

ACCESSRAMPTM

Click here for
Tips on using
ACCESSRAMP

*PIPENET
Conventions for EDI*

Section 7

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7.0 THE CONCEPT

7.1 The Concept

The Electronic exchange of data between computers is not a new concept to the petroleum industry. Proprietary systems have been in existence for more than a decade. Why the tremendous interest in EDI today? What is EDI and how has it evolved? The answers to these questions will follow as we understand the concept and capabilities of EDI.

EDI is defined as the electronic transmission of business documents in a standard format between two companies. The definition can be expanded further to include the electronic transmission of business documents from the application program of one computer to the application program of another computer within the framework of a standard format. The key elements in the framework of a standard format. The key elements in the definition are "business documents" and "standard format"

EDI is not a computer technology advancement although it benefits from one - the personal computer. Instead, EDI is a technique that reduces costs and errors associated with a paper document and environment. EDI replaces the mail delivery and reentry of documents with the electronic mailbox and the delivery of your business document directly to your computer application program.

The need for EDI becomes apparent when cost efficiencies are demanded by the competitive environment of our industry.

- Proliferation of personal computers
- Availability of third party networks
- Widely accepted public standards such as ASC X12

7.2 Proliferation of Personal Computers

Enormous technological breakthroughs have occurred in computers over the last decade, but the primary benefit associated with the PC boom has been less expensive hardware and software. This permitted companies, large and small, to participate in EDI on an equal basis. Although many companies have EDI applications residing on mainframe computer processors, it is not necessary for smaller companies to make equivalent hardware and software investments in order to participate in EDI. The current technology of personal computers coupled with economically priced EDI software make it possible for small corporations or even departments of larger corporations to process data thorough EDI. Clearly, the proliferation of PCs and associated communications and EDI software have created a willingness by man companies to participate in EDI projects. Therefore, a critical mass of EDI users can be attained and success is more easily and quickly achieved

7.3 Third Party Networks

The third party network provider is the clearinghouse for electronic documents like the U.S. Postal system is for paper documents. The key features that a third party network provider contributes to successful EDI are:

- A mail boxing system with sufficient capacity to deal with enormous number of documents
- A very secure computer and communications environment with easy local access over a wide spread geographical area
- Simple communications and transparent connectivity regardless of the varying hardware, software, communications protocol, and transmission line speeds.
- Accountability of the transmitted documents must be maintained from the moment it enters the network until it is received by the trading partner. The document should be time stamped and provide an audit trail at the following junctures:
 - a. When the document first enters the network
 - b. When the document is placed in the trading partner's mailbox
 - c. When the document is retrieved by the trading partner
- The capability of retrieving mishandled or lost documents easily. Recovery capability to reread documents.
- The network and clearing house must be continuously available. Nearly 24 hours per day up time
- The ability to translate and compliance check documents that must pass between multiple standards or networks
- The ability to send documents to other third party network providers

7.4 Public Standards


EDI has resulted from the efforts of the Transportation Data Coordinating Committee (TDCC). It evolved from specific industries that were looking for cost savings and efficiencies associated with the reduction of paperwork. The automotive industry was suffering through the glut of foreign imports and was in desperate need of reducing costs to remain competitive. Thus, industry specific standards emerged, such as the Automotive Industry Action Group (AIAG), and the aftermarket automotive parts, Manufacturers Equipment Management Association (MEMA). These standards proved to be effective when dealing with companies within their specific industries; however it became apparent as the automotive companies bought steel, rubber, and electronics that the need for a standard common to many industries was required. Thus American National Standards Institute (Accredited Standards Committee) X12 standards evolved. There was not only a need to send business documents to suppliers of other industries' there was also a need to deal with documents associated with shipping of the product via truck, rail or ship. The transportation needs created the requirement for ASC X12 and TDCC to become more compatible. Thus, a committee known as the Joint EDI Committee was established for this purpose. Although efforts continue and time brings both standards together, differences remain, thus requiring translation between standards. The success of EDI depends on an open architecture.


Standards such as ANSI X12 are the single most important factor to attaining an open system architecture for EDI. An open system architecture simply means that a trading company, regardless of industry, can trade business documents with another company whether it is or is not in a similar industry. The need for industry specific documents has not decreased with time nor with the advent of ASC X12. However, the approach to establishing industry specific documents has changes. Industries no longer attempt to create their own standard' instead, industries work within the framework of ASC X12. Industry specific documentation is created to facilitate trading. Specifications for these business documents are usually created by industry societies whose purpose is to embrace the needs of their industry and develop tools for the benefit of their membership. Currently, the American Petroleum Institute through the task force on electronic data interchange is working in the area of pipeline transportation to develop a set of ten pipeline industry specific business documents within the ASC X12 framework. This document will assist those pipeline and shipper companies who wish to trade business documents utilizing ASC X12 with other companies.


Acrobat™


Tips *These buttons help you find, view and use ACCESSRAMP™ text*


Bookmarks/Thumbnails

 When bookmarks are onscreen, click on triangles to show or hide subtopics.

 When bookmarks are onscreen, a double-click on one of these brings its topic to the page window.

 Closes thumbnails or bookmarks and displays the page window only.

 Displays bookmarks and a page.

 Displays thumbnails and a page.

Page Viewing



Magnifies, reduces the page: click the button, then click within the document. Or click and drag to enlarge an area.



When part of the page fills the window, the hand icon drags the page so that the rest can be shown.

Text Copying



Selects text to copy to the clipboard.

Page 1 of 5, click this button for page 2 

Acrobat™

Tips *Use these buttons to quickly move from page to page and to set the page size*

Page Turning



Displays the first page.



Displays the previous page.



Displays the last page.



Displays the next page.



Displays the previous page viewed.



Returns from previous pages.

Page Size Setting



Sets the page view to 100%.



Displays the full width of the page within the window.



Displays the entire page within the window.



Click this button for page 1

Page 2 of 5

Click this button for page 3



Acrobat™

Tips *ACCESSRAMP™ bookmarks work like a table of contents*

Collapsing and expanding topics

Triangle icons in the bookmark area let you expand or collapse subtopics by clicking. A triangle that faces down indicates a topic is expanded. A triangle that faces to the right indicates a topic is collapsed.

To make scrolling the bookmark area easier, collapse all topics.

As you move the cursor past the border between the bookmark area and the page window a double arrow appears. Drag the double arrow to resize the bookmark area.

Finding EDI segments in ACCESSRAMP

Most ACCESSRAMP titles are based upon ASC X12 transaction sets or UN/EDIFACT messages. The hierarchy of these EDI standards creates a natural way to locate a message's interrelated parts.

- In each message listing, there is a column of page numbers to the left of the segment identifier. Click on a page number and the page window changes to the selected segment.
- You can also use the bookmarks for the same purpose.



Click this button for page 2

Page 3 of 5

Click this button for page 4



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Tips *Tips for opening multiple documents and jumping to specific pages*

Opening multiple documents

You might want to have more than one ACCESSRAMP document open at one time. For example, a data element dictionary and one or more transaction sets can be open for instant cross access.

From within ACCESSRAMP, choose File|Open to open another document. Files that can be read by ACCESSRAMP have the file extension *.PDF.

Use the Window menu to switch between the documents that are open.

Going to a specific page

In addition to using bookmarks and the message listing, there are two additional ways to get to a specific page.

- Click the page number box at the bottom of the window. Type the number of the page in the dialog box, then click OK.
- Click and hold the vertical scroll box; as you move the scroll box, a page number appears to the left of the scroll bar. Stop dragging the scroll box when it reaches the page you want.



Click this button for page 3

Page 4 of 5

Click this button for page 5



Acrobat™

Tips *Magnification and manipulating the size of the onscreen image*

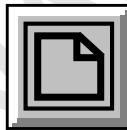
Changing page magnification

The magnification box is at the bottom of the page window next to the page number box. Click and hold to select a preset percentage of magnification.

Selecting "Other..." displays a dialog box. By typing in a number (between 12 and 800) you can set any magnification from 12% to 800%.

You can preset ACCESSRAMP to open at any desired magnification by using the "Preferences..." dialog box under the "Edit" menu.

Fitting the page to your screen



When the displayed image is too small or too large, click this button. The page will fill the window at the maximum magnification possible.



[Click this button for page 4](#)

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