International ACH (IAT)
NACHA File Formats

August 2009

INTERNATIONAL ACH (IAT) FILE FORMATS

IAT File Header Record – Original Entry

The File Header Record introduces the file. It designates the physical file characteristics and identifies the sender of the file (the ODFI or Gateway Operator) and the party to which the file is being delivered (the ACH Operator). This record also includes the date, time, and file identification fields that can be used to identify a particular file.

#	Field	Position	Length	Mandatory/Required/ Optional	Description
1	Record Type Code	01-01	1	Mandatory	Record Type: **1**
2	Priority Code	02-03	2	Required	Priority Code: **01** *(Numeric)*
3	Immediate Destination	04-13	10	Mandatory	Transit/Routing number of Bank, preceded by a single space **_101000019**
4	Immediate Origin	14-23	10	Mandatory	Company Fed Tax ID, preceded by a single space **_nnnnnnnnn**
5	File Creation Date	24-29	6	Mandatory	File Creation Date: **YYMMDD**
6	File Creation Time	30-33	4	Optional	File Creation Time: **HHMM**
7	File ID Modifier	34-34	1	Mandatory	File ID Modifier – "**A**" for the first file of the day, "**B**" for the second file of the day, etc. May use: Upper Case A-Z, Numeric 0-9
8	Record Size	35-37	3	Mandatory	Record size: **094**
9	Blocking Factor	38-39	2	Mandatory	Blocking Factor: **10**
10	Format Code	40-40	1	Mandatory	Format Code: **1**
11	Immediate Destination Name	41-63	23	Optional	Immediate Destination Name *(Alphameric):* **Commerce Bank**
12	Immediate Origin Name	64-86	23	Optional	Company Name or Name of Service Agency who created the file *(Alphameric)*
13	Reference Code	87-94	8	Optional	Reference Code is reserved for bank use *(Alphameric)*

IAT Company/Batch Header Record – Original Entry

The Company/Batch Header Record identifies the Originator and briefly describes the purpose of the entry.

#	Field	Position	Length	Mandatory/Required/ Optional	Description
1	Record Type Code	01-01	1	Mandatory	Record Type: **5**
2	Service Class Code	02-04	3	Mandatory	Service Class Code *(Numeric):* **200** Debits & Credits **220** Credits Only **225** Debits Only
3	IAT Indicator	05-20	16	Optional	*(Alphameric)*
4	Foreign Exchange Indicator	21-22	2	Mandatory	Indicates the foreign exchange conversion methodology applied to an IAT entry *(Alphameric)* **FV** Fixed to variable **VF** Variable to fixed **FF** Fixed to Fixed
5	Foreign Exchange Reference Indicator	23	1	Required	Indicates the type of data in the foreign exchange reference field *(Numeric):* **1** Foreign exchange rate; **2** Foreign exchange reference number; or **3** Space filled
6	Foreign Exchange Reference	24-38	15	Required	Foreign exchange rate or reference number, as specified in the foreign exchange reference indicator field. If the foreign exchange reference indicator is **3,** leave this field blank *(Alphameric)*
7	ISO Destination Country Code	39-40	2	Mandatory	Two-character ISO 3166 country code for the beneficiary country *(Alphameric)*
8	Originator Identification	41-50	10	Mandatory	Enter your Commerce Bank ACH Company ID *(Alphameric)*
9	Standard Entry Class Code (SEC)	51-53	3	Mandatory	Always **IAT**. Must be uppercase *(Alphameric)*
10	Company Entry Description	54-63	10	Mandatory	Enter a description of the entry, such as **PAYROLL** or **VENDOR PMT** *(Alphameric)*
11	ISO Originating Currency Code	64-66	3	Mandatory	Three-character ISO 4217 code of the originating currency. When the foreign exchange indicator field is **FV**, ISO originating currency is **USD** *(Alphameric)*
12	ISO Destination Currency Code	67-69	3	Mandatory	Three-character ISO 4217 code for the destination currency. When the foreign exchange indicator field is **VF** or **FF**, ISO originating currency and ISO destination currency must be the same. When the foreign exchange indicator field is **FV**, ISO destination currency indicates the foreign currency *(Alphameric)*
13	Effective Entry Date	70-75	6	Required	Date item(s) are to post to the receivers account Format: **YYMMDD**
14	Settlement Date (Julian Date)	76-78	3	Inserted by ACH Operator	Julian Date – Commerce Bank will insert *(Numeric)*
15	Originator Status Code	79	1	Mandatory	Originator Status Code: **1** *(Alphameric)*
16	Gateway Operator Identification/Originating DFI Identification	80-87	8	Mandatory	Originating DFI ID – Commerce Bank will insert (10100001)
17	Batch number	88-94	7	Mandatory	Sequential batch number within file *(Numeric)*

IAT Entry Detail Record – Original Entry

The Entry Detail Records contain information about the Receiver and the Receiver's financial institution.

#	Field	Position	Length	Mandatory/Required/ Optional	Description
1	Record Type Code	01-01	1	Mandatory	Record Type: **6**
2	Transaction Code	02-03	2	Mandatory	Transaction Code *(Numeric):* **22** Demand Deposit Account Credit **23** Demand Deposit Account Credit Pre-note **27** Demand Deposit Account Debit **28** Demand Deposit Account Debit Pre-note **32** Savings Account Credit **33** Savings Account Credit Pre-note **37** Savings Account Debit **38** Savings Account Debit Pre-note
3	Gateway Operator Identification / Receiving DFI Identification	04-11	8	Mandatory	Contains the standard Routing Number that identifies the U.S. RDFI at which the receiver maintains their account
4	Check Digit	12-12	1	Mandatory	*(Numeric)*
5	Number of Addenda Records	13-16	4	Mandatory	Represents the number of addenda records associated with the Entry Detail Record *(Numeric)*
6	Reserved	17-29	13	N/A	Leave Blank
7	Amount	30-39	10	Mandatory	Contains the dollar amount of the entry in U.S. dollars
8	Foreign Receiver's Account Number / DFI Account Number	40-74	35	Mandatory	Contains the receiver's account number *(Alphameric)*
9	Reserved	75-76	2	N/A	Leave Blank
10	Gateway Operator (GO) OFAC Screening Indicator	77-77	1	Optional	Indicates the results of a Gateway Operator screen for OFAC compliance *(Alphameric)* **0 =** GO has not found a potential block party **1 =** GO found presence of a potential blocked party
11	Secondary OFAC Screening Indicator	78-78	1	Optional	*(Alphameric)*
12	Addenda Record Indicator	79-79	1	Mandatory	*(Numeric)*
13	Trace Number	80-94	15	Mandatory	Assigned by the ODFI in ascending sequence and uniquely identifies each entry within a batch *(Numeric)*

First IAT Addenda Record – Original Entry

The First IAT Addenda Record identifies the Receiver of the transaction and the dollar amount of the payment.

#	Field	Position	Length	Mandatory/Required/ Optional	Description
1	Record Type Code	01-01	1	Mandatory	Record Type: **7**
2	Addenda Type Code	02-03	2	Mandatory	Addenda Type Code: **10**
3	Transaction Type Code	04-06	3	Required	Field contains a three-character code used to identify the type of transaction *(Alphameric)* <u>Options for Outbound Payments:</u> **ANN –** Annuity **BUS** – Business/Commercial **DEP** – Deposit **LOA** – Loan **MIS** – Miscellaneous **MOR** – Mortgage **PEN** – Pension **RLS** – Rent/Lease **SAL** – Salary **TAX** – Tax For <u>Inbound Payments</u>, in addition to the options above, a secondary SEC Code may be used: **ARC**, **BOC**, **MTE**, **POP**, **POS**, **RCK**, **TEL**, **WEB**
4	Foreign Payment Amount	07-24	18	Required	For Outbound IAT Entries, this field contains the amount for which the entry is to be received by the Foreign Receiver in the currency denomination expressed in the ISO Destination Currency Code Field of the Company/Batch Header Record
5	Foreign Trace Number	25-46	22	Optional	Insert blanks or zeros *(Alphameric)*
6	Receiving Company Name or Individual Name	47-81	35	Mandatory	This field contains the name of the Receiver *(Alphameric)*
7	Reserved	82-87	6	N/A	Leave Blank
8	Entry Detail Sequence Number	88-94	7	Mandatory	This field contains the ascending sequence number section of the Entry Detail Record's trace number. This number is the same as the last seven digits of the trace number of the related Entry Detail Record *(Numeric)*

Second and Third IAT Addenda Records – Original Entry

The Second and Third IAT Addenda Records identify key information related to the Originator of the entry.

Second IAT Addenda Record

#	Field	Position	Length	Mandatory/Required/ Optional	Description
1	Record Type Code	01-01	1	Mandatory	Record Type: **7**
2	Addenda Type Code	02-03	2	Mandatory	Addenda Type Code: **11**
3	Originator Name	04-38	35	Mandatory	Field contains the name of the Originator of the transaction *(Alphameric)*
4	Originator Street Address	39-73	35	Mandatory	Field contains the Originator's physical street address *(Alphameric)*
5	Reserved	74-87	14	N/A	Leave Blank
6	Entry Detail Sequence Number	88-94	7	Mandatory	This field contains the ascending sequence number section of the Entry Detail Record's trace number. This number is the same as the last seven digits of the trace number of the related Entry Detail Record *(Numeric)*

Third IAT Addenda Record

#	Field	Position	Length	Mandatory/Required/ Optional	Description
1	Record Type Code	01-01	1	Mandatory	Record Type: **7**
2	Addenda Type Code	02-03	2	Mandatory	Addenda Type Code: **12**
3	Originator City & State/Province	04-38	35	Mandatory	This field contains the city and, if applicable, the state or province of the Originator. Asterisks must be used to separate the data elements, and the last data element must be followed by a backslash *(Alphameric)*
4	Originator Country & Postal Code	39-73	35	Mandatory	This field identifies the Originator's country and postal code, (e.g., 'US*64105\'). Data elements must be separated by an asterisk and must end with a backslash *(Alphameric)*
5	Reserved	74-87	14	N/A	Leave Blank
6	Entry Detail Sequence Number	88-94	7	Mandatory	This field contains the ascending sequence number section of the Entry Detail Record's trace number. This number is the same as the last seven digits of the trace number of the related Entry Detail Record *(Numeric)*

Fourth IAT Addenda Record – Original Entry

The Fourth IAT Addenda Record contains information related to the financial institution originating the entry.

#	Field	Position	Length	Mandatory/Required/ Optional	Description
1	Record Type Code	01-01	1	Mandatory	Record Type: **7**
2	Addenda Type Code	02-03	2	Mandatory	Addenda Type Code: **13**
3	Originating DFI Name	04-38	35	Mandatory	For an Inbound IAT entry, this field contains the name of the foreign Originating DFI *(Alphameric)*
4	Originating DFI Identification Number Qualifier	39-40	2	Mandatory	This field contains a 2-digit code that identifies the numbering scheme used in the Originating DFI Identification Number Field *(Alphameric)*
5	Originating DFI Identification	41-74	34	Mandatory	For Inbound IAT Entries, this field contains the National Clearing System Number of the foreign Originating DFI *(Alphameric)*
6	Originating DFI Branch Country Code	75-77	3	Mandatory	This field contains a 2-digit code, as approved by the International Organization for Standardization, used to identify the country in which the branch of the bank that originated the entry is located. On an Inbound IAT Entry, this code will identify the country in which the branch of the foreign ODFI is located *(Alphameric)*
7	Reserved	78-87	10	N/A	Leave Blank
8	Entry Detail Sequence Number	88-94	7	Mandatory	This field contains the ascending sequence number section of the Entry Detail Record's trace number. This number is the same as the last seven digits of the trace number of the related Entry Detail Record *(Numeric)*

Fifth IAT Addenda Record – Original Entry

The Fifth IAT Addenda Record identifies the Receiving Depository Financial Institution holding the Receiver's account.

#	Field	Position	Length	Mandatory/Required/ Optional	Description
1	Record Type Code	01-01	1	Mandatory	Record Type: **7**
2	Addenda Type Code	02-03	2	Mandatory	Addenda Type Code: **14**
3	Receiving DFI Name	04-38	35	Mandatory	Field contains the name of the Receiving DFI holding the Receiver's account *(Alphameric)*
4	Receiving DFI Identification Number Qualifier	39-40	2	Mandatory	This field contains a 2-digit code that identifies the numbering scheme used in the Originating DFI Identification Number Field *(Alphameric)*
5	Receiving DFI Identification	41-74	34	Mandatory	Foreign RDFI's routing/transit number *(Alphameric)*
6	Receiving DFI Branch Country Code	75-77	3	Mandatory	This field contains a 2-digit code, as approved by the International Organization for Standardization, used to identify the country in which the branch of the bank that receives the entry is located. On an Inbound IAT Entry, this code will identify the U.S. as the branch location *(Alphameric)*
7	Reserved	78-87	10	N/A	Leave Blank
8	Entry Detail Sequence Number	88-94	7	Mandatory	This field contains the ascending sequence number section of the Entry Detail Record's trace number. This number is the same as the last seven digits of the trace number of the related Entry Detail Record *(Numeric)*

Sixth and Seventh IAT Addenda Records – Original Entry

The Sixth and Seventh IAT Addenda Records identify key information related to the Receiver of the entry.

Sixth IAT Addenda Record

#	Field	Position	Length	Mandatory/Required/ Optional	Description
1	Record Type Code	01-01	1	Mandatory	Record Type: **7**
2	Addenda Type Code	02-03	2	Mandatory	Addenda Type Code: **15**
3	Receiver Identification Number	04-18	15	Optional	Used by the Originator to identify the Receiver or may be used for tracing purposes *(Alphameric)*
4	Receiver Street Address	19-53	35	Mandatory	Field contains the Receiver's physical street address *(Alphameric)*
5	Reserved	54-87	34	N/A	Leave Blank
6	Entry Detail Sequence Number	88-94	7	Mandatory	This field contains the ascending sequence number section of the Entry Detail Record's trace number. This number is the same as the last seven digits of the trace number of the related Entry Detail Record *(Numeric)*

Seventh IAT Addenda Record

#	Field	Position	Length	Mandatory/Required/ Optional	Description
1	Record Type Code	01-01	1	Mandatory	Record Type: **7**
2	Addenda Type Code	02-03	2	Mandatory	Addenda Type Code: **16**
3	Receiver City & State/Province	04-38	35	Mandatory	This field contains the city and, if applicable, the state or province of the Receiver. Asterisks must be used to separate the data elements, and the last data element must be followed by a backslash *(Alphameric)*
4	Receiver Country & Postal Code	39-73	35	Mandatory	This field identifies the receiver's country and postal code, (e.g., 'US*64105\'). Data elements must be separated by an asterisk and must end with a backslash *(Alphameric)*
5	Reserved	74-87	14	N/A	Leave Blank
6	Entry Detail Sequence Number	88-94	7	Mandatory	This field contains the ascending sequence number section of the Entry Detail Record's trace number. This number is the same as the last seven digits of the trace number of the related Entry Detail Record *(Numeric)*

IAT Addenda Record for Remittance Information (Optional)

IAT entries will accommodate the transmission of optional remittance information.

#	Field	Position	Length	Mandatory/Required/ Optional	Description
1	Record Type Code	01-01	1	Mandatory	Record Type: **7**
2	Addenda Type Code	02-03	2	Mandatory	Addenda Code Type: **17**
3	Payment Related Information	04-83	80	Optional	Free-form text *(Alphameric)*
4	Addenda Sequence Number	84-87	4	Mandatory	Sequence number of Type Code "17" addenda records in ascending order beginning with 0001 *(Numeric)*
5	Entry Detail Sequence Number	88-94	7	Mandatory	This field contains the ascending sequence number section of the Entry Detail Record's trace number. This number is the same as the last seven digits of the trace number of the related Entry Detail Record *(Numeric)*

Note: A maximum of two optional addenda records will be able to accompany an IAT entry.

IAT Addenda Record for Foreign Correspondent Bank Information

IAT Addenda Records for Foreign Correspondent Bank Information applies to Incoming/Received IAT entries only.

#	Field	Position	Length	Mandatory/Required/ Optional	Description
1	Record Type Code	01-01	1	Mandatory	Record Type: **7**
2	Addenda Type Code	02-03	2	Mandatory	Addenda Code Type: **18**
3	Foreign Correspondent Bank Name	04-38	35	Mandatory	This field contains the Foreign Correspondent Bank Name *(Alphameric)*
4	Foreign Correspondent Bank Identification Number Qualifier	39-40	2	Mandatory	This field contains a 2-digit code that identifies the numbering scheme used in the Foreign Correspondent Bank Identification Number field. Code values for this field are *(Alphameric)*: **01** National Clearing System Number (e.g. U.S. routing number) **02** BIC Code; or **03** IBAN
5	Foreign Correspondent Bank Identification Number	41-74	34	Mandatory	This field contains the Routing Number or bank identification number of the Foreign Correspondent Bank *(Alphameric)*
6	Foreign Correspondent Bank Branch Country Code	75-77	3	Mandatory	This field contains a 2-digit code as approved by the International Organization for Standardization (ISO) used to identify the country in which the branch of the Foreign Correspondent Bank is located *(Alphameric)*
7	Reserved	78-83	6	N/A	Leave Blank
8	Addenda Sequence Number	84-87	4	Mandatory	This number is consecutively assigned to each Addenda Record following an Entry Detail Record. The first addenda sequence number must always be a "1" *(Numeric)*
9	Entry Detail Sequence Number	88-94	7	Mandatory	This field contains the ascending sequence number section of the Entry Detail Record's trace number. This number is the same as the last seven digits of the trace number of the related Entry Detail Record *(Numeric)*

Note: Each Foreign Correspondent Bank involved in the processing of an IAT entry must be identified within an Addenda Record for IAT Foreign Correspondent Bank Information.

All Entries Company/Batch Control Record – Original Entry

The Company/Batch Control Record summarizes the information contained within the batch. It contains the counts, hash totals, and total dollar controls for the entries within the batch.

#	Field	Position	Length	Mandatory/Required/ Optional	Description
1	Record Type Code	01-01	1	Mandatory	Record Type: **8**
2	Service Class Code	02-04	3	Mandatory	Service Class Code *(Numeric):* **200** Debits & Credits **220** Credits Only **225** Debits Only
3	Entry/Addenda Count	05-10	6	Mandatory	Field is a tally of each Entry Detail and Addenda Record processed within the batch *(Numeric)*
4	Entry Hash	11-20	10	Mandatory	Field is prepared by hashing the Routing Number in each entry. The Entry Hash provides a check against inadvertent alteration of data contents due to hardware or program failure *(Numeric)*
5	Total Debit Entry Dollar Amount	21-32	12	Mandatory	Accumulated Entry Detail debit totals within the batch
6	Total Credit Entry Dollar Amount	33-44	12	Mandatory	Accumulated Entry Detail credit totals within the batch
7	Company Identification	45-54	10	Required	Field conveys the same information that Is contained within the Originator Identification Field of the Company/Batch Header Record, i.e. your Commerce Bank ACH Company ID *(Alphameric)*
8	Message Authentication Code	55-73	19	Optional	*(Alphameric)*
9	Reserved	74-79	6	N/A	Leave Blank
10	Originating DFI Identification	80-87	8	Mandatory	Field conveys the same information that is contained within the GO Identification/Originating DFI Identification Field of the Company/Batch Header Record, i.e. **10100001**
11	Batch Number	88-94	7	Mandatory	Sequential batch number within file *(Numeric)*

All Entries File Control Record – Original Entry

The File Control Record summarizes the information carried in the Company/Batch Control Records. It contains dollar, entry, and hash total accumulations from the Company/Batch Control Records in the file. This record also contains counts of the number of blocks and the number of batches within the file.

#	Field	Position	Length	Mandatory/Required/ Optional	Description
1	Record Type Code	01-01	1	Mandatory	Record Type: **9**
2	Batch Count	02-07	6	Mandatory	The value of the Batch Count Field is equal to the number of Company/Batch/Header Records in the file *(Numeric)*
3	Block Count	08-13	6	Mandatory	Number of Blocks within the file *(Numeric)*
4	Entry/Addenda Count	14-21	8	Mandatory	Field is a tally of each Entry Detail and Addenda Record processed within the batch *(Numeric)*
5	Entry Hash	22-31	10	Mandatory	Field is prepared by hashing the Routing Number in each entry. The Entry Hash provides a check against inadvertent alteration of data contents due to hardware or program failure *(Numeric)*
6	Total Debit Entry Dollar Amount	32-43	12	Mandatory	Accumulated Entry Detail debit totals within the batch
7	Total Credit Entry Dollar Amount	44-55	12	Mandatory	Accumulated Entry Detail credit totals within the batch
8	Reserved	56-94	39	N/A	Leave Blank