

## SECTION V — IMPLEMENTING EDI

**T**his section provides guidelines for the successful implementation of EDI in your organization. It addresses the steps required to begin submitting business documents electronically, including the Trading Partner Agreement, security and quality control issues, testing, ongoing support resources and contacts, and a suggested implementation checklist and time schedule.

It is important to remember that EDI changes the way in which you do business. It affects the support and operational mission of your organization. Consequently, management as well as technological issues must be addressed. In general, the following instructions are provided for an EDI implementation:

- Consider EDI as part of a business solution — not simply a technical issue;
- Do not deviate from published standards;
- Initiate pilot production first;
- Conduct integrated testing;
- Provide an audit trail of EDI activities; and
- Integrate EDI with internal systems and business procedures.

### ***How to Begin Submitting Transactions Electronically***

There are a number of criteria for the initiation of EDI. The following is a partial list of HUD requirements:

- Contact HUD's EDI Help Desk to indicate interest in conducting EDI and to coordinate an implementation schedule;
- Develop technical environment as described in Section IV of this guide;
- Modify internal operational environment to facilitate changes from paper-based processing;
- Review Trading Partner Agreement for conditions and procedures to be followed when utilizing EDI to transmit data;
- Complete an EDI Information Request form, provided in Appendix B of this guide, and forward this to the HUD EDI Help Desk;
- Conduct testing; and

- Initiate an electronic funds transfer (EFT) agreement.

## Trading Partner Agreement

The Trading Partner Agreement is a key document in the implementation of EDI. It sets forth the rights and obligations of the EDI trading parties. This agreement outlines all conditions that will allow the parties to communicate electronically with each other. The agreement prescribes the general procedures and policies to be followed when EDI is used for transmitting and receiving electronic business information in lieu of creating one or more paper documents normally associated with conducting business with HUD. The agreement states that the parties intend to operate in the same manner as though they were exchanging hard copy paper documents. The associated Addenda provide additional information for those transactions that you will trade with HUD.

A copy of the Trading Partner Agreement and each Addendum used as a HUD baseline is found in Appendix B.

## Quality Control and Security

The issues of quality control and security are important aspects of a well-designed EDI implementation process. Many of the manual and automated processes will have to be re-addressed to appropriately ensure ongoing quality control and security.

EDI can facilitate the quality control and security processes with built-in audit trails that are available through the EDI software and third party networks. In EDI, all transactions are time- and date-stamped automatically. EDI software provides a log of **all** transactions, which provides a better audit trail than paper. An Inbound Control Log and Outbound Control Log supply an excellent mechanism for ensuring appropriate management of all EDI transmissions. Additionally, VANs provide audit information such as an activity log showing what was received, where it went, and what was placed in the VAN mailbox.

The EDI transaction sets also provide for a control number, which is an effective means of regulating and monitoring receipt and delivery of EDI transmissions. Each transaction set is conveyed in a communications envelope. The interchange control header and trailer control all EDI transmissions. The interchange header and trailer contain information that identifies the sender ID, receiver ID, date, and time. In addition, usage of a standards identifier, version number, and control number also safeguards the sender and receiver on all EDI transmissions.

From a HUD perspective to maintain quality control measures, EDI transactions/communications with HUD will be restricted to HUD-approved lenders or servicers with a valid EDI Information Request form on file with HUD. A copy of the EDI Information Request form is found in Appendix B.

A HUD trading partner is granted access to the EDS\*ELIT mailbox when the following information has been provided via the EDI Information Request Form:

- Name and address of trading partner organization;
- Technical contact name;
- EDI service(s) used, including name of VAN Servicer; and
- Mailbox ID number.

Any time any of this information or any other information contained in the EDI Information Request Form changes, it is imperative that the HUD EDI Help Desk be contacted immediately.

**Management Reports** --- Automated reports are available from the VAN, translation, and, if used, mapping software. The following is a list of the reports and the general content of each. It is recommended that you ensure that your VAN and translation software provide similar capabilities. Additionally, it is recommended that you acquire summary level reports from the VAN as these reports tend to be quite costly. Use the translation software to provide detailed information about electronic transmissions both sent and received.

**Translation Software** — The following reports are typically available from the translation software:

- Generator log indicating transmitted transaction sets and control information;
- Interpreter log indicating received transaction sets and control information;
- Formatted report of both incoming and screen-prepared data; and
- Communication management reports related to EDI activity.

**Mapping Software** — The following reports are typically available from the mapping software:

- **Message/Status Log** — Provides a log of all EDI messages for a range of dates or events.
- **Event Log** — Used for host notification of event results.
- **Session Totals Report** — Summarizes transmission totals for a range of events with subtotals for EDI transactions.
- **Data Generated Through the Data Base** — User defined report capability.

**VAN** — The following reports are typically available from the VAN:

- **Documents Received Report** — Provides a report of all documents (transaction sets) received by sender for a given time range.
- **Documents Delivered Report** — Details the documents that you have sent have been placed into the receiver's mailbox. Includes date and time delivered, trading partner ID, interchange tracking ID, group control number, and flag that document was retrieved.
- **Document Acknowledgment & Reconciliation Report** — Summarizes acknowledgments of documents sent organized by trading partner. Also includes tracking number and reference number.
- **Trading Partner Profile Report** — Alphabetical listing of trading partners, including mailbox/account ID, standard version used, and registration date.
- **Monthly Statistics Report** — Summarizes monthly statistics of EDI traffic.

## Testing

Testing is required to ensure the accuracy of all components of the EDI solution. Testing ensures that:

- The mailbox and send and receive facilities are operational;
- Translation and mapping software are functioning properly; and
- Data is accurately mapped, translated, and transmitted between HUD and its trading partners.

**Testing Procedures.** Procedures are classified in two different groups. The trading partner prior to contacting HUD completes group 1 testing that consists of the following:

- Stand-alone testing; and
- VAN connectivity.

**Standalone Testing.** To perform accurate stand-alone testing the trading partner must consider all possible scenarios of data when selecting sample data from their daily work and generate X12 output. The X12 output should be reviewed and compared to the associated Data Mapping Guide for accuracy.

**VAN Connectivity** - Trading partner should test the connectivity with the chosen VAN and their mailbox on the VAN. If a trading partner is using a VAN other than the

one used by HUD (EDS\*ELIT), the trading partner needs to arrange the connectivity between their VAN and HUD. Upon completion of the above tests, the trading partner will test their system's connectivity with HUD's VAN test mailbox and EDI gateway using the same set of data as used in the stand-alone test. This test will continue until the data sent to the EDI gateway is received in proper format and the context is correct.

In Group 2 two basic types of testing may be performed with HUD upon completion of Group 1 testing. They are:

- Simulated testing; and
- Limited parallel testing.

The Mortgagee/Servicer staff should contact the HUD EDI Help Desk when ready to transfer the test data for each transaction set. A time frame will then be established for transferring the data files for each of the required transaction sets.

## Ongoing Support

The following subsections describe the business and technical support provided to HUD's EDI trading partners.

**Business Support.** Reporting requirements are the same as for paper submissions. Review the appropriate handbook for guidance and review the section of the Implementation Guide related to the operational components of the implementation (e.g., Section VI contains the operational instructions for submission of FHA business documents).

**Technical Support.** The associated vendors should provide technical support for the EDI hardware, software, and network. Maintain a list of appropriate vendor support numbers to assist in the implementation of the EDI system. The HUD EDI team provides both implementation and operational technical support to trading partners.

The HUD EDI team provides support during implementation to field questions and respond to inquiries. To receive technical assistance during the implementation of the EDI system, call (800) 483-4334. Ask for the EDI technical support. Technical support provides the following functions:

- Answer questions regarding the transaction sets referenced in subsequent sections of this guide;
- Liaison for resolution of communication issues relating to the EDS\*ELIT VAN;
- Resolution of HUD system failures;
- Liaison to software vendors to assist in the implementation of vendor software

(translation and mapping); and

- Answer questions regarding status of EDI and EFT transmissions.

Examples of when to call include:

- To get help with electronic reporting requirements; and
- To check status of transmission.

Once you become operational, the Help Desk provides ongoing EDI support.

The *Help Desk* provides assistance to trading partners via toll free telephone access. The *Help Desk* is staffed from 8:30 a.m. to 5:30 p.m. EST to assist in the resolution of EDI related operational issues. The number is 1-800-HUD-4EDI (1-800-483-4334). An answering machine will take your message after hours. Each trading partner calling the Help Desk should be prepared to leave their name, company name, phone number and a brief description of the problem. The Help Desk staff will log each call into the database in the order received and process it accordingly.

Any changes made to your EDI environment after you are operational should be carefully controlled. It is advisable that whenever changes are made in the EDI software, a backup copy of the previous version should be kept for emergency production. If you are unable to transmit due to technical difficulties whether hardware or software related, you should communicate this to the applicable HUD Headquarters program/operations office and to the EDI Help Desk. You and HUD Headquarters must mutually agree upon your backup method of transmission. Any filing requirements established by law, regulations, HUD Handbooks or other HUD issuances remain in force, regardless of the method of transmission.

### Implementation Checklist

The following checklist is provided as a guideline for the management of the EDI implementation. It can be customized, as required, to meet your unique requirements.

- ☐ Obtain management commitment — Involve all key managers and departments affected by the implementation.
- ☐ Obtain the most recent version of the HUD EDI Implementation Guide from the Internet HUD Home Page at [www.hud.gov/offices/hsg/comp/edi/edi.cfm](http://www.hud.gov/offices/hsg/comp/edi/edi.cfm) - Use the guide as a resource for technical and operational requirements as well as mapping instructions.
- ☐ Review internal systems and business procedures — Determine how EDI should be integrated into existing systems and business practices. (Do not limit your thinking to only HUD's program. EDI can provide many other opportunities to improve

your operations.)

- ☐ Establish a plan — Establish the overall direction and priorities. Include milestones and completion dates.
- ☐ Organize a project team and define responsibilities — Assign responsibilities for each task.
- ☐ Obtain appropriate reference materials — Reference materials should include network service and software supplier manuals.
- ☐ Conduct communication and hardware inventory — Evaluate existing communication needs and capabilities to determine preferred method of communication and communication services.
- ☐ Develop an overall design — The EDI design should include a narrative, system data flow diagram, functional analysis, input/output requirements, control back-up/restart specifications, program description, and operational, audit and security procedures.
- ☐ Determine the communication vehicle/VAN — If you select a third party service provider, finalize any optional services and costs.
- ☐ Determine translation/mapping software — Factors to consider include: configuration of current system, resource availability, ability to handle multiple X12 standards, implementation timetable, vendor experience, education, and customer support services.
- ☐ Implement translation/mapping software — Use vendor support services to implement translation software.
- ☐ Complete the EDI Information Request Form and return to HUD per the instructions on the form.
- ☐ Conduct system test with translation software and communication hardware/software — Generate document, translate, send transmission, and verify receipt.
- ☐ Conduct stand-alone testing — Ensure the X12 generated data is correct before conducting simulated and limited parallel testing with HUD.
- ☐ Conduct simulated and parallel testing with HUD — Coordinate testing with HUD EDI team.
- ☐ Decide on production procedures and schedule — Establish production cutover date.

- ☐ Provide training — Provide both EDI management and operational classes to appropriate staff members.
- ☐ Implement — Begin sending production data.
- ☐ Re-evaluate checklist for future implementations — Eliminate unnecessary tasks and simplify processes.

**Implementation Time Schedule.** The key to successful implementation is the Implementation Plan. It is assumed that in general the implementation process will take approximately 30 to 120 days depending upon the complexity of the business process being migrated to EDI. Your Implementation Plan should describe the implementation process, user support, and operations activities as well as a time frame for accomplishing each of the EDI implementation tasks. It should also identify who will accomplish the various tasks and other resource requirements. The following activities should be addressed:

- Overall planning and coordination for the implementation and preparation of the implementation procedures;
- Technical assistance requirements;
- Training activities associated with the implementation;
- Prerequisites for successful implementation, including reference materials and support contacts;
- Personnel required;
- Computer and software support;
- Operational support requirements; and
- Priority scheduling.



## Set-Up Instructions

The following chart summarizes the steps you should take to set up your EDI capability.

SET-UP CHECKLIST	
1.	Review your HUD EDI Implementation Guide (Sections I, II, III and V), which provide a complete overview of the set-up phases of EDI and how EDI works at HUD.
2.	Prepare an implementation plan describing how EDI will work in your organization.
3.	Ensure that the EDI Information Request Form has been completed and returned to HUD. Make sure you use the HUD assigned mortgagee ID # in the appropriate fields in the envelope, to send files to the gateway.
4.	This step only applies to Transaction Set 260, Claims. Gain commitment from bank to support electronic funds transfer (EFT); complete HUD Form SF-3881, Automated Clearinghouse Vendor/Miscellaneous Payment Enrollment Form; and return it to HUD as indicated on the transmittal letter from HUD.
5.	Arrange for value-added network (VAN) service. Make sure your VAN uses the mortgagee ID # as described under 3.
6.	Acquire the hardware and software that will enable your servicing application system to connect to your VAN and transmit data via EDI. The software will typically include a mapper and a translator. <b>OR</b> select a service bureau with the appropriate software and hardware.
7.	Program your mapping and translation software.
8.	Review your internal workflow, personnel assignments, and servicing systems' configurations and re-engineer them, as appropriate. Identify and plan any required staff orientation and training.
9.	Contact HUD's EDI Help Desk about 30 days before you expect to be ready to start your stand-alone testing to review progress with your set-up activities. Detailed instructions for testing with HUD and a testing schedule will then be provided.

## Valid HUD Segment Terminators

These are the only valid HUD Segment Terminators that may be used in all of the HUD Transaction Sets.

CHARACTER	DESCRIPTION	HEX CODE
RFI	RFI	07
HT	HORIZONTAL TAB	09
VT	VERTICAL TAB	0B
FF	FORM FEED	0C
FS	FILE SEPARATOR	1C
GS	GROUP SEPARATOR	1D
RS	RECORD SEPARATOR	1E
US	UNIT SEPARATOR	1F
~	TILDE	7E
!	EXCLAMATION POINT	21
^	CARROT	5E
"	DOUBLE QUOTE	22
#	SHARP	23
\$	DOLLAR SIGN	24
%	PERCENT	25
&	AMPERSAND	26
'	APOSTROPHE	27
+	PLUS SIGN	2B
,	COMMA	2C
:	COLON	3A
;	SEMICOLON	3B
<	LESS THAN SIGN	3C
=	EQUAL	3D
>	GREATER THAN SIGN	3E
?	QUESTION MARK	3F

CHARACTER	DESCRIPTION	HEX CODE
@	AT SIGN	40
[	LEFT BRACKET	5B
\	BACK SLASH	5C
]	RIGHT BRACKET	5D
_	UNDERLINE	5F
{	LEFT BRACE	7B
	VERTICAL BAR	7C
}	RIGHT BRACE	7D