preauthorized Bill Payment*

Preauthorized payment is a debit application. Companies with billing operations may participate in the ACH through the electronic transfer (direct debit) of bill payment entries. Through standing authorizations, the consumer grants the company authority to initiate periodic charges to his or her account as bills become due. This concept has met with appreciable success in situations where the recurring bills are regular and do not vary in amount—insurance premiums, mortgage payments, and installment loan payments being the most prominent examples. Standing authorizations have also been successful for bills where the amount does vary, such as utility payments.

**RCK - Re-presented Check Entry**

A re-presented check entry is an ACH debit application used by Originators to re-present a check that has been processed through the check collection system and returned because of insufficient or uncollected funds. This method of collection via the ACH Network, compared to the check collection process, provides Originators with the potential for improvements to processing efficiency (such as control over timing of the initiation of the debit entry) and decreased costs.

**TEL - Telephone-Initiated Entry**

This Standard Entry Class Code is used for the origination of a Single Entry debit transaction to a consumer's account pursuant to an oral authorization obtained from the consumer via the telephone. This type of transaction may only be originated when there is either (1) an existing relationship between the Originator and the Receiver, or (2) no existing relationship between the Originator and the Receiver, but the Receiver has initiated the telephone call. This SEC Code facilitates access to the ACH Network by providing an alternative authorization method, oral authorization via the telephone, for certain types of consumer debit entries.

**WEB - Internet-Initiated Entry**

This Standard Entry Class Code is used for the origination of debit entries (either recurring or Single Entry) to a consumer's account pursuant to an authorization that is obtained from the Receiver via the Internet. This SEC Code helps to address unique risk issues inherent to the Internet payment environment through requirements for added security procedures and obligations.

**2. Corporate Applications****CBR - Corporate Cross-Border Payment**

This Standard Entry Class Code is used for the transmission of corporate cross-border ACH credit and debit entries. This SEC Code allows cross-border payments to be readily identified so that financial institutions may apply special handling requirements for cross-border payments, as desired. The CBR format accommodates detailed information unique to cross-border payments (e.g., foreign exchange conversion, origination and destination currency, country codes, etc.).

**CCD - Cash Concentration or Disbursement**

This application, Cash Concentration or Disbursement, can be either a credit or debit application where funds are either distributed or consolidated between corporate entities. This application can serve as a stand-alone funds transfer, or it can support a limited amount of payment related data with the funds transfer.

**CTX - Corporate Trade Exchange**

The Corporate Trade Exchange application supports the transfer of funds (debit or credit) within a trading partner relationship in which a full ANSI ASC X12 message or payment related UN/EDIFACT information is sent with the funds transfer. The ANSI ASC X12 message or payment related UN/EDIFACT information is placed in multiple addenda records.

**3. Other Applications****ACK/ATX - Acknowledgment Entries**

These optional Standard Entry Class Codes are available for use by the RDFI to acknowledge the receipt of ACH credit payments originated using the CCD or CTX formats. These acknowledgments indicate to the Originator that the payment was received

and that the RDFI will attempt to post the payment to the Receiver's account. Acknowledgment entries initiated in response to a CCD credit entry utilize the ACK format. Acknowledgments initiated in response to a CTX credit entry utilize the ATX format.

**ADV - Automated Accounting Advice**

This Standard Entry Class Code represents an optional service to be provided by ACH Operators that identifies automated accounting advices of ACH accounting information in machine readable format to facilitate the automation of accounting information for Participating DFIs.

**COR - Automated Notification of Change or Refused Notification of Change**

This Standard Entry Class Code is used by an RDFI or ODFI when originating a Notification of Change or Refused Notification of Change in automated format. It is also used by the ACH Operator that converts paper Notifications of Change to automated format.

**DNE - Death Notification Entry**

This application is utilized by a Federal Government agency (e.g., Social Security Administration) to notify a depository financial institution that the recipient of a government benefit payment has died.

**ENR - Automated Enrollment Entry**

This optional SEC Code allows a depository financial institution to transmit ACH enrollment information to Federal Government Agencies via the ACH Network for future credit and debit applications on behalf of both consumers and companies.

**RET - Return Entry**

This Standard Entry Class Code is used by ACH Operators that convert paper returns to automated format. It may also be used by ODFIs that are

originating Dishonored Returns when the return that is being dishonored carried the Standard Entry Class Code RET.

### **TRC/TRX - Truncated Entries**

This Standard Entry Class Code is used to identify batches of truncated checks. For more information on check truncation, please see the National Association for Check Safekeeping Guidelines available from NACHA.

### **XCK - Destroyed Check Entry**

This application can be utilized by a collecting institution for the collection of certain checks when those checks have been destroyed.

### **D. Advantages to Participants**

Each participant in the ACH Network benefits through improvements in service and reductions in operating costs. The following specific advantages have been identified for each participant:

#### **Advantages to Consumers**

- Direct deposit offers the following benefits to the recipient:
  - Elimination of time and cost involved in depositing checks.
  - Consistent availability of funds on a timely basis, even during vacation, illness, or business trips.
  - Elimination of the possibility of lost or stolen checks.
- Debit applications provide the following benefits to the consumer:
  - Convenience of not having to write checks.
  - Elimination of postage expense and the risk of late payments.
  - Avoidance of late or interest charges through prompt, timely payments.
  - Establishment of excellent payment and credit records.

#### **Advantages to Companies (Originators or Receivers)**

- Reduction of administration and operating expenses.
- Elimination of time lost by employees who deposit checks during working hours.
- Reduction of clerical cost for account reconciliation.
- Elimination of stop payment charges and check reissue costs.
- Reduced remittance processing costs (paper handling) resulting from the absence of the check.
- Accelerated availability of funds.
- Better cash management forecasting.
- Improved business relationships.
- Certainty of delivery.
- Possible reduction of bank service charges.

#### **Advantages to the Originating Depository Financial Institution**

- Reduction of costs through increased automated processing.
- New opportunities for increased business through expanded services.
- Enhanced public recognition through provision of effective, efficient, and innovative payment services.

#### **Advantages to the Receiving Depository Financial Institution**

- Reduction of costs through automated processing of electronic entries and elimination of handling individual items.
- Alleviation of teller-line congestion during peak periods (particularly on payday).
- Ability to offer improved services to both consumer and corporate account holders.

- Enhanced public recognition through provision of effective, efficient, and innovative payment services.

### **E. Settlement and Posting**

Settlement is the actual transfer of the value of funds between financial institutions to complete the payment instruction of an ACH entry.

The Federal Reserve provides settlement services for ACH entries processed by the Federal Reserve and for private sector ACH Operators that process ACH entries. The Federal Reserve ACH Operator calculates the net credit and debit positions of financial institutions and applies those credits or debits to the reserve accounts of the financial institutions (or their correspondent banks) that are maintained on the books of the Federal Reserve.

In addition to the Federal Reserve, there are also three private sector ACH Operators that provide settlement services for participants in the ACH Network: (1) the American Clearing House Association, (2) the Electronic Payments Network, and (3) VisaNet ACH Services. These private sector ACH Operators have entered into an agreement, called Private Sector Exchange or PAX, in which they exchange ACH entries among themselves, bypassing the Federal Reserve ACH system.

The following are the three main participants (ODFI, ACH Operator, RDFI) and their responsibilities concerning settlement and posting.

#### **1. ODFI**

Settlement with the ODFI for entries originated usually occurs using the same procedures used for settlement of entries received. If the scheduled settlement date of a credit entry is not a banking day for the ODFI, but the applicable Federal Reserve office is

open on that date, settlement shall occur on the scheduled Settlement Date.

Specific procedures and timing of settlement between the ODFI and the Originator are solely at the discretion of the ODFI and the Originator and, therefore, governed by agreement between them. It is the ODFI's responsibility to monitor the credit-worthiness of its corporate customers to ensure that the ODFI's risk in originating ACH payments is managed efficiently.

## 2. ACH Operator

ACH Operators calculate settlement totals owed to and by Participating DFIs based on the effective entry dates and processing dates contained within batches of transactions. ACH Operators provide information to participants on the dollar amounts that will be settled for each institution on each Settlement Date. ACH entries processed by the Federal Reserve ACH Operator are settled against the Participating DFI's settlement account held at the Federal Reserve. Settlement for transactions processed by private sector ACH Operators is determined by an arrangement with the Federal Reserve.

## 3. RDFI

(a) *Posting.* The RDFI is responsible for posting entries and for providing funds availability, both of which are determined by the Settlement Date in the Company Batch Header Record.

**ACH debits** will be delivered to an RDFI no earlier than one banking day prior to the Settlement Date. *NACHA Operating Rules* state that debits cannot be posted prior to the Settlement Date.

If an RDFI is closed for business on the scheduled settlement date of a debit entry, but the Receiving ACH Operator is open, the RDFI will be debited on the scheduled Settlement Date unless it

has advised the ACH Operator to delay settlement to the next business day of the RDFI. If the ACH Operator agrees to delay settlement, the RDFI must pay for any costs of float resulting from the deferral of settlement.

**ACH credits** will be delivered to an RDFI no earlier than two banking days prior to the settlement date. It is recommended that credits be posted on the settlement date; credit entries may, however, be posted prior to the settlement date if the RDFI cannot warehouse the entry. *NACHA Operating Rules* require that credit entries must be available for withdrawal or cash withdrawal by the customer no later than the settlement date of the entry. Further, according to *NACHA Operating Rules*, each PPD credit entry that is made available to an RDFI by its ACH Operator by 5:00 p.m. (RDFI's local time) on the banking day prior to the settlement date must be made available to the Receiver for withdrawal or cash withdrawal at the opening of business on the settlement date. For the purposes of the preceding sentence, opening of business is defined as the later of 9:00 a.m. (RDFI's local time) or the time the RDFI's teller facilities (including ATMs) are available for customer account withdrawals.

(b) *Settlement.* Settlement between the Originator and the ODFI is governed by agreement. Settlement between the RDFI and the Receiver is determined by the *NACHA Operating Rules*, Federal Reserve availability schedules, and agreement.

When an ACH file is processed by the receiving ACH Operator, the ACH Operator will read the Effective Entry Date in the Company/Batch Header Record and settle according to that date. If the file has been delivered to the ACH Operator so that the ACH Operator is able to settle on the Effective Entry Date, it will insert the corresponding Julian Date in the Settlement

Date field. If the ACH Operator cannot settle on the Effective Entry Date due to a stale date, weekend, or holiday, the ACH Operator will insert the Julian Date of the next business day into the Settlement Date field reflecting that settlement will occur on that date.

Settlement information is produced by the ACH Operator as ACH entries are processed. This information is accumulated based on the type of entry (debit or credit) by settlement date. These settlement totals are reported to the RDFI or its settlement member correspondent.

The ACH Operator may provide ACH settlement information in a machine-readable format to facilitate the automation of settlement accounting for correspondent RDFIs.

Settlement totals should be balanced daily against totals posted to the RDFI's customer accounts and against any rejects that may occur. Rejects and other differences must be resolved immediately.

ACH settlement procedures are the same for consumer and corporate transactions. In view of the large-dollar entries that flow through the ACH Network for corporate customers, RDFIs should have internal procedures in place to monitor large-dollar settlement totals.

## F. Legal Framework

The ACH process operates from beginning to end through a series of legal agreements. Before any transaction is initiated, the Originator and ODFI execute an agreement to use the ACH Network to originate payments. Among other things, the agreement should bind the originating company to the *NACHA Operating Rules*, define the parameters of the relationship between the two parties, identify processing requirements for the specific application(s), and establish liability and

accountability for procedures related to certain application(s). The *NACHA Operating Rules* govern interregional ACH transactions and also cover intraregional ACH transactions unless a regional ACH association has implemented a local rule to supersede a provision of the *NACHA Operating Rules*.

While the *NACHA Operating Rules* is the primary document addressing the rules and regulations for the commercial ACH Network, Federal Government ACH payments are controlled by the provisions of Title 31 Code of Federal Regulations Part 210 (31 C.F.R. Part 210). The Financial Management Service (FMS) of the U.S. Department of the Treasury is the agency responsible for establishing Federal Government ACH policy. In 1999, 31 C.F.R. Part 210 was revised by FMS to adopt the provisions of the *NACHA Operating Rules* as the regulations governing the transmission and receipt of Federal Government ACH entries, with certain exemptions to address matters of Federal law. FMS also publishes *The Green Book*, a procedural manual for Federal Government ACH payments.

Other laws that have a direct bearing on ACH operations are the Uniform Commercial Code Article 4, which governs check transactions, and Article 4A, and the Electronic Funds Transfer Act as implemented by Regulation E. Certain other activities related to ACH payments are affected by The Right to Financial Privacy Act, Regulation D regarding reserve requirements, Regulation CC regarding funds availability, and other regulatory agency directives. Agreements are also required between RDFIs and the ACH Operators for ACH Operator services. Relationships between the consumer as Receiver and the RDFI are generally governed by Regulation E and the *NACHA Operating Rules*. In some cases, agreements exist between the RDFI and the Receiver, particularly if the Receiver is a corporate or government entity.

### G. History of the ACH Network

The ACH Network is a processing and delivery system that provides for the distribution and settlement of electronic credits and debits among financial institutions. The ACH Network was developed in response to the astronomical growth of check payments and the many technological advances in the mid-twentieth century and functions as an efficient, electronic alternative to paper checks. Through a nationwide telecommunications network, each ACH Operator is able to communicate with other ACH Operators to exchange entries quickly and efficiently, regardless of geographic distances involved. The ACH Network offers an assortment of technical formats that can be used for a variety of payment applications, products and services. The ACH Network is governed by operating rules and guidelines, which are developed by the actual users of the system, and is administered through a series of agreements among financial institutions, customers, trading partners, and ACH Operators.

The ACH movement began in the early 1970s when a group of California bankers formed the Special Committee on Paperless Entries (SCOPE). In direct response to the rapid growth in check volume, the Committee was chartered to explore the technical, operational, and legal framework necessary for an automated payments system.

SCOPE laid the groundwork for the first Automated Clearing House (ACH) association, which began operation in 1972. The establishment of this ACH association led to the formation of similar groups in other parts of the country. Agreements were made between the emerging regional ACH associations and the regional Federal Reserve Banks to provide facilities, equipment, and staff to operate regional ACH networks. Two notable exceptions to this type of arrangement

occurred in New York and Chicago, where private clearing houses were formed to handle ACH transactions.

In 1974, the National Automated Clearing House Association (NACHA) was formed to coordinate the ACH movement nationwide. Through the joint efforts of NACHA and the Federal Reserve System, local ACHs were linked electronically on a nationwide basis in 1978. The main benefits associated with the use of the ACH Network are cost reduction and improved productivity over paper check transactions.

In an effort to improve the payments system, Congress enacted the Monetary Control Act in 1980. As a result of that Act, private sector ACH Operators were encouraged to compete with the Federal Reserve, which could no longer offer its services free of charge and was required to recover its operating costs. A private sector adjustment factor (i.e., profit margin) is included in Federal Reserve processing so that the Federal Reserve Bank charges as though it were operating on a "for profit" basis.

### ***NACHA and the Regional Payments Associations***

NACHA oversees America's largest electronic payments network. NACHA's primary roles are to develop and maintain the *NACHA Operating Rules*, to promote growth in ACH volume, and to provide educational services to its members and other ACH participants. NACHA's member payments associations serve over 12,000 financial institutions across the United States, which in turn provide services to over 3.5 million corporations and one-hundred million consumers, with a transaction volume of 8 billion payments and a dollar value \$22.2 trillion in 2001.

Regional payments associations provide management, education, assis-

tance, and services to link all types of financial institutions (commercial banks, saving banks, and credit unions) across the United States. Several of these associations also develop and implement local ACH rules that apply specifically to their own member financial institutions. The regional payment associations offer a wide variety of educational sessions ranging from origination and receipt operations to audit and control.

## H. ACH Terminology

This section is intended to provide users of this book with an overview of basic ACH terminology. ACH terms, as defined specifically for purposes of the *NACHA Operating Rules*, may be found within Article Thirteen of the *NACHA Operating Rules*.

### **ACH Operator**

means (1) a Federal Reserve Bank that performs all of the following, or (2) an entity that executes an annual agreement with the National Association in which the entity agrees to comply with or perform all of the following:

- (a) adhere to these rules (except to the extent inconsistent with the policies or practices of the Federal Reserve Banks) and other applicable laws, regulations, and policies;
- (b) execute agreements with a minimum of twenty independent (i.e., not owned by the same holding company) Participating DFIs that bind such entities to the ACH Operator's rules and to these rules (except that a Federal Reserve Bank shall not be required to bind a Participating DFI to any provision of such rules of the National Association that is not incorporated by the Uniform Operating Circular of the Federal Reserve Banks);
- (c) (a) provide clearing, delivery, and settlement services for ACH entries, as defined by these rules, between Participating DFIs that

have selected that ACH Operator to perform ACH services (intra-ACH Operator services), and (b) exchange transactions with other ACH Operators (inter-ACH Operator exchange);

- (d) process and edit files based on the requirements of these rules;
- (e) evaluate the credit worthiness of and apply risk control measures to their Participating DFIs;
- (f) adhere to the Federal Reserve's Policy Statement on Privately Operated Multilateral Settlement Systems (as applicable); and
- (g) adhere to any National ACH Operator Performance Standards of the National Association.

### **Addenda Record**

An ACH record type that carries the supplemental data needed to completely identify an account holder(s) or provide information concerning a payment to the RDFI and the Receiver.

### **Authorization**

A written agreement with the originating company signed or similarly authenticated by an employee or customer to allow payments processed through the ACH Network to be deposited in or withdrawn from his or her account at a financial institution. Can also be a written agreement that defines the terms, conditions and legal relationship between trading partners. For ACH credit entries, authorization may also be by verbal or other non-written means.

### **Automated Clearing House (ACH) Network**

A funds transfer system, governed by the *NACHA Operating Rules*, that provides for the interbank clearing of electronic entries for participating financial institutions.

### **Banking Day**

Any day on which a participating depository financial institution is open to the public during any part of the day for carrying on substantially all its banking functions.

### **Batch**

A group of records or documents considered as a single unit for the purpose of data processing.

### **Consumer Account**

A deposit account held by a financial institution and established by a natural person primarily for personal, family, or household use and not for commercial purposes.

### **Corporate-to-Corporate Payments**

Any of the class of automated payment formats developed for the ACH Network that allow concurrent exchange of funds and remittance information between trading partners.

### **Credit Entry**

An entry to the record of an account to represent the transfer or placement of funds into the account.

### **Data Transmission**

The electronic exchange of information between two data processing points.

### **Debit Entry**

An entry to the record of an account to represent the transfer or removal of funds from the account.

### **Direct Debit**

A method of collection used in the ACH for certain claims, generally those that are repeated over a period of time, under which the debtor gives his or her financial institution authorization to debit his or her account upon the receipt of an entry issued by a creditor.

**Direct Deposit**

An ACH service that provides for the electronic transfer of funds directly into the account of a payee, usually an employee receiving pay or a Social Security beneficiary receiving retirement benefits.

**Direct Payment**

A method of collection used in the ACH Network for certain claims, generally those that are repeated over a period of time, for which the debtor gives the Originator an authorization to debit his or her account.

**EDI Payment**

The computer-to-computer transmission of a payment and related information in a standard format.

**Effective Entry Date**

The date the originating company expects payment to take place. The ACH Operator reads the effective entry date to determine the settlement date that is usually the next available business day.

**Electronic Funds Transfer (EFT)**

A generic term used to describe any ACH or wire transfer.

**Entry**

An electronic item representing the transfer of funds in the ACH.

**Field**

One or more consecutive character positions within an ACH entry mapped to contain specific information. For credit, debit or ATM cards, a defined area within an information track of the magnetic stripe of fixed or variable length.

**File**

A group of ACH batches initiated into the ACH Network or sorted for delivery to ACH receiving point(s). A file must be transmitted electronically via data transmission between the sending point and the receiving point. A file

may be delivered to an end-point via direct data transmission, magnetic tape, or floppy diskette. A file may contain one or more batches of entries.

**Financial EDI**

Electronic data interchange for financial transactions/applications between companies and financial institutions, including payment and remittance advice, account analysis, and balance reporting.

**Funds Availability**

The time at which the funds resulting from a funds transfer are made available to the customer.

**Green Book**

A publication assembled by the U.S. Department of the Treasury that specifies the procedures to be used in Automated Clearing House transactions originated on behalf of the United States Federal Government.

**Live Dollar Entry**

"Live" refers to an entry that affects a funds transfer rather than non-dollar entries, such as prenotifications.

**MICR line**

The magnetic ink character recognition inscription at the bottom of a paper check.

**National Automated Clearing House Association (NACHA)**

The national association that establishes the standards, rules and procedures that enable depository financial institutions to exchange payments on a national basis.

**NACHA Formats**

The ACH record format specifications described in the *NACHA Operating Rules and Guidelines* are the accepted and warranted payment format standards for payments delivered through the ACH.

**Notification of Change (NOC)**

Information sent by an RDFI to notify the ODFI that previously valid information for a receiver has become outdated or that information contained in a prenotification is erroneous. The standard entry class code is COR.

**On-Us Entries**

Entries within an ACH file destined for accounts held at the ODFI.

**Originating Depository Financial Institution (ODFI)**

A participating financial institution that initiates ACH entries at the request of and by agreement with its customers. ODFIs must abide by the provisions of the *NACHA Operating Rules and Guidelines*.

**Originator**

Any individual, corporation or other entity that initiates entries into the Automated Clearing House system.

**Posting**

The process of recording debits and credits to individual account balances.

**Prenotification**

A non-dollar entry that may be sent through the ACH Network by an Originator to alert an RDFI that a live-dollar transaction will be forthcoming and that verification of the Receiver's account number is required.

**Receiver**

An individual, corporation or other entity who has authorized an originator to initiate a credit or debit entry to an account held at an RDFI.

**Receiving Depository Financial Institution (RDFI)**

Any financial institution qualified to receive ACH entries that agrees to abide by the *NACHA Operating Rules and Guidelines*.

**Receiving Point**

A site where entries are received from an ACH Operator for processing. It may be the RDFI, its data center or a data processing service bureau authorized to receive entries on behalf of a RDFI.

**Regulation E**

A regulation promulgated by the Federal Reserve Board of Governors in order to ensure consumers of a minimum level of protection in disputes arising from electronic funds transfers.

**Returns**

Any ACH entry that has been returned to the ODFI by the RDFI or by the ACH Operator because it cannot be processed. The reason for each return is included with the return in the form of a "return reason code." (See the *NACHA Operating Rules and Guidelines* for complete return reason code listing.)

**Reversals**

Any ACH entries or files sent within required deadlines to "correct" or reverse previously originated entries or files.

**Routing Number**

A nine-digit number (eight digits and a check digit) that identifies a specific financial institution. Also referred to as the ABA number. Numbers are assigned by the Thomson Financial Publishing and are listed in its publication entitled *Key to Routing Numbers*.

**Sending Point**

A processing site from which entries are transmitted to the ACH Operator. It may be the ODFI on its own behalf or a financial institution or private data processing service bureau on behalf of the ODFI.

**Settlement**

A transfer of funds between two parties in cash, or on the books of a mutual depository institution, to complete one or more prior transactions, made subject to final accounting. Settlement for the ACH system usually occurs through the Federal Reserve.

**Settlement Date**

The date on which an exchange of funds with respect to an entry is reflected on the books of the Federal Reserve Bank(s).

**Standard Entry Class Codes**

Three character code within an ACH company/batch header record that identifies payment types within an ACH batch (e.g., CCD, CTX, etc.).

**Transaction Code**

The two digit code in the ACH record that determines whether an entry is a debit or a credit to a DDA account, savings account, or general ledger account, or whether an entry is a credit to a loan account.