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Introduction

Financial EDI Guidelines are a resource to facilitate businesses in a successful implementation of Financial EDI within their business process. This document provides Financial EDI guidelines for the three major business models by including the following information:

- A description of the basic Financial EDI transaction sets including invoices, credit or debit advices, and remittance advices.
- A best practices description of the complete business cycles in which Financial EDI events occur.
- A discussion of all essential implementation considerations (technical and non-technical) related to Financial EDI implementation.
- A discussion of issues and concerns that may require special attention in the implementation of Financial EDI.
- A list of reference documents that might be consulted in addition to this Financial EDI Guideline.
- A glossary of business and technical terms used in Financial EDI.

These guidelines are written for the retail, grocery, supplier, factoring, and freight carrier firms that are looking for guidance in implementing and integrating Financial EDI documents into their business flow. These guidelines are intended for two categories of people: (1) business professionals, not necessarily technical, who want to become knowledgeable about the importance of Financial EDI to their company, and (2) EDI professionals planning to implement Financial EDI, therefore requiring a best practices overview and directions.

The best practices implementation recommendations provided in this guide will enable every company to maximize Financial EDI’s potential benefits and to discourage companies from settling into their own proprietary implementations that are likely to result in less than optimal Financial EDI results for all sides of the trading partner relationship.

Financial EDI provides substantial efficiencies in the business operations and accounting functions. The resultant benefits are: accelerated processing times; high accuracy transmitting data thus eliminating or reducing costs associated with correcting errors, and; productivity improvements through reduced administrative and clerical time. Some specific examples include:

- Promotes timely and accurate financial data
- Minimizes time to process invoices
- Minimizes time spent in reconciling differences and errors
- Minimizes payment delays by providing timely, accurate information
- Minimizes need for paper based communications
- Improves credit/debit processing
- Minimizes administrative costs
- Minimizes proof of delivery problems
- Allows for integration of data to multiple systems without multiple data entry
- Decreases frequency of invoice adjustments
- Reduces clerical time in the merchandising and sales departments
- Decreases time resolving discrepancies in orders, invoices and disputes
Transaction Sets

The transaction sets discussed in this document include:

- Invoice (810 VICS/880 UCS)
- Credit/Debit Adjustment (812)
- Payment Order/Remittance Advice (820)
- Application Advice (824)
- Application Control Totals (831)
- Carrier Invoices (110/210/310/410)

A description of the Financial EDI Transaction sets follows.

810/880 – Invoice

The Invoice or Grocery Product Invoice (810 or 880) is generated by the supplier to bill the buyer for products and services provided.

Description

Used to request payment from the purchaser of products/services rendered. The 810/880 allows a buyer to record payment information and automatically update applicable financial systems. The data contained in the transaction provides automated cross-referencing of purchase order and receiving data. If a consolidated invoice is used, receiving and reconciliation must support multiple invoices being combined into one Invoice (810/880). This process occurs without manual intervention, thus eliminating further key entry.

Benefits

- Increases operating efficiencies by reducing the need for manual data entry
- Allows for automated reconciliation
- Improves the claim process due to timely information exchange
- Allows for automated payment authorization

(Source: UCS/VICS EDI Architecture Guide & UCC Publication - What is Electronic Data Interchange)

Special Considerations

- Determine need for dual processing for a period of time.
- Determine requirements to move trading partner from test to production.
- Identify reporting needs for tracking of test performance.
- Identify effective tools to uncover transmission errors and enable timely trading partner follow up.
- Determine business needs for timing of transmission and/or timing for mailbox pull, file download, and so forth.
- Identify approach for handling freight and allowances, which may be included on the invoice document.
- For consolidated invoicing, refer to the UCS/VICS/EDI Standards manual.

Use of Third Party Payees

For factored invoices use the N1 segment loop to identify the factor. Buyers’ vendor profiles should provide for multiple factoring relationships. On a single invoice, only one third-party payee may be specified.

- N101 element should contain the RE qualifier to indicate remittance to a factor.
- N102 element indicates the factor name.
- N103 and N104 may be used. For further consideration, refer to your industry standard guidelines.
812 - Credit/Debit Adjustment

The flow of this transaction is generally after goods and services have been invoiced using an Invoice (810) and before receipt of the Payment Order/Remittance Advice (820).

Description

This transaction identifies and contains the details and amounts covering exceptions, adjustments, credits or debits for goods and services. The transaction is used in conjunction with other financial transactions to help record and track activities that occur within the accounts payable/receivable department. It is not intended to be used to transfer funds. However, it can be used as a billing transaction for goods or services in the form of a billback. The 812 is multidirectional between trading partners. The 812 provides the receiver with reference information relating to a previous invoice, or purchasing agreement, to facilitate the tracking of financial accounting.

Benefits

- Tracking vehicle for adjustments, billback, credit and debits
- Allows for early identification of financial implications
- Used to detail description of accounting transactions
- Used with other financial transactions to complete the accounting cycle

(SOURCE: UCS/VICS EDI Architecture Guide & UCC Publication - What is Electronic Data Interchange)

Special Considerations

- User should determine debit and credit types to be included in design and the source of the detail to support these debits and credits.
- Determine timing for transmission of the 812 document, daily, weekly, in advance of a check payment, concurrent with a check generation.
- Both sender and receiver must determine if there is a business need to tie the EDI 812 detail to an electronic or paper payment and how to accomplish.
- Determine if the use of the 812 will be multidirectional in its application, inbound/outbound.
- Identify any reporting requirements or additional controls with the implementation within your company.

820 - Payment Order Remittance Advice

The Payment Order/Remittance Advice (820) is used to communicate remittance information or to initiate an electronic funds transfer (EFT) or both.

Typically it is used by the buyer (payor) to notify the seller (payee) of payment of an invoice or invoices.

Description

Used to 1) give advice to a payee from a payor regarding the application of funds remitted and/or; 2) report completion of payment to a payee by a financial institution; and/or 3) to order a financial institution to make payment on behalf of the payor.

Benefits

- Increases efficiency by reducing the time needed for payment functions.
- Provides increased cost savings through reduced manpower.
- From a payor’s perspective, the implementation of the 820 provides logistical savings between a financial institution and a supplier.

(SOURCE: UCS/VICS EDI Architecture Guide & UCC Publication - What is Electronic Data Interchange)

Special Considerations

- Determine design approach, dollars and data together, separate, or enable either option (bundled or unbundled). Understand requirements for linking dollars and data together in an unbundled process design (CTX or CCD+).
- Ensure thorough understanding of partner bank’s capability in transmitting remittance detail in a bundled (data/dollars together) environment. Some banks may not forward down to the item detail, that is, the IT1 segments.
- Ensure partner bank’s understanding of use of the stand-alone ADX and REF segments to ensure comprehensive pricing.
• Determine partner bank’s method of accepting and handling mixed payment files (single input with wires, ACH, and/or paper check output).
• Identify any requirement to archive payment orders and the bank’s ability to resupply data.
• Pre-notification and/or use of a small dollar transmission can be included in the project scope for testing with new trading partners; the approach may also be used when routing number/banks/account numbers change.
• Some banking partners offer additional EDI transaction sets that can be used in conjunction with the 820. These include the 821 Financial Information Reporting, the 822 Customer Account Analysis, the 823 Lockbox, and the 827 Financial Return Notice.
• Based on business need, understand the bank’s ability to process multi-currency and international payments with remittance advice.
• Understand control features supported by the bank and identify any additional security requirements, for instance, use of an encryption product.
• Ensure bank pro forma is inclusive of all aspects of design approach.

Testing
• Determine if dual production of paper and electronic remittance will be used during testing period and duration of proposed test period.
• Provide/verify format of the invoice number received from the trading partner (TP) on Electronic Funds Transfer (EFT) and/or Electronic Remittance Advice (ERA) is the same format as is sent on the ASN, Electronic Invoice, and so forth – no dashes or additional zeros added.
• Communicate to trading partner that all data elements that are sent on EFT and/or ERA are consistent with all other documents that are sent by the trading partner. That is, department numbers on EFT and/or ERA must be in the same format as received on a purchase order from the trading partner.
• Identify acceptable lead time of ERA to actual receipt of dollars.
• Remittance Only Transmission - will trading partners send dollar amount on ERA transmission?
• Has trading partner established a relationship with a technical contact at their bank?
• Can trading partner send a file marked as test to his bank?
• Can trading partner’s bank accept a file marked as test from trading partner?
• Can trading partner’s bank send a file marked as test (received from the trading partner) to your bank?
• Is trading partner able to initiate a test EFT in the amount of $.01?
• If trading partner cannot send a test file, can trading partner write a check for $.01 and pass through production environment of banking system? Can trading partner create a production EFT transmission of $.01?

Agreements
With electronic commerce implemented and paper documents eliminated, establishing an EFT Agreement becomes critical in determining liability when errors occur. The American Bar Association has developed a model EFT Agreement to use as a guide for creating the agreement. Partners can modify these to fit their unique relationship. The EFT Agreement should include the items outlined in the general agreements: security & legal considerations section, as well as:
• Account and Routing Numbers
• Bank Contacts - both your bank and your partner’s bank
• Float - to define if the float days will change
• Authentication and/or Encryption - payments require a higher level of security. Software and hardware solutions are available. Refer to X12.42 and X12.58 regarding the methods commonly used under the X12 standards to authenticate messages. Contact your electronic commerce software provider for information on software and hardware solutions.

Use of Third Party Payees
• Buyer should provide for sending remittance advice to both vendor and factor while the funds go only to the factor.
• For sellers with multiple factors, remittance advices should be sent to the designated factor based on information received in the invoices.
• Buyers vendor profile should allow for multiple factors as payees.
824 - Application Advice

Description
The Application Advice (824) has two uses within UCS/VICS EDI:

1. The first involves the reporting of errors (such as, incorrect unit cost, invalid combination, and so on). The transaction needs to report all applicable errors encountered for a transaction set. It is recommended that a unique interchange file be generated for each transaction type being reported (that is, one interchange for invoices, a second interchange for ship notices, and so on). The Application Advice should not be used in place of a transaction set designed as a specific response to another transaction set.

2. The second use involves buyers, suppliers and financial institutions. The 824 is the vehicle used by a financial institution to report acceptance and/or discrepancies to either the sender or receiver of the Payment Order/Remittance Advice (820). In this application, as well as others, the 824 may be used to communicate a ‘zero’ error condition as a result of application edits of the original transaction set.

Benefits

- Automated means to communicate errors in transactions which do not have a designated response document
- Eliminates need for problem determination/resolution by phone, fax, or mailed reports
- Strengthens the relationship between trading partners by resolving inconsistencies as they occur, rather than after time has elapsed

(Source: UCS/VICS EDI Architecture Guide & UCC Publication - EC Brochure)

Special Considerations

- Depending on partner’s bank, the 824 may be used as a negative response to the 820/831.
- Again, depending on the system design of the partner bank, the 824 may be available at either a summary level or a detail level including document number, routing number, dollar amount of payment by document number.
- Project design may include posting of this acknowledgment information back to the sender system at a summary or document level.
- Determine whether you need to capture acceptances, rejections, or both for audit/tracking purposes.
- Prepare an exception process internally to identify rejected 820 transactions so it can be reacted to.
- Identify point person for contact regarding errors once production is activated.

Testing

- When using the 824 document for reporting application errors:
  1. Identify TED-01 application error codes to be used and how they should be reacted to:
     - For example, re-send, with correction using same document number(s).
     - For example, re-send with correction using different document number(s).
     - For example, correct future documents only (a manual process has already been done for corrections).
  2. Setup EDI mapping to create unique 824 interchanges for each document being reported. That is, do not send a single 824 transaction containing application errors for an 810 and 856.
  3. Setup EDI mapping to contain the GS and ST control numbers from the originating file when reporting 824 Application Advice errors. This means a database should be setup to pass the GS and ST control numbers with the 810, or other document into the application.

- When using the 824 Application Advice document as a response for the EDI 820 Payment Order/Remittance Advice:
  1. Identify whether you will have the 824 represent acceptance/rejection of single 820 transactions or multiple 820 transactions.
  2. Setup EDI mapping to match 824 to 820.
  3. Determine whether you expect an 824 for each 820 sent, or only 820’s with errors.
  4. Identify TED-01 application error codes to be used and how they should be reacted to:
     - For instance, resend entire 820, including requested corrections?
     - For instance, resend portion of 820, for requested corrections only?
     - For instance, correct future documents only? (a manual process has already been done for corrections)
831 - Application Control Totals

Description
The 831 may be used with the Payment Order/Remittance Advice (820) to serve as a balancing mechanism for financial institutions. The totals passed in the 831 can include totals, monetary totals, or quantity totals.

Benefits
- Used by financial institutions to automate the verification of the number of Payment Order/Remittance Advice (820) transactions or the dollar totals contained within the 820s.
(Source: UCS/VICS EDI Architecture Guide)

Special Considerations
- The 831 Control Totals transaction set can be sent by the customer with the 820 transmission. The transaction set would be used by the bank to balance the total number of items and dollars on the 820 file transmitted. Determine if the partner bank utilizes the 831.
- If the 831 is utilized and an out of balance condition exists, the bank’s EDI system may send a negative 824, or in a more manual environment, place a follow up call.
- Determine the partner bank’s approach to testing the use of the 831 for both a balanced 820/831 and an out of balance 820/831.
Non UCS/VICS Transaction Sets which may be used in Financial EDI

110/210/310/410 - Carrier Invoices

Description
Carrier Invoice documents are no longer maintained within the UCS/VICS EDI standards; however, most EDI programs support usage of these type of invoices using DISA ANSI or ATA standards. Although the Carrier Invoices are non-UCS/VICS, we have defined each type of Carrier Invoice document below to help you understand their relationship to the Financial EDI process.

The Carrier Invoice documents are similar to the 810 Invoice document. They are sent from the Carrier to the Seller, Buyer or Third Party for payment of shipment services, based on the pre-determined freight collection method between the partners. Considerations should be made to determine which applications systems are impacted by the Carrier invoice documents, as this may be different than the 810 Invoice document.

110 – Air Freight Details and Invoice
The transaction set can be used to provide a customer with an air invoice for transportation and other charges related to shipments, including Original Invoices, Past Due Billings, Balance Due Bills, and Revisions. (Source: ANSI X12 Standards)

210 – Motor Carrier Freight Details and Invoice
The transaction set can be used to provide detailed information for charges for services rendered by a motor carrier. It is used either as a motor carrier invoice to request payment or as details pertaining to motor freight shipment(s) charges. (Source: ANSI X12 Standards & ATA Standards)

Transaction Set 210 is used by the motor carrier industry to provide an itemized detail of freight charges to parties relevant to the shipment. In addition, it is used to request payment for services rendered by the motor carrier. The 210 is sent from the motor carrier to shipper, consignee, or third party payment center that is responsible for payment of the freight charges. (Source: ATA Standards)

310 – Freight Receipt and Invoice (Ocean)
The transaction set can be used to provide ocean bill of lading information. It is sent by ocean carriers to interested parties and can be used as the receipt for the shipment; to substitute for a paper bill of lading where the parties have agreed that a paper bill of lading is not necessary; to allow the shipper or forwarder to verify bill of lading information before an original is printed and released; for information purposes, that is, as a bill of lading copy; by the carrier to convey manifest information to a terminal operator; and as an invoice for freight. (Source: ANSI X12 Standards)

410 – Rail Carrier Freight Details and Invoice
The transaction set can be used to provide detailed information of the charges associated with a rail movement. The information is provided by a rail carrier and is sent to the freight payer. (Source: ANSI X12 Standards)
Complete Business Cycle Examples

The following sections illustrate complete business cycles in which Financial EDI may be used. These business cycles exist between:

- a buyer and seller
- a third-party factor in addition to the buyer and seller
- a freight carrier in relation to either the buyer or seller

**Buyer/Seller**

Chain of Events
Seller sends Buyer 810/880

<table>
<thead>
<tr>
<th>BUYER’S BANK</th>
<th>SELLER’S BANK</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUYER</td>
<td>SELLER</td>
</tr>
<tr>
<td>BANK</td>
<td></td>
</tr>
</tbody>
</table>

Key:
A solid line (——) indicates that action TYPICALLY occurs
A dotted line (---) indicates that action MAY occur
Buyer/Seller, continued

Chain of Events
Seller sends Buyer 810/880
Seller and Buyer may trade 824
Buyer/Seller, continued

**Chain of Events**
- Seller sends Buyer 810/880
- Seller and Buyer may trade 824
- Buyer and Seller may trade 812
Buyer/Seller Payment (Method 1 of 3)

**Chain of Events**

**Seller sends Buyer 810/880**

- Seller and Buyer may trade 824
- Buyer and Seller may trade 812

**Buyer sends 820 to Seller**

- Buyer sends 820 Payment Order & Remittance Advice to Buyer’s Bank
- Buyer’s Bank sends Funds Transfer & 820 Remittance Advice to Seller’s Bank
- Seller’s Bank sends Deposit Notification & 820 Remittance Advice to Seller

**Buyer may send 831 to Buyer’s Bank; Buyer’s Bank may send 831 to Buyer**

**Buyer’s Bank may send 824 to Buyer**
**Buyer/Seller Payment (Method 2 of 3)**

**Chain of Events**
- Seller sends Buyer 810/880
- Seller and Buyer may trade 824
- Buyer and Seller may trade 812

**Buyer sends 820 to Seller**
- Buyer sends 820 Payment Order & Remittance Advice to Buyer’s Bank
- Buyer’s Bank sends 820 Remittance Advice to Seller
- Buyer’s Bank sends Funds Transfer to Seller’s Bank
- Seller’s Bank sends Deposit Notification to Seller

**Buyer may send 831 to Buyer’s Bank; Buyer’s Bank may send 831 to Buyer**

**Buyer’s Bank may send 824 to Buyer**
Buyer/Seller Payment (Method 3 of 3)

**Chain of Events**

*Seller sends Buyer 810/880*

Seller and Buyer may trade 824

Buyer and Seller may trade 812

*Buyer sends 820 to Seller*

- Buyer sends 820 Payment Order sent to Buyer’s Bank
- Buyer sends 820 Remittance Advice to Seller
- Buyer’s Bank sends Funds Transfer to Seller’s Bank
- Seller’s Bank sends Deposit Notification to Seller

*Buyer may send 831 to Buyer’s Bank; Buyer’s Bank may send 831 to Buyer*

*Buyer’s Bank may send 824 to Buyer*
Buyer/Factor/Seller

**Chain of Events**
- Seller sends 810/880 to Buyer
- Seller sends 810/880 to Factor

**Key:**
- A solid line (---) indicates that action TYPICALLY occurs
- A dotted line (----) indicates that action MAY occur
Buyer/Factor/Seller, continued

**Chain of Events**
- Seller sends 810/880 to Buyer
- Seller sends 810/880 to Factor
- Buyer & Seller may trade 824
- Factor & Seller may trade 824 &/or 831
Buyer/Factor/Seller, continued

**Chain of Events**
- Seller sends 810/880 to Buyer
- Seller sends 810/880 to Factor
- Buyer & Seller may trade 824
- Factor & Seller may trade 824 &/or 831
- Buyer and Seller may trade 812
Buyer/Factor/Seller Payment (Method 1 of 3)

**Chain of Events**

- Seller sends 810/880 to Buyer
- Seller sends 810/880 to Factor
- Buyer & Seller may trade 824
- Factor & Seller may trade 824 &/or 831
- Buyer & Seller may trade 812
- Buyer sends 820 to Factor

**Buyer sends 820 Payment Order & Remittance Advice to Buyer’s Bank**

- Buyer’s Bank sends Funds Transfer and 820 Remittance Advice to Factor’s Bank
- Factor’s Bank sends Deposit Notification & 820 Remittance Advice to Factor

**Buyer may send 831 to Buyer’s Bank OR Buyer’s Bank may send 831 to Buyer**

**Buyer’s Bank may send 824 to Buyer**

**Factor sends 820 Remittance Advice to Seller**
**Chain of Events**

Seller sends 810/880 to Buyer

Buyer & Seller may trade 824

Factor & Seller may trade 824 &/or 831

Buyer & Seller may trade 812

**Buyer sends 820 to Factor**

- Buyer sends 820 Payment Order & Remittance Advice to Buyer’s Bank
- Buyer’s Bank sends 820 Remittance Advice to Factor
- Buyer’s Bank sends Funds Transfer to Factor’s Bank
- Factor’s Bank sends Deposit Notification to Factor

Buyer may send 831 to Buyer’s Bank OR Buyer’s Bank may send 831 to Buyer

Buyer’s Bank may send 824 to Buyer

Factor sends 820 Remittance Advice to Seller
Buyer/Factor/Seller Payment (Method 3 of 3)

**Chain of Events**
- Seller sends 810/880 to Buyer
- Seller sends 810/880 to Factor
- Buyer & Seller may trade 824
- Factor & Seller may trade 824 &/or 831
- Buyer & Seller may trade 812

**Buyer sends 820 to Factor**
- Buyer sends 820 Payment Order to Buyer’s Bank
- Buyer sends 820 Remittance Advice to Factor’s Bank
- Buyer’s Bank sends Funds Transfer to Factor’s Bank
- Factor’s Bank sends Deposit Notification to Factor

**Buyer may send 831 to Buyer’s Bank OR Buyer’s Bank may send 831 to Buyer**

**Buyer’s Bank may send 824 to Buyer**

**Factor sends 820 Remittance Advice to Seller**
Buyer/Carrier

Chain of Events
Carrier sends freight invoice (110, 210, 310, 410) to Buyer

Key:
A solid line (——) indicates that action TYPICALLY occurs
A dotted line (---) indicates that action MAY occur
Buyer/Carrier, continued

**Chain of Events**
Carrier sends freight invoice (110, 210, 310, 410) to Buyer

**Buyer and Carrier may trade 824**
Buyer/Carrier, continued

**Chain of Events**
Carrier sends freight invoice (110, 210, 310, 410) to Buyer

Buyer and Carrier may trade 824

Buyer and Carrier may trade 812
Buyer/Carrier Payment (Method 1 of 3)

Chain of Events
Carrier sends freight invoice (110, 210, 310, 410) to Buyer

Buyer and Carrier may trade 824

Buyer and Carrier may trade 812

Buyer sends 820 to Carrier
- Buyer sends 820 Payment Order & Remittance Advice to Buyer’s Bank
- Buyer’s Bank sends Funds Transfer and 820 Remittance Advice to Carrier’s Bank
- Carrier’s Bank sends Deposit Notification & 820 Remittance Advice to Carrier

Buyer may send 831 to Buyer’s Bank OR Buyer’s Bank may send 831 to Buyer

Buyer’s Bank and Buyer may trade 824
Buyer/Carrier Payment (Method 2 of 3)

**Chain of Events**
Carrier sends freight invoice (110, 210, 310, 410) to Buyer

Buyer and Carrier may trade 824

Buyer and Carrier may trade 812

**Buyer sends 820 to Carrier**
- Buyer sends 820 Payment Order and Remittance Advice to Buyer’s Bank
- Buyer’s Bank sends 820 Remittance Advice to Carrier
- Buyer’s Bank sends funds transfer to Carrier’s Bank
- Carrier’s Bank sends Deposit Notification to Carrier

**Buyer may send 831 to Buyer’s Bank OR Buyer’s Bank may send 831 to Buyer**

**Buyer’s Bank and Buyer may trade 824**
**Buyer/Carrier Payment (Method 3 of 3)**

**Chain of Events**
Carrier sends freight invoice (110, 210, 310, 410) to Buyer

Buyer and Carrier may trade 824

Buyer and Carrier may trade 812

**Buyer sends 820 to Carrier**
- Buyer sends 820 Payment Order to Buyer’s Bank
- Buyer’s Bank sends 820 Remittance Advice to Carrier
- Buyer’s Bank sends funds transfer to Carrier’s Bank
- Carrier’s Bank sends Deposit Notification to Carrier

**Buyer may send 831 to Buyer’s Bank OR Buyer’s Bank may send 831 to Buyer**

**Buyer’s Bank and Buyer may trade 824**
Seller/Carrier

Chain of Events
Carrier sends freight invoice (110, 210, 310, 410) to Seller

Key:
A solid line (----) indicates that action TYPICALLY occurs
A dotted line (-----) indicates that action MAY occur
Seller/Carrier, continued

**Chain of Events**
Carrier sends freight invoice (110, 210, 310, 410) to Seller

Seller and Carrier may trade 824
Seller/Carrier, continued

Chain of Events
Carrier sends freight invoice (110, 210, 310, 410) to Seller
Seller and Carrier may trade 824
Seller & Carrier may trade 812
Seller/Carrier Payment (Method 1 of 3)

**Chain of Events**
Carrier sends freight invoice (110, 210, 310, 410) to Seller

Seller and Carrier may trade 824

Seller & Carrier may trade 812

**Seller sends 820 to Carrier**
- Seller sends 820 Payment Order & Remittance Advice to Seller’s Bank
- Seller’s Bank sends Funds Transfer & 820 Remittance Advice to Carrier’s Bank
- Carrier’s Bank sends deposit notification & 820 Remittance Advice to Carrier

**Seller may send 831 to Seller’s Bank OR Seller’s Bank may send 831 to Seller**

**Seller’s Bank may send 824 to Seller**
Seller/Carrier Payment (Method 2 of 3)

Chain of Events
Carrier sends freight invoice (110, 210, 310, 410) to Seller

Seller and Carrier may trade 824

Seller & Carrier may trade 812

Seller sends 820 to Carrier

• Seller sends 820 Payment Order & Remittance Advice to Seller’s Bank
• Seller’s Bank sends 820 Remittance Advice to Carrier
• Seller’s Bank sends Funds Transfer to Carrier’s Bank
• Carrier’s Bank sends Deposit Notification to Carrier

Seller may send 831 to Seller’s Bank OR Seller’s Bank may send 831 to Seller

Seller’s Bank may send 824 to Seller

FREIGHT INVOICE
820 Payment Order & Remittance Advice
820 Remittance Advice
820
824
831
SELLER
CARRIER
824
812
SELLER’S BANK
CARRIER’S BANK
Deposit Notification
Funds Transfer
Seller/Carrier Payment (Method 3 of 3)

**Chain of Events**
Carrier sends freight invoice (110, 210, 310, 410) to Seller

Seller and Carrier may trade 824

Seller & Carrier may trade 812

**Seller sends 820 to Carrier**
- Seller sends 820 Payment Order to Seller’s Bank
- Seller sends 820 Remittance Advice to Carrier
- Seller’s Bank sends Funds Transfer to Carrier’s Bank
- Carrier’s Bank sends Deposit Notification to Carrier

Seller may send 831 to Seller’s Bank OR Seller’s Bank may send 831 to Seller

**Seller’s Bank may send 824 to Seller**
Financial EDI Implementation Considerations

The information provided in this document can be used as a starting point when developing EDI compatible systems for the first time or expanding an existing program to include additional financial documents. Implementation of Financial EDI may require definition of the proposed methodology; specifications documentation; the development of a bridge between internal applications and EDI; decisions on agreements, benchmarking, audit and reconciliation requirements; as well as testing and training considerations. This section describes factors to consider both at a general level and at a document level. It is designed to support the creation of the scope document, provide general project directions, and document specifications.

General Project Considerations

- Scope
- Integration with Internal Processes
- Electronic Communications Method
- System Design Considerations
- Mapping Considerations and Guidelines
- Reconciliation
- Audit Trail Considerations
- Testing
- Benchmarks/Measurements of Success
- Best Practice Integration Rules
- Agreements

Scope

Specifications or project scope often becomes the most critical piece of the implementation process. A good scope document provides an effective tool that will guide the project from inception to completion. Typically a scope document will include any or all of the following:

- Identify Project Leader (Business & Technical)
- Objective
- Project Background
- Approach
- Assumptions
- Contact List and Project Responsibilities
- Project Milestones
- Design Overflow (Items Outside of Scope)
- System Flow
- Additions and/or Modifications by System
- Issues for Discussion
- Conversion and/or Interface Requirements by System
- Training/Documentation
- Testing Approach and Requirements
- Equipment
- Post Installation Considerations
- Cost/Cost Benefit
- Scope Sign Off
Integration with Internal Processes

- Determine the responsible person(s) for the EDI document who will assume responsibility for processing transmissions. This may include acknowledgment reconciliation, technical procedures, business procedures, and reporting.
- Identify any requirements to differentiate EDI generated documents from other records. An EDI Invoice can be differentiated from a manually entered invoice by using a unique user ID tagged on the record.
- Determine optimum database structure and management:
  1. When integrating into an existing system design, review all related locate/add/edit functions for potential modification.
  2. When integrating into a new database, identify how the purge process will be managed. Options may include mirroring existing logic or adding new design elements.
  3. Determine database retention guidelines. EDI records may have different requirements than non-EDI records for storage/archive/retrieval.
- Determine the data requirements and its source(s). The design must consider data availability, timing restrictions, and access requirements to support the EDI document process.
- Review the system restart procedures. Enhancements may be necessary for EDI related system failures.
- Determine the release criteria of documents for processing. This may include document balancing and automatic versus manual selection.
- Revise the current business process flow to incorporate Financial EDI. This process may include a need for multiple reports to allow edits and reconciliation for both EDI and non-EDI information.
- Identify and revise existing business partner profiles to accommodate EDI relationships, and determine who will have responsibility for maintenance.
- Identify and revise control methods, such as existing reporting and balancing tools, that may require enhancement to support Financial EDI.

Electronic Communication Methods

One or a combination of the following communication methods may be selected based on business needs and scope of project. Selections may vary based upon document type and/or business relationships.

- Direct EDI transmission
- EDI transmission through a VAB/VAN
- Transmission through the Internet/computer file transfer
- Wire transfer

System Design Considerations

Consider the following steps when starting a comprehensive scope document:

- Define a successful transmission and the processes needed to handle inaccurate transmissions of data; identify logic that could enhance the translation process and increase rate of acceptance/successful delivery. For instance, an edit might include logic to substitute a default whenever the trading partner transmits incorrect information.
- Identify field/segments that lend themselves to edits. For instance, invoice date cannot be greater than current date or terms percent cannot exceed a table value.
- Identify tables that might be used to support the design. For instance, a table might be set up for acceptable terms on a financial document, if a discount percentage exceeds the table value a non-fatal error might be assigned for corrective action, or reporting purposes.
- Determine if a suspense file is necessary to allow staging of fatal errors that have potential for resolution. For instance, an out of balance document.
- Define reporting requirements. For instance, a report that monitors program success.
- Define requirements for execution of EDI transmission. For instance, frequency of transmissions and ability to retransmit.
- Determine acknowledgment reconciliation requirements within your translator and application.
For instance, an EDI 820 document might be updated with a flag to indicate trading partner acknowledgment (997) has been received.

- Determine timing and method of communication for trading partners of fixes/enhancements/upgrades including version migration for EDI traded documents.

**Mapping Considerations and Guidelines**

Mapping guidelines are commonly published and distributed among trading partners to communicate specific trading requirements for an EDI document. Guidelines allow users to obtain trading partner specific information for each document. They provide the opportunity to assess or communicate requirements that may benefit from additional dialog. They also provide the opportunity to minimize or clarify data exchanged. A guideline may be used to communicate use of optional fields or define acceptable or preferred usage of qualifier codes.

- Determine the requirements for each trading partner.
- Obtain Industry Standards guidelines for the financial documents to be implemented.
- Use ONLY the approved industry code lists.
- Assess the gaps between your application system and your partners system.
- Ensure understanding of the impact of miscellaneous characters such as *(asterisk), ~ (tilde), > (greater than). When included in segment detail, they can corrupt the transmission if they are in conflict with the sub-element separators or segment delimiter.
- Design transaction sets minimizing the amount of data exchanged.
- Codify the document by eliminating notes and descriptions wherever possible.
- Identify domestic versus international format and content.
- Capture pertinent information from the transaction set header information (for instance, ISA and GS).

**Reconciliation**

The requirement of balancing or tying financial documents together should be a consideration in the implementation of Financial EDI.

- Reconciliation across different transactions.
  For instance, reconciliation of invoice to remittance detail.
- Reconciliation across one transaction.
  For instance, invoiced items total to the total invoice amount transmitted.
- Business process reconciliation.
  For instance, reconciliation between an EDI document and business applications. Or, verification of bank acknowledgement to transmitted data.
- Association of remittance detail and dollars.

**Audit Trail Considerations**

Involvement of internal auditors throughout the project design, testing, and roll out phases will provide a source of quality input, which if applied up front, establishes proper application controls for the EDI system and internal processes. Points of control to consider:

- Retention - to determine how long the data is kept. (Federal guidelines may determine the retention period; usually the length of retention is the same for paper documents.)
- Backup Points – to determine where in the process data should be backed up. Usually recommended at the point of receipt, before program manipulation is performed and at the point of transmission to capture exactly what is transmitted to the partner.
- Application Controls - the application and translation software may need to acknowledge receipt of each message or batch of messages sent or received. In an automated and/or real-time environment, ability to track and produce usable statistics becomes critical.
- Data Verification – both trading partners must be able to interface and store electronic data and generate the information as received. For instance, invoice numbers being received in the remittance advice must match those sent on the invoice. Amounts must also be verified. Discrepancy reports must be generated for the EDI coordinators to review.
• Documentation – changed processes, controls, and procedures as a result of implementing an electronic solution must be documented for the users.
• Encryption - implementation of some financial documents (EDI 820 Payment Order/Remittance Advice) using an encryption package to meet internal audit standards.

Testing
The following represents preparation steps and functionality that might be included in a testing approach:

• Select partners to use for the pilot.
• Complete comprehensive test plans with detailed scenarios including expected results for both EDI transmissions and business applications. Include scenarios covering all possible failures and successes.
• Determine your translator’s ability to determine test versus production. For instance, use of the ISA-15 = T for testing.
• Prepare mapping guidelines.
• Identify EDI sender/receiver IDs for you and your partner for the chosen method of communication. Will there be different IDs for test versus production?
• Determine maximum number of trading partners to allow in the test phase.
• Determine how many trading partners will participate in the pilot – you may need to support different business cases – include trading partners that are technically capable and some that are not.
• Determine source of test data. Will information be production or test? For instance, will parallel testing take place or will manually entered data be used?
• Define variables to test
  o Optional vs. mandatory segments
  o Fatal vs. non-fatal errors; for instance, duplicate detail, invalid PO, missing, or invalid date
  o Suspense/Recirculating file logic (if included in design)
  o Reporting Output
  o Translator Edits
  o Delimiters
  o Document Balancing Logic
  o Segment Terminators
  o Transmission when no trading partners vendor exists
  o Duplicate transmission
  o Controls/Security features
  o Balancing
  o Table setting
Benchmarks/Measurements of Success

Benchmarking is a tool used to document existing capabilities, set realistic goals and establish common expectations, measure successes and in the process identify and address issues as they arise. Providing a method to track the performance of both sides of the trading partner relationship will lead to better results. To successfully measure or scorecard the implementation takes honest appraisals at each step of the process. The areas to measure depend on the EDI document, the roll out plan, and other internal processes impacted.

Best Practice Integration Rule

“In addition to translation software, a company’s EDI capabilities should provide automated integration of inbound and outbound transactions. Quality data will then be provided, which will ensure a tighter union between trading partners because of the smooth flow of information. Companies must develop computer programs to interface UCS/VICS EDI with their internal application systems.” (Source: UCS/VICS EDI ARCHITECTURE GUIDE & UCC Publication - What is Electronic Data Interchange)

Agreements

With electronic commerce implemented and paper documents eliminated, establishing a Trading Partner Agreement may become necessary in determining liability when errors occur. The American Bar Association has developed model EDI Trading Partner and EFT Agreements to use as a guide for creating the agreements. Partners can modify these to fit their unique relationship.

Document Specific Considerations

- 820 Payment Order/Remittance Advice
- 812 Credit/Debit Adjustment
- 824 Application Advice
- 831 Application Control Totals
- 110/210/310/410 Carrier Invoices (Air, Motor, Ocean, Rail, respectively)
Appendix A: Key Supporting Documents & Organizations

Uniform Code Council, Inc, EDI Manuals and Related Publications:
EDI Member Status Report
EDI Service Provider Directory
VICS/UCS EDI Business Examples
VICS/UCS EDI Retail Conventions and Implementation Guidelines for EDI
VICS/UCS EDI Architecture Guide

Other Related Publications:
Models for Payment Systems. A publication from DISA, 1800 Diagonal Road, Suite 200, Alexandria, VA 22314-2852

Trade Associations and Industry Organizations:
American Bankers Association (ABA)
1120 Connecticut Avenue, N.W.
Washington, D.C. 20036;
Telephone: 800/338-0626
www.aba.com

American Bar Association
541 N. Fairbanks Ct.
Chicago, IL 60611
Telephone: 312-988-5522
www.abanet.org

American Trucking Association (ATA)
2200 Mill Road
Alexandria, Va. 22314-4677
Telephone: 703-838-1700
www.truckline.com

Bank Administration Institute (BAI)
One North Franklin, Suite 1000
Chicago, Illinois 60606-3421
Telephone: (800) 224-9889 or (312) 683-2464
www.bai.org

Commercial Finance Association (CFA)
225 West 34th Street Suite 1815
New York, New York, 10122
Telephone: 212-594-3490
www.cfa.com
Data Interchange Standards Association (DISA)
1800 Diagonal Road, Suite 200
Alexandria, VA 22314-2852
Telephone: (703) 548-7005
www.disa.org

National Automated Clearing House Association (NACHA)
13665 Dulles Technology Drive, Suite 300
Herndon, VA 20171
Telephone: (703) 561-1100
www.nacha.org

Uniform Code Council, Inc. (UCC)
1009 Lenox Drive, Suite 202
Lawrenceville, NJ 08648-2313
Telephone: (609) 620-0200  Fax: (609) 620-1200
www.uc-council.org

Voluntary Interindustry Commerce Standards (VICS)
Uniform Communications Standard (UCS)
Princeton Pike Corporate Center, 1009 Lenox Drive, Suite 202
Lawrenceville, NJ 08648
Telephone: (609) 620-4590  Fax: (609) 620-1201
www.vics.org
Glossary

-A-

ACH
Automated Clearing House

American Trucking Association (ATA)
An industry organization made of member transportation companies that forwards the interests of these organizations as well as establishing the conventions between them. This includes EDI standards.

ANSI
American National Standards Institute

Application Acknowledgment
A transaction set whose purpose is to respond to a transaction Acknowledgment set which has been received and processed in an application program. The Purchase Order Acknowledgment Transaction Set (855) is an example of an application acknowledgment, used to respond to the Purchase Order Transaction Set (850) presenting information, such as whether the receiver can fulfill the order and if it can be done on time.

ASC X12
Accredited Standards Committee, X12 comprised of industry members for the purpose of creating EDI standards for submission to ANSI for subsequent approval and dissemination.

-B-

Batch EDI
A transmission methodology, in which the sender transmits and/or receives data during a regularly scheduled data systems update cycle, normally occurs at the close of the business day.

Bisynchronous Communication (bisynch)
An older IBM synchronous data transmission protocol. Bisynch communications are under the control of a timing clock. In this protocol, the data is formatted into blocks, control information is added, and the control information is verified on the receiving end.

Broker
A sales and marketing organization that directly represents a manufacturer’s products to distributors within the grocery industry, providing services usually completed by the manufacturer’s sales force.

Bundled vs. Unbundled
This refers to the 820 transfer of information. The funds (EFT) and remittance advice can travel together (bundled) or separately (unbundled). They can also travel part of the way bundled and then become unbundled. (Refer to workflow diagrams, method one is fully bundled, method two is hybrid, method three is unbundled.)

Buyer
A person responsible for the procurement or replenishment of goods and services from a supplier. This person may also be responsible for the merchandising and advertising events, although a category manager usually does this function. Also called a Re-buyer or Replenishment Buyer.

-C-

CCD
Cash Concentration or Disbursement – An automated corporate payment application developed by NACHA in 1983. Used primarily for intra- or inter- company concentration or disbursement of funds. May also be used to make corporate trade payments requiring minimal descriptive information. Refer to the NACHA rulebook for further information.

CCD+
Cash Concentration or Disbursement Plus – Same as CCD with some special information addendum. The addendum record of this format is used to contain data that conforms to the ASC X12 syntax or a NACHA approved standard. Only one
addendum is permitted per payment record. Refer to the NACHA rule book for further information.

**CTX**
Corporate Trade Exchange – An automated payment application developed by NACHA in 1987. Used to electronically move funds and detailed accounting and remittance information. The remittance information is consolidated in addenda records formatted in accordance with X12.4 Payment Order/Remittance Advice Transaction Set (820 and 835) and X12.5 Interchange Control Structures. Refer to the NACHA rulebook for further information.

**Carrier**
Defined as any entity responsible for delivering goods from the supplier to the buyer.

**Conventions**
A summary of the basic electronic data trading agreements made within an industry.

**Compliance Checking**
A checking process that is used to ensure that a transmission complies with ASNI ASC X12 syntax rules.

**Customer**
Individual or firm who is purchasing the goods and services.

**Data Mapping**
Relationship between the X12 message syntax and the users data.

**Direct Transmission**
The exchange of data from the computer of the sending party directly to the computer of the receiving party. A third-party value-added service is not used in a direct transmission.

**Distributor**
A retail sales entity, selling finished goods to the consumer or a wholesale entity, selling finished goods to other retailers.

**DUNS Number**
A non-indicative 9-character number assigned and maintained by Dun & Bradstreet to identify unique business establishments. Also see definition for Universal Customer/Vendor Identification Code.

**Electronic Data Interchange (EDI)**
The process of exchanging business data from one computer to another computer using a public standard format.

**Electronic Funds Transfer (EFT)**
A method for payment of monies owed in which the payer orders the bank to electronically debit the payer’s account and forward credit information to electronically credit the payee’s account.

**Event Driven EDI**
A transmission methodology in which the sender immediately transmits and/or receives data as a result of, or in conjunction with, a specific business event.

**FTP**
File Transfer Protocol. On a network, FTP is a set of net systems and user interfaces that facilitate the transfer of files to users from servers.
Factor
The factor purchases accounts receivable, normally without recourse, and advances funds against sales.

The factor provides three distinct services to its clients (vendors)

- receivables management
- credit protection
- lending

These three products may each be used in a stand-alone environment or in any combination. Typically in a factoring relationship, all three are used.

The factor passes money to its clients (the vendor) based on two different scenarios i.e. on an as collected basis (commonly known as collection factoring) or on an average due date basis (commonly known as maturity factoring).

Both of these methods can be used when funds are passed PRIOR to the collection or maturity of the receivables.

In financial EDI, when referring to the 820, remittance information would typically flow:

- from the buyer to the factor and then
- from the factor to the vendor (seller) as it is processed through the factoring system.

In a typical buyer/seller relationship, the remittance advice is a one to one exchange of information where one buyer is sending one remittance advice to a seller. In the factoring environment, multiple buyers would be sending remittance information to the factor. The factor would compile ALL the remittance information received on a given day and transmit ALL the information in one 820 remittance advice to the vendor.

The funds; however, flow according to the contract with the client and would almost never follow the path of the remittance and therefore is NOT covered in the workflows.

-I-
Interconnect
A communication technique in which the sender’s VAN physically connects to the destination VAN associated with the receiver to effect electronic transfer of trading partner data.

-N-
NACHA
National Automated Clearing House Association

-R-
Real Time EDI
Interactive processing of EDI transactions between trading partners.

-S-
Scan Validate Invoice
Consists of data from retailer POS system that has been captured and validated to consumer purchase data at the time the coupon was accepted from consumer with payment due directly to retailer.

Shipper
Defined as the vendor/supplier who tenders the shipment to a carrier.

Seller
A manufacturer of finished goods or manufacturer’s agent that physically provides finished goods for wholesale and/or retail sales.

Standard Carrier Alpha Code (SCAC)
A unique 2 to 4-letter alpha code used as an abbreviation or to identify a particular company for transportation data processing purposes.
Third Party Payee
If payment needs to be made to a party other than the originator (see also “Factor”).

Trading Partner (TP)
The sending and/or receiving party involved in the exchange of electronic data interchange transmissions.

Transaction Set
A specific structure of electronic data segments, data elements and codes that communicate information between systems. It replaces documents and other forms of business communications, such as purchase orders, invoices or warehouse shipping orders. Each transaction set consists of the transaction set header and at least one segment before the transaction set trailer.

Translation
The act of accepting documents in other than standard format and translating them to the standard.

UCC
Uniform Code Council, Inc.

Uniform Communication Standard (UCS)
The EDI standard maintained and utilized by the grocery industry.

Universal Product Code (U.P.C.)
A unique product identification number applied at the product level to identify products where attributes such as product description, size and weight are fixed. Used to mark items that will be scanned at Point-of-Sale.

Value-Added-Bank (VAB)
Any bank that can help with an EDI roll-out. The bank would need to be able to process any incoming transaction sets, turn them around to the receiver in a readable format and be able to archive the data for whatever period of time the receiver requested. The bank would need to be able to perform any type of funds transfer request e.g. ACH, EFT, Wires etc.

Value-Added-Network (VAN)
An EDI service provider that provides a communication (VAN) link between companies to enable electronic exchange of business data/documents.

Version
A specific “edition” of the EDI standard. Versions are released annually in the spring and become effective in the fall of the same year. A specific 4-digit number assigned by the Uniform Code Council identifies them.

Voluntary Inter-Industry Commerce Standards (VICS) EDI
The EDI Standards maintained and utilized by the retail industry.