

# 997 Functional Acknowledgment

Functional Group ID=**FA**

## Introduction:

This Draft Standard for Trial Use contains the format and establishes the data contents of the Functional Acknowledgment Transaction Set (997) for use within the context of an Electronic Data Interchange (EDI) environment. The transaction set can be used to define the control structures for a set of acknowledgments to indicate the results of the syntactical analysis of the electronically encoded documents. The encoded documents are the transaction sets, which are grouped in functional groups, used in defining transactions for business data interchange. This standard does not cover the semantic meaning of the information encoded in the transaction sets.

## Notes:

*The submitter of an X12 transaction set may request an acknowledgment at the interchange level by populating the ISA14 element with a value of '1'. When an acknowledgment is requested at the ISA interchange level, a TA1 envelope segment is returned following the ISA of the 997. The TA1 segment contains the original ISA control number, the original ISA date, the original ISA time and the interchange status. The interchange status is 'A' for interchange accepted, 'E' for interchange accepted with X12 errors or 'R' for interchange rejected.*

	<u>Pos. No.</u>	<u>Seg. ID</u>	<u>Name</u>	<u>Req. Des.</u>	<u>Max.Use</u>	<u>Loop Repeat</u>	<u>Notes and Comments</u>
M	005	ISA	Interchange Control Header	M	1		
M	007	GS	Functional Group Header	M	1		
M	010	ST	Transaction Set Header	M	1		n1
M	020	AK1	Functional Group Response Header	M	1		n2
			LOOP ID - AK2			999999	
	030	AK2	Transaction Set Response Header	O	1		n3
			LOOP ID - AK3			999999	
	040	AK3	Data Segment Note	O	1		c1
	050	AK4	Data Element Note	O	99		
M	060	AK5	Transaction Set Response Trailer	M	1		
M	070	AK9	Functional Group Response Trailer	M	1		
M	080	SE	Transaction Set Trailer	M	1		
M	090	GE	Functional Group Trailer	M	1		
M	100	IEA	Interchange Control Trailer	M	1		

## Transaction Set Notes

1. These acknowledgments shall not be acknowledged, thereby preventing an endless cycle of acknowledgments of acknowledgments. Nor shall a Functional Acknowledgment be sent to report errors in a previous Functional Acknowledgment.

The Functional Group Header Segment (GS) is used to start the envelope for the Functional Acknowledgment Transaction Sets. In preparing the functional group of acknowledgments, the application sender's code and the application receiver's code, taken from the functional group being acknowledged, are exchanged; therefore, one acknowledgment functional group responds to only those functional groups from one application receiver's code to one application sender's code.

There is only one Functional Acknowledgment Transaction Set per acknowledged functional group.

2. AK1 is used to respond to the functional group header and to start the acknowledgement for a functional group. There shall be one AK1 segment for the functional group that is being acknowledged.
3. AK2 is used to start the acknowledgement of a transaction set within the received functional group. The AK2 segments shall appear in the same order as the transaction sets in the functional group that has been received and is being acknowledged.

## Transaction Set Comments

1. The data segments of this standard are used to report the results of the syntactical analysis of the functional groups of transaction sets; they report the extent to which the syntax complies with the standards for transaction sets and functional groups. They do not report on the semantic meaning of the transaction sets (for example, on the ability of the receiver to comply with the request of the sender).

**Segment:** **ISA** Interchange Control Header  
**Position:** 005  
**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**

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
M	ISA01	I01	<b>Authorization Information Qualifier</b> Code to identify the type of information in the Authorization Information 00 No Authorization Information Present (No Meaningful Information in I02)	M ID 2/2
M	ISA02	I02	<b>Authorization Information</b> Information used for additional identification or authorization of the interchange sender or the data in the interchange; the type of information is set by the Authorization Information Qualifier (I01)	M AN 10/10
M	ISA03	I03	<b>Security Information Qualifier</b> Code to identify the type of information in the Security Information 00 No Security Information Present (No Meaningful Information in I04)	M ID 2/2
M	ISA04	I04	<b>Security Information</b> This is used for identifying the security information about the interchange sender or the data in the interchange; the type of information is set by the Security Information Qualifier (I03)	M AN 10/10
M	ISA05	I05	<b>Interchange ID Qualifier</b> Qualifier to designate the system/method of code structure used to designate the sender or receiver ID element being qualified <i>Set by Trading Partner Agreement.</i> 01 Duns (Dun & Bradstreet) 14 Duns Plus Suffix 20 Health Industry Number (HIN) 27 Carrier Identification Number as assigned by Health Care Financing Administration (HCFA) 28 Fiscal Intermediary Identification Number as assigned by Health Care Financing Administration (HCFA) 29 Medicare Provider and Supplier Identification Number as assigned by Health Care Financing Administration (HCFA) 30 U.S. Federal Tax Identification Number 33 National Association of Insurance Commissioners Company Code (NAIC) ZZ Mutually Defined	M ID 2/2
M	ISA06	I06	<b>Interchange Sender ID</b> 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 <i>Set by Trading Partner Agreement.</i>	M AN 15/15
M	ISA07	I05	<b>Interchange ID Qualifier</b> Qualifier to designate the system/method of code structure used to designate the sender or receiver ID element being qualified <i>Set by Trading Partner Agreement.</i>	M ID 2/2

			01	Duns (Dun & Bradstreet)	
			14	Duns Plus Suffix	
			20	Health Industry Number (HIN)	
			27	Carrier Identification Number as assigned by Health Care Financing Administration (HCFA)	
			28	Fiscal Intermediary Identification Number as assigned by Health Care Financing Administration (HCFA)	
			29	Medicare Provider and Supplier Identification Number as assigned by Health Care Financing Administration (HCFA)	
			30	U.S. Federal Tax Identification Number	
			33	National Association of Insurance Commissioners Company Code (NAIC)	
			ZZ	Mutually Defined	
M	ISA08	I07		<b>Interchange Receiver ID</b>	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 <i>Set by Trading Partner Agreement.</i>	
M	ISA09	I08		<b>Interchange Date</b>	M DT 6/6
				Date of the interchange	
M	ISA10	I09		<b>Interchange Time</b>	M TM 4/4
				Time of the interchange	
M	ISA11	I10		<b>Interchange Control Standards Identifier</b>	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	
			U	U.S. EDI Community of ASC X12, TDCC, and UCS	
M	ISA12	I11		<b>Interchange Control Version Number</b>	M ID 5/5
				This version number covers the interchange control segments	
			00401	Draft Standards for Trial Use Approved for Publication by ASC X12 Procedures Review Board through October 1997	
M	ISA13	I12		<b>Interchange Control Number</b>	M N0 9/9
				A control number assigned by the interchange sender <i>The Interchange Control Number is incremented each time an ISA is created.</i> The Interchange Control Number, ISA13, is identical to the associated Interchange Trailer, IEA02.	
M	ISA14	I13		<b>Acknowledgment Requested</b>	M ID 1/1
				Code sent by the sender to request an interchange acknowledgment (TA1)	
			0	No Acknowledgment Requested	
			1	Interchange Acknowledgment Requested	
M	ISA15	I14		<b>Usage Indicator</b>	M ID 1/1
				Code to indicate whether data enclosed by this interchange envelope is test, production or information	
			P	Production Data	
			T	Test Data	
M	ISA16	I15		<b>Component Element Separator</b>	M AN 1/1
				Type is not applicable; the component element separator is a delimiter and not a data element; this field provides the delimiter used to separate component data elements within a composite data structure; this value must be different than the data element separator and the segment terminator	

**Segment:** **GS** **Functional Group Header**  
**Position:** 007  
**Loop:**  
**Level:**  
**Usage:** Mandatory  
**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.

**Data Element Summary**

<b>Ref.</b>	<b>Data</b>	<b>Data</b>	<b>Attributes</b>
<b>Des.</b>	<b>Element</b>	<b>Name</b>	
M	GS01	479 <b>Functional Identifier Code</b>	M ID 2/2
		Code identifying a group of application related transaction sets FA Functional Acknowledgment (997)	
M	GS02	142 <b>Application Sender's Code</b>	M AN 2/15
		Code identifying party sending transmission; codes agreed to by trading partners <i>Set by Trading Partner Agreement.</i>	
M	GS03	124 <b>Application Receiver's Code</b>	M AN 2/15
		Code identifying party receiving transmission; codes agreed to by trading partners <i>Set by Trading Partner Agreement.</i>	
M	GS04	373 <b>Date</b>	M DT 8/8
		Date expressed as CCYYMMDD Used for the Functional Group Creation Date.	
M	GS05	337 <b>Time</b>	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) Used for the Functional Group Creation Time, HHMM.	
M	GS06	28 <b>Group Control Number</b>	M N0 1/9
		Assigned number originated and maintained by the sender <i>The Group Control Number is incremented each time a GS is created.</i>	
M	GS07	455 <b>Responsible Agency Code</b>	M ID 1/2
		Code used in conjunction with Data Element 480 to identify the issuer of the standard X Accredited Standards Committee X12	
M	GS08	480 <b>Version / Release / Industry Identifier Code</b>	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 004010X096 ASC X12N Version Identifier for Institutional Claims 004010X097 ASC X12N Version Identifier for Dental Claims 004010X098	



**Segment:** **ST** Transaction Set Header  
**Position:** 010  
**Loop:**  
**Level:**  
**Usage:** Mandatory  
**Max Use:** 1  
**Purpose:** To indicate the start of a transaction set and to assign a control number  
**Syntax Notes:**  
**Semantic Notes:** 1 The transaction set identifier (ST01) is used by the translation routines of the interchange partners to select the appropriate transaction set definition (e.g., 810 selects the Invoice Transaction Set).  
**Comments:**

**Data Element Summary**

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
M	ST01	143	<b>Transaction Set Identifier Code</b> Code uniquely identifying a Transaction Set 997 Functional Acknowledgment	M ID 3/3
M	ST02	329	<b>Transaction Set Control Number</b> Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set	M AN 4/9

**Segment:** **AK1** **Functional Group Response Header**  
**Position:** 020  
**Loop:**  
**Level:**  
**Usage:** Mandatory  
**Max Use:** 1  
**Purpose:** To start acknowledgment of a functional group  
**Syntax Notes:**  
**Semantic Notes:**

- 1 AK101 is the functional ID found in the GS segment (GS01) in the functional group being acknowledged.
- 2 AK102 is the functional group control number found in the GS segment in the functional group being acknowledged.

**Comments:**

**Data Element Summary**

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
M	AK101	479	<b>Functional Identifier Code</b> Code identifying a group of application related transaction sets HC Health Care Claim (837)	M ID 2/2
M	AK102	28	<b>Group Control Number</b> Assigned number originated and maintained by the sender	M N0 1/9

**Segment:** **AK2** Transaction Set Response Header  
**Position:** 030  
**Loop:** AK2 Optional  
**Level:**  
**Usage:** Optional  
**Max Use:** 1  
**Purpose:** To start acknowledgment of a single transaction set  
**Syntax Notes:**  
**Semantic Notes:**

- 1 AK201 is the transaction set ID found in the ST segment (ST01) in the transaction set being acknowledged.
- 2 AK202 is the transaction set control number found in the ST segment in the transaction set being acknowledged.

**Comments:**

**Data Element Summary**

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
M	AK201	143	<b>Transaction Set Identifier Code</b> Code uniquely identifying a Transaction Set 837 Health Care Claim	M ID 3/3
M	AK202	329	<b>Transaction Set Control Number</b> Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set	M AN 4/9

**Segment:** **AK3** Data Segment Note  
**Position:** 040  
**Loop:** AK3 Optional  
**Level:**  
**Usage:** Optional  
**Max Use:** 1  
**Purpose:** To report errors in a data segment and identify the location of the data segment  
**Syntax Notes:**  
**Semantic Notes:**  
**Comments:**

**Data Element Summary**

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
M	AK301	721	<b>Segment ID Code</b> Code defining the segment ID of the data segment in error (See Appendix A - Number 77)	M ID 2/3
M	AK302	719	<b>Segment Position in Transaction Set</b> The numerical count position of this data segment from the start of the transaction set: the transaction set header is count position 1	M N0 1/6
	AK303	447	<b>Loop Identifier Code</b> The loop ID number given on the transaction set diagram is the value for this data element in segments LS and LE	O AN 1/6
	AK304	720	<b>Segment Syntax Error Code</b> Code indicating error found based on the syntax editing of a segment	O ID 1/3
			1 Unrecognized segment ID	
			2 Unexpected segment	
			3 Mandatory segment missing	
			4 Loop Occurs Over Maximum Times	
			5 Segment Exceeds Maximum Use	
			6 Segment Not in Defined Transaction Set	
			7 Segment Not in Proper Sequence	
			8 Segment Has Data Element Errors	

**Segment:** **AK4** Data Element Note

**Position:** 050

**Loop:** AK3 Optional

**Level:**

**Usage:** Optional

**Max Use:** 99

**Purpose:** To report errors in a data element or composite data structure and identify the location of the data element

**Syntax Notes:**

**Semantic Notes:** 1 In no case shall a value be used for AK404 that would generate a syntax error, e.g., an invalid character.

**Comments:**

**Data Element Summary**

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
M	AK401	C030	<b>Position in Segment</b> Code indicating the relative position of a simple data element, or the relative position of a composite data structure combined with the relative position of the component data element within the composite data structure, in error; the count starts with 1 for the simple data element or composite data structure immediately following the segment ID	<b>M</b>
M	C03001	722	<b>Element Position in Segment</b> This is used to indicate the relative position of a simple data element, or the relative position of a composite data structure with the relative position of the component within the composite data structure, in error; in the data segment the count starts with 1 for the simple data element or composite data structure immediately following the segment ID	<b>M N0 1/2</b>
	C03002	1528	<b>Component Data Element Position in Composite</b> To identify the component data element position within the composite that is in error	<b>O N0 1/2</b>
	AK402	725	<b>Data Element Reference Number</b> Reference number used to locate the data element in the Data Element Dictionary	<b>O N0 1/4</b>
M	AK403	723	<b>Data Element Syntax Error Code</b> Code indicating the error found after syntax edits of a data element	<b>M ID 1/3</b>
			1 Mandatory data element missing	
			2 Conditional required data element missing.	
			3 Too many data elements.	
			4 Data element too short.	
			5 Data element too long.	
			6 Invalid character in data element.	
			7 Invalid code value.	
			8 Invalid Date	
			9 Invalid Time	
			10 Exclusion Condition Violated	
	AK404	724	<b>Copy of Bad Data Element</b> This is a copy of the data element in error	<b>O AN 1/99</b>

**Segment:** **AK5** Transaction Set Response Trailer  
**Position:** 060  
**Loop:** AK2 Optional  
**Level:**  
**Usage:** Mandatory  
**Max Use:** 1  
**Purpose:** To acknowledge acceptance or rejection and report errors in a transaction set  
**Syntax Notes:**  
**Semantic Notes:**  
**Comments:**

**Data Element Summary**

<u>Ref.</u>	<u>Data</u>	<u>Name</u>	<u>Attributes</u>
<u>Des.</u>	<u>Element</u>		
M	AK501	717 Transaction Set Acknowledgment Code	M ID 1/1
		Code indicating accept or reject condition based on the syntax editing of the transaction set	
		A Accepted	
		E Accepted But Errors Were Noted	
		M Rejected, Message Authentication Code (MAC) Failed	
		R Rejected	
		W Rejected, Assurance Failed Validity Tests	
		X Rejected, Content After Decryption Could Not Be Analyzed	
	AK502	718 Transaction Set Syntax Error Code	O ID 1/3
		Code indicating error found based on the syntax editing of a transaction set	
		1 Transaction Set Not Supported	
		2 Transaction Set Trailer Missing	
		3 Transaction Set Control Number in Header and Trailer Do Not Match	
		4 Number of Included Segments Does Not Match Actual Count	
		5 One or More Segments in Error	
		6 Missing or Invalid Transaction Set Identifier	
		7 Missing or Invalid Transaction Set Control Number	
		8 Authentication Key Name Unknown	
		9 Encryption Key Name Unknown	
		10 Requested Service (Authentication or Encrypted) Not Available	
		11 Unknown Security Recipient	
		12 Incorrect Message Length (Encryption Only)	
		13 Message Authentication Code Failed	
		15 Unknown Security Originator	
		16 Syntax Error in Decrypted Text	
		17 Security Not Supported	
		19 S1E Security End Segment Missing for S1S Security Start Segment	
		20 S1S Security Start Segment Missing for S1E Security End Segment	
		21 S2E Security End Segment Missing for S2S Security Start Segment	
		22 S2S Security Start Segment Missing for S2E Security End Segment	
		23 Transaction Set Control Number Not Unique within the Functional Group	
		24 S3E Security End Segment Missing for S3S Security Start Segment	
		25 S3S Security Start Segment Missing for S3E Security End	

		26	Segment S4E Security End Segment Missing for S4S Security Start Segment	
		27	S4S Security Start Segment Missing for S4E Security End Segment	
<b>AK503</b>	<b>718</b>		<b>Transaction Set Syntax Error Code</b>	<b>O ID 1/3</b>
			Code indicating error found based on the syntax editing of a transaction set <i>See values for AK502.</i>	
			Refer to 004010 Data Element Dictionary for acceptable code values.	
<b>AK504</b>	<b>718</b>		<b>Transaction Set Syntax Error Code</b>	<b>O ID 1/3</b>
			Code indicating error found based on the syntax editing of a transaction set <i>See values for AK502.</i>	
			Refer to 004010 Data Element Dictionary for acceptable code values.	
<b>AK505</b>	<b>718</b>		<b>Transaction Set Syntax Error Code</b>	<b>O ID 1/3</b>
			Code indicating error found based on the syntax editing of a transaction set <i>See values for AK502.</i>	
			Refer to 004010 Data Element Dictionary for acceptable code values.	
<b>AK506</b>	<b>718</b>		<b>Transaction Set Syntax Error Code</b>	<b>O ID 1/3</b>
			Code indicating error found based on the syntax editing of a transaction set <i>See values for AK502.</i>	
			Refer to 004010 Data Element Dictionary for acceptable code values.	

**Segment:** **AK9** Functional Group Response Trailer

**Position:** 070

**Loop:**

**Level:**

**Usage:** Mandatory

**Max Use:** 1

**Purpose:** To acknowledge acceptance or rejection of a functional group and report the number of included transaction sets from the original trailer, the accepted sets, and the received sets in this functional group

**Syntax Notes:**

**Semantic Notes:**

**Comments:** 1 If AK901 contains the value "A" or "E", then the transmitted functional group is accepted.

**Data Element Summary**

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
M	AK901	715	<b>Functional Group Acknowledge Code</b> Code indicating accept or reject condition based on the syntax editing of the functional group A Accepted E Accepted, But Errors Were Noted. M Rejected, Message Authentication Code (MAC) Failed P Partially Accepted, At Least One Transaction Set Was Rejected R Rejected W Rejected, Assurance Failed Validity Tests X Rejected, Content After Decryption Could Not Be Analyzed	M ID 1/1
M	AK902	97	<b>Number of Transaction Sets Included</b> Total number of transaction sets included in the functional group or interchange (transmission) group terminated by the trailer containing this data element	M N0 1/6
M	AK903	123	<b>Number of Received Transaction Sets</b> Number of Transaction Sets received	M N0 1/6
M	AK904	2	<b>Number of Accepted Transaction Sets</b> Number of accepted Transaction Sets in a Functional Group	M N0 1/6
	AK905	716	<b>Functional Group Syntax Error Code</b> Code indicating error found based on the syntax editing of the functional group header and/or trailer 1 Functional Group Not Supported 2 Functional Group Version Not Supported 3 Functional Group Trailer Missing 4 Group Control Number in the Functional Group Header and Trailer Do Not Agree 5 Number of Included Transaction Sets Does Not Match Actual Count 6 Group Control Number Violates Syntax 10 Authentication Key Name Unknown 11 Encryption Key Name Unknown 12 Requested Service (Authentication or Encryption) Not Available 13 Unknown Security Recipient 14 Unknown Security Originator 15 Syntax Error in Decrypted Text 16 Security Not Supported 17 Incorrect Message Length (Encryption Only) 18 Message Authentication Code Failed 19 S1E Security End Segment Missing for S1S Security Start	O ID 1/3

	20	Segment S1S Security Start Segment Missing for S1E End	
	21	Segment S2E Security End Segment Missing for S2S Security Start	
	22	Segment S2S Security Start Segment Missing for S2E Security End	
	23	Segment S3E Security End Segment Missing for S3S Security Start	
	24	Segment S3S Security Start Segment Missing for S3E End	
	25	Segment S4E Security End Segment Missing for S4S Security Start	
	26	Segment S4S Security Start Segment Missing for S4E Security End	
<b>AK906</b>	<b>716</b>	<b>Functional Group Syntax Error Code</b>	<b>O ID 1/3</b>
		Code indicating error found based on the syntax editing of the functional group header and/or trailer	
		<i>See values for AK905.</i>	
		Refer to 004010 Data Element Dictionary for acceptable code values.	
<b>AK907</b>	<b>716</b>	<b>Functional Group Syntax Error Code</b>	<b>O ID 1/3</b>
		Code indicating error found based on the syntax editing of the functional group header and/or trailer	
		<i>See values for AK905.</i>	
		Refer to 004010 Data Element Dictionary for acceptable code values.	
<b>AK908</b>	<b>716</b>	<b>Functional Group Syntax Error Code</b>	<b>O ID 1/3</b>
		Code indicating error found based on the syntax editing of the functional group header and/or trailer	
		<i>See values for AK905.</i>	
		Refer to 004010 Data Element Dictionary for acceptable code values.	
<b>AK909</b>	<b>716</b>	<b>Functional Group Syntax Error Code</b>	<b>O ID 1/3</b>
		Code indicating error found based on the syntax editing of the functional group header and/or trailer	
		<i>See values for AK905.</i>	
		Refer to 004010 Data Element Dictionary for acceptable code values.	

**Segment:** **SE** Transaction Set Trailer

**Position:** 080

**Loop:**

**Level:**

**Usage:** Mandatory

**Max Use:** 1

**Purpose:** To indicate the end of the transaction set and provide the count of the transmitted segments (including the beginning (ST) and ending (SE) segments)

**Syntax Notes:**

**Semantic Notes:**

**Comments:** 1 SE is the last segment of each transaction set.

**Data Element Summary**

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
M	SE01	96	<b>Number of Included Segments</b> Total number of segments included in a transaction set including ST and SE segments	M N0 1/10
M	SE02	329	<b>Transaction Set Control Number</b> Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set	M AN 4/9

**Segment:** **GE** Functional Group Trailer  
**Position:** 090  
**Loop:**  
**Level:**  
**Usage:** Mandatory  
**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 group 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**

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
M	GE01	97	<b>Number of Transaction Sets Included</b> Total number of transaction sets included in the functional group or interchange (transmission) group terminated by the trailer containing this data element	M N0 1/6
M	GE02	28	<b>Group Control Number</b> Assigned number originated and maintained by the sender	M N0 1/9

**Segment:** **IEA** Interchange Control Trailer  
**Position:** 100  
**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**

	<u>Ref.</u>	<u>Data</u>	<u>Name</u>	<u>Attributes</u>
	<u>Des.</u>	<u>Element</u>		
M	IEA01	I16	<b>Number of Included Functional Groups</b>	M N0 1/5
			A count of the number of functional groups included in an interchange	
M	IEA02	I12	<b>Interchange Control Number</b>	M N0 9/9
			A control number assigned by the interchange sender	
			Same value as the associated Interchange Control Number (ISA13).	