APPENDIX C - HUD Communications Envelope Specifications

Presented on the following pages are the data mapping guides for the Interchange Control segments and the functional group segments. These are used in every communications session. As stated in Section III, the interchange control segment provides information on you and your trading partners. The functional group segments provide information about each functional group.

Data Mapping Guide
Interchange Control Segments

ICS Interchange Control Structures

Introduction:

The purpose of this standard is to define the control structures for the electronic interchange of one or more encoded business transactions including the EDI (Electronic Data Interchange) encoded transactions of Accredited Standards Committee X12. This standard provides the interchange envelope of a header and trailer for the electronic interchange through a data transmission, and it provides a structure to acknowledge the receipt and processing of this envelope.

Pos. No.	Seg. ID	Name	Req. Des.	Max.Use	Loop Repeat	Notes and Comments
Must Use010	ISA	Interchange Control Header	M	1		
Must Use020	GS	Functional Group Header	O	1		
Must Use030	GE	Functional Group Trailer	O	1		
Must Use040	IEA	Interchange Control Trailer	M	1		

Segment:	**ISA** Interchange Control Header	
Position:	010	
Loop:		
Level:		
Usage:	Mandatory	
Max Use:	1	
Purpose:	To start and identify an interchange of zero or more functional groups and interchange-related control segments	
Syntax Notes:		
Semantic Notes:		
Comments:		

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
Must Use	**ISA01**	**I01**	**Authorization Information Qualifier**	**M ID 2/2**
			Code to identify the type of information in the Authorization Information	
			Must be 00.	
			00 No Authorization Information Present (No Meaningful Information in I02)	
Must Use	**ISA02**	**I02**	**Authorization Information**	**M AN 10/10**
			Information used for additional identification or authorization of the sender or the data in the interchange. The type of information is set by the Authorization Information Qualifier.	
			Must be 10 spaces.	
Must Use	**ISA03**	**I03**	**Security Information Qualifier**	**M ID 2/2**
			Code to identify the type of information in the Security Information	
			Must be 00.	
			00 No Security Information Present (No Meaningful Information in I04)	
Must Use	**ISA04**	**I04**	**Security Information**	**M AN 10/10**
			This is used for identifying the security information about the sender or the data in the interchange. The type of information is set by the Security Information Qualifier.	
			Must be 10 spaces.	
Must Use	**ISA05**	**I05**	**Interchange ID Qualifier**	**M ID 2/2**
			Qualifier to designate the system/method of code structure used to designate the sender or receiver ID element being qualified	
			01 Duns (Dun & Bradstreet)	
			ZZ Mutually Defined	
Must Use	**ISA06**	**I06**	**Interchange Sender ID**	**M AN 15/15**
			Identification code published by the sender for other parties to use as the receiver ID to route data to them; the sender always codes this value in the sender ID element	
			Should be mortgagee ID number for mortgagee sending directly, DUNS number for service bureau (if appropriate) with trailing blanks to meet	

			15 character requirement.		
Must Use	ISA07	I05	**Interchange ID Qualifier**	M	ID 2/2

Qualifier to designate the system/method of code structure used to designate the sender or receiver ID element being qualified

Should be ZZ for mortgagee or other appropriate qualifier for Service Bureau.

01	Duns (Dun & Bradstreet)
ZZ	Mutually Defined

Must Use	ISA08	I07	**Interchange Receiver ID**	M	AN 15/15

Identification code published by the receiver of the data; When sending, it is used by the sender as their sending ID, thus other parties sending to them will use this as a receiving ID to route data to them

This number is determined by HUD. Contact the EDI Help Desk at 1-800-483-4334 for clarification.

Must Use	ISA09	I08	**Interchange Date**	M	DT 6/6

Date of the interchange

Must be in YYMMDD format.

Must Use	ISA10	I09	**Interchange Time**	M	TM 4/4

Time of the interchange

Must Use	ISA11	I10	**Interchange Control Standards Identifier**	M	ID 1/1

Code to identify the agency responsible for the control standard used by the message that is enclosed by the interchange header and trailer

Must be U.

U	U.S. EDI Community of ASC X12, TDCC, and UCS

Must Use	ISA12	I11	**Interchange Control Version Number**	M	ID 5/5

This version number covers the interchange control segments

Must be version number mutually agreed to by HUD and mortgagee (e.g. 00300- Draft Standards Approved for Publication by ASC X12 Procedures Review Board through October 1992). 00400 for X12 version 004010 and 004040.

Refer to 003040 Data Element Dictionary for acceptable code values.

Must Use	ISA13	I12	**Interchange Control Number**	M	N0 9/9

This number uniquely identifies the interchange data to the sender. It is assigned by the sender. Together with the sender ID it uniquely identifies the interchange data to the receiver. It is suggested that the sender, receiver, and all third parties be able to maintain an audit trail of interchanges using this number.

This data interchange control number must be identical to the same element in the associated Interchange Control Trailer IEA02.

Must Use	ISA14	I13	**Acknowledgment Requested**	M	ID 1/1

Code sent by the sender to request an interchange acknowledgment (TA1)

Must be 0.

0	No Acknowledgment Requested

Electronic Data Interchange

Must Use	**ISA15**	**I14**	**Test Indicator**	**M**	**ID 1/1**

Code to indicate whether data enclosed by this interchange envelope is test or production

Enter P when status has changed to production.
Enter T for test period only.

    P   Production Data
    T   Test Data

Must Use	**ISA16**	**I15**	**Subelement Separator**	**M**	**AN 1/1**

This is a field reserved for future expansion in separating data element subgroups. (In the interest of a migration to international standards, this must be different from the data element separator).

Segment:	**GS** **Functional Group Header**
Position:	020
Loop:	
Level:	
Usage:	Optional
Max Use:	1
Purpose:	To indicate the beginning of a functional group and to provide control information
Syntax Notes:	
Semantic Notes:	**1** GS04 is the group date.
	2 GS05 is the group time.
	3 The data interchange control number GS06 in this header must be identical to the same data element in the associated functional group trailer, GE02.
Comments:	**1** A functional group of related transaction sets, within the scope of X12 standards, consists of a collection of similar transaction sets enclosed by a functional group header and a functional group trailer.
Notes:	NOTE: This functional group header is used differently by servicing mortgagees and service bureaus.
	Servicing Mortgagee: Each transaction set type (260, 264 and 266) is a separate functional group; the sender's code (GS02) is always the mortgagee's ID#.
	Service Bureau: Each transaction set (260, 264 and 266) for a specific mortgagee is a separate functional group; the sender's code (GS02) is always the mortgagee's ID number. For example, all 260s transmitted by a service bureau for Sunnyside Mortgage Co. would be one functional group and all 264s for Sunnyside Mortgage would be another. In each, data element GS02 would be Sunnyside's mortgagee's ID.

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
Must Use	**GS01**	**479**	**Functional Identifier Code**	**M** **ID 2/2**
			Code identifying a group of application related transaction sets	
			Must be MG for mortgage servicing specific transaction sets. RA will be entered by HUD for transaction set 820. AG will be entered by HUD for transaction set 824.	
			AG Application Advice (824)	
			FA Functional Acknowledgment (997)	
			MG Mortgage Servicing Transaction Sets (260, 264, 266)	
			RA Payment Order/Remittance Advice (820)	
Must Use	**GS02**	**142**	**Application Sender's Code**	**M** **AN 2/15**
			Code identifying party sending transmission; codes agreed to by trading partners	
			Servicers must enter mortgagee ID with a program flag except for Mortgage Insurance Claims) (e.g., 1234567890T). Use "D" for Mortgage Loan Default and "T" for Mortgage Record Change and Termination. NOTE: No flag is needed for Mortgage Insurance Claims.	
Must Use	**GS03**	**124**	**Application Receiver's Code**	**M** **AN 2/15**

Electronic Data Interchange

Code identifying party receiving transmission. Codes agreed to by trading partners

This number is determined by HUD. Contact the EDI Help Desk at 1-800-483-4334 for clarification.

Must Use	**GS04**	**373**	**Date**	**M**	**DT 6/6**

Date (YYMMDD) use this format for versions prior to X12 version 004010

			Date	**M**	**DT 8/8**

Date (CCYYMMDD) use this format for X12 version 004010 and after

The length of this data element is determined by the X12 version being used.

Must Use	**GS05**	**337**	**Time**	**M**	**TM 4/8**

Time expressed in 24-hour clock time as follows: HHMM, or HHMMSS, or HHMMSSD, or HHMMSSDD, where H = hours (00-23), M = minutes (00-59), S = integer seconds (00-59) and DD = decimal seconds; decimal seconds are expressed as follows: D = tenths (0-9) and DD = hundredths (00-99)

Must Use	**GS06**	**28**	**Group Control Number**	**M**	**N0 1/9**

Assigned number originated and maintained by the sender

This data Group Control Number must be identical to the same element in the associated Functional Group Trailer GE02.

Must Use	**GS07**	**455**	**Responsible Agency Code**	**M**	**ID 1/2**

Code used in conjunction with Data Element 480 to identify the issuer of the standard

Must be X.

    X   Accredited Standards Committee X12

Must Use	**GS08**	**480**	**Version / Release / Industry Identifier Code**	**M**	**AN 1/12**

Code indicating the version, release, subrelease, and industry identifier of the EDI standard being used, including the GS and GE segments; if code in DE455 in GS segment is X, then in DE 480 positions 1-3 are the version number; positions 4-6 are the release and subrelease, level of the version; and positions 7-12 are the industry or trade association identifiers (optionally assigned by user); if code in DE455 in GS segment is T, then other formats are allowed

Enter version number mutually agreed to by HUD and mortgagee (e.g. 003032 - Draft Standards Approved for Publication by ASC X12 Procedures Review Board Through June 1993).
Note: The versions 004010 and 004040 can also be used if appropriate.

    003032   Draft Standards Approved for Publication by ASC X12 Procedures Review Board Through June 1993

    003042   Draft Standards Approved for Publication by ASC X12 Procedures Review Board through June 1994

    004010   Draft Standards Approved for Publication by ASC X12 Procedures Review Board

    004040   Draft Standards Approved for Publication by ASC X12 Procedures Review Board

Segment:	## GE Functional Group Trailer
Position:	030
Loop:	
Level:	
Usage:	Optional
Max Use:	1
Purpose:	To indicate the end of a functional group and to provide control information
Syntax Notes:	
Semantic Notes:	1 The data interchange control number GE02 in this trailer must be identical to the same data element in the associated Functional Header GS06.
Comments:	1 The use of identical data interchange control numbers in the associated functional group header and trailer is designed to maximize functional group integrity. The control number is the same as that used in the corresponding header.

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
Must Use	**GE01**	**97**	**Number of Transaction Sets Included**	**M N0 1/6**
			Total number of transaction sets included in the functional group or interchange (transmission) group terminated by the trailer containing this data element	
Must Use	**GE02**	**28**	**Group Control Number**	**M N0 1/9**
			Assigned number originated and maintained by the sender	
			This Data Group Control Number must be identical to the same element in the associated Functional Group Header (GS06).	

Electronic Data Interchange

Segment:	**IEA** Interchange Control Trailer		
Position:	040		
Loop:			
Level:			
Usage:	Mandatory		
Max Use:	1		
Purpose:	To define the end of an interchange of zero or more functional groups and interchange-related control segments		
Syntax Notes:			
Semantic Notes:			
Comments:			

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
Must Use	IEA01	I16	**Number of Included Functional Groups**	M N0 1/5
			A count of the number of functional groups included in a transmission.	
Must Use	IEA02	I12	**Interchange Control Number**	M N0 9/9
			This number uniquely identifies the interchange data to the sender. It is assigned by the sender. Together with the sender ID it uniquely identifies the interchange data to the receiver. It is suggested that the sender, receiver, and all third parties be able to maintain an audit trail of interchanges using this number.	
			This Data Interchange Control Number must be identical to the same element in the associated Interchange Control Header ISA13.	