



*California Department of Health Care Services*

*Short Doyle/Medi-Cal Phase II*

# Companion Guide

## DMH – ADP - 997

*Version: 1.2.3*

*Date: 01/09/09*



## Versioning, History

<i>Version</i>	<i>Author</i>	<i>Date</i>	<i>Loop</i>	<i>Segment</i>	<i>Element</i>	<i>Change Made</i>
1.1	Deepa Pochiraju	10/27/08	-	-	-	Incorporated changes from DMH.
1.2	Deepa Pochiraju	10/28/08	-	-	-	Updated the 'Purpose' text, per DMH and DHCS feedback.
1.2.1	Deepa Pochiraju	10/30/08	-	-	-	Incorporated changes from DMH.
1.2.2	Deepa Pochiraju	12/15/2008	AK2 - Transaction Set Response Header	AK5 - Transaction Set Response Trailer	AK501 - Transaction Set Acknowledgment Code	Updated the code list to include the values from the imp. Guide.
1.2.2	Deepa Pochiraju	12/15/2008		AK9 - Functional Group Response Trailer	AK901 - Functional Group Acknowledge Code	Updated the code list to include the values from the imp. Guide.
1.2.3	Deepa Pochiraju	01/09/09	-	ISA – Interchange Control Header	-	Example for the ISA segment is updated to show the EIN for ADP.
1.2.3	Deepa Pochiraju	01/09/09	-	ISA – Interchange Control Header	ISA07	Code '30' included for ADP.

<i>Version</i>	<i>Author</i>	<i>Date</i>	<i>Loop</i>	<i>Segment</i>	<i>Element</i>	<i>Change Made</i>
1.2.3	Deepa Pochiraju	01/09/09	-	ISA – Interchange Control Header	ISA08	Notes updated to show EIN only for ADP.
1.2.3	Deepa Pochiraju	01/09/09	-	GS – Functional Group Header	-	Example for the GS segment is updated to show the EIN for ADP.
1.2.3	Deepa Pochiraju	01/09/09	-	GS – Functional Group Header	GS03	Notes updated to show EIN only for ADP.

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# 997

## Functional Acknowledgment

### Functional Group=FA

**Purpose:** This guide 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 is 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.

The 997 transaction is returned to a submitter once validation of a submitted claims file by the Short-Doyle Phase II system has been completed.

#### Not Defined:

<u>Pos</u>	<u>Id</u>	<u>Segment Name</u>	<u>Req</u>	<u>Max Use</u>	<u>Repeat</u>	<u>Notes</u>	<u>Usage</u>
	ISA	Interchange Control Header	M	1			Required
	GS	Functional Group Header	M	1			Required

#### Heading:

<u>Pos</u>	<u>Id</u>	<u>Segment Name</u>	<u>Req</u>	<u>Max Use</u>	<u>Repeat</u>	<u>Notes</u>	<u>Usage</u>
010	ST	Transaction Set Header	M	1		N1/010	Required
020	AK1	Functional Group Response Header	M	1			Required

<u>LOOP ID - AK2</u>					<u>999999</u>	<u>N1/030L</u>	
030	AK2	Transaction Set Response Header	O	1		N1/030	Situational
<u>LOOP ID - AK3</u>					<u>999999</u>	<u>N1/040L</u>	
040	AK3	Data Segment Note	O	1		N1/040	Situational
050	AK4	Data Element Note	O	99			Situational
060	AK5	Transaction Set Response Trailer	M	1			Required
070	AK9	Functional Group Response Trailer	M	1			Required
080	SE	Transaction Set Trailer	M	1			Required

#### Not Defined:

<u>Pos</u>	<u>Id</u>	<u>Segment Name</u>	<u>Req</u>	<u>Max Use</u>	<u>Repeat</u>	<u>Notes</u>	<u>Usage</u>
	GE	Functional Group Trailer	M	1			Required
	IEA	Interchange Control Trailer	M	1			Required

#### Notes:

- 1/010 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.
- 1/030L 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.
- 1/030 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.

- 1/040L 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).
- 1/040 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).

# ISA Interchange Control Header

<b>Pos:</b>	<b>Max: 1</b>
<b>Not Defined - Mandatory</b>	
<b>Loop: N/A</b>	<b>Elements: 16</b>

**User Option (Usage):** Required

**Purpose:** To start and identify an interchange of zero or more functional groups and interchange-related control segments

## Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
ISA01	I01	Authorization Information Qualifier	M	ID	2/2	Required

**Description:** Code to identify the type of information in the Authorization Information

<u>Code</u>	<u>Name</u>
00	No Authorization Information Present (No Meaningful Information in I02)

ISA02	I02	Authorization Information	M	AN	10/10	Required
-------	-----	---------------------------	---	----	-------	----------

**Description:** 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)

**Notes:** Valid values: 10 blanks

ISA03	I03	Security Information Qualifier	M	ID	2/2	Required
-------	-----	--------------------------------	---	----	-----	----------

**Description:** Code to identify the type of information in the Security Information

<u>Code</u>	<u>Name</u>
00	No Security Information Present (No Meaningful Information in I04)

ISA04	I04	Security Information	M	AN	10/10	Required
-------	-----	----------------------	---	----	-------	----------

**Description:** 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)

**Notes:** Valid values: 10 blanks

ISA05	I05	Interchange ID Qualifier	M	ID	2/2	Required
-------	-----	--------------------------	---	----	-----	----------

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

<u>Code</u>	<u>Name</u>
ZZ	Mutually Defined

ISA06	I06	Interchange Sender ID	M	AN	15/15	Required
-------	-----	-----------------------	---	----	-------	----------

**Description:** 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

**Notes:** Valid Values: *SDMCPHASETWODMH* or *SDMCPHASETWOADP*

ISA07	I05	Interchange ID Qualifier	M	ID	2/2	Required
-------	-----	--------------------------	---	----	-----	----------

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

<u>Code</u>	<u>Name</u>
30	U.S. Federal Tax Identification Number
ZZ	Mutually Defined

ISA08	I07	Interchange Receiver ID	M	AN	15/15	Required
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**Description:** 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

**Notes:** For DMH: C + County Code + 12 Zeroes, Examples: C59000000000000

For ADP:

County or Direct Contract Provider: 9 digit EIN established by Trading Partner agreement + 6 Spaces

Example: 956000928

ISA09	I08	<b>Interchange Date</b>	M	DT	6/6	Required
-------	-----	-------------------------	---	----	-----	----------

**Description:** Date of the interchange

ISA10	I09	<b>Interchange Time</b>	M	TM	4/4	Required
-------	-----	-------------------------	---	----	-----	----------

**Description:** Time of the interchange

ISA11	I10	<b>Interchange Control Standards Identifier</b>	M	ID	1/1	Required
-------	-----	---	---	----	-----	----------

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

**Code**

**Name**

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

ISA12	I11	<b>Interchange Control Version Number</b>	M	ID	5/5	Required
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**Description:** Code specifying the version number of the interchange control segments

**Code**

**Name**

00401 Draft Standards for Trial Use Approved for Publication by ASC X12 Procedures Review Board through October 1997

ISA13	I12	<b>Interchange Control Number</b>	M	N0	9/9	Required
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**Description:** A control number assigned by the interchange sender

ISA14	I13	<b>Acknowledgment Requested</b>	M	ID	1/1	Required
-------	-----	---------------------------------	---	----	-----	----------

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

**Code**

**Name**

0 No Acknowledgment Requested

ISA15	I14	<b>Usage Indicator</b>	M	ID	1/1	Required
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**Description:** Code to indicate whether data enclosed by this interchange envelope is test, production or information

**Code**

**Name**

P Production Data  
T Test Data

ISA16	I15	<b>Component Element Separator</b>	M		1/1	Required
-------	-----	------------------------------------	---	--	-----	----------

**Description:** 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

**Notes:**

Example for DMH:

ISA\*00\* \*00\*

\*ZZ\*SDMCPHASETWODMH\*ZZ\*C5900000000000\*030930\*1256\*U\*00401\*000000636\*0\*P\*::~

Example for ADP:



ISA\*00\* \*00\* \*ZZ\*SDMCPHASETWOADP\*30\*956000928  
\*030930\*1256\*U\*00401\*000000636\*0\*P\*:-~

# GS Functional Group Header

<b>Pos:</b>	<b>Max: 1</b>
<b>Not Defined - Mandatory</b>	
<b>Loop: N/A</b>	<b>Elements: 8</b>

**User Option (Usage):** Required  
**Purpose:** To indicate the beginning of a functional group and to provide control information

**Element Summary:**

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
GS01	479	<b>Functional Identifier Code</b>	M	ID	2/2	Required
<b>Description:</b> Code identifying a group of application related transaction sets						
		<u>Code</u>	<u>Name</u>			
		FA	Functional Acknowledgment (997)			
GS02	142	<b>Application Sender's Code</b>	M	AN	2/15	Required
<b>Description:</b> Code identifying party sending transmission; codes agreed to by trading partners						
<b>Notes:</b> Valid Values: <i>SDMCPHASETWODMH or SDMCPHASETWOADP</i>						
GS03	124	<b>Application Receiver's Code</b>	M	AN	2/15	Required
<b>Description:</b> Code identifying party receiving transmission; codes agreed to by trading partners						
<b>Notes:</b> For DMH: C + County Code + 12 Zeroes, Examples: <i>C5900000000000</i>						
<i>For ADP: County or Direct Contract Provider: 9 digit EIN established by Trading Partner agreement</i>						
<i>Example: 956000928</i>						
GS04	373	<b>Date</b>	M	DT	8/8	Required
<b>Description:</b> Date expressed as CCYYMMDD						
GS05	337	<b>Time</b>	M	TM	4/8	Required
<b>Description:</b> 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)						
GS06	28	<b>Group Control Number</b>	M	N0	1/9	Required
<b>Description:</b> Assigned number originated and maintained by the sender						
GS07	455	<b>Responsible Agency Code</b>	M	ID	1/2	Required
<b>Description:</b> Code identifying the issuer of the standard; this code is used in conjunction with Data Element 480						
		<u>Code</u>	<u>Name</u>			
		X	Accredited Standards Committee X12			
GS08	480	<b>Version / Release / Industry Identifier Code</b>	M	AN	1/12	Required
<b>Description:</b> 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						



<u>Code</u>	<u>Name</u>
004010	Draft Standards Approved for Publication by ASC X12 Procedures Review Board through October 1997

**Semantics:**

1. GS04 is the group date.
2. GS05 is the group time.

**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:**

*The data interchange control number GS06 in this header must be identical to the same data element in the associated functional group trailer, GE02.*

**Example:**

*Example for DMH:*

*GS\*HP\*SDMCPHASETWODMH\*C5900000000000\*20030930\*1256\*614\*X\*004010~*

*Example for ADP:*

*GS\*HP\*SDMCPHASETWOADP\*956000928\*20030930\*1256\*614\*X\*004010~*

# ST Transaction Set Header

Pos: 010	Max: 1
Heading - Mandatory	
Loop: N/A	Elements: 2

**User Option (Usage):** Required  
**Purpose:** To indicate the start of a transaction set and to assign a control number

**Element Summary:**

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
ST01	143	<b>Transaction Set Identifier Code</b>	M	ID	3/3	Required
<b>Description:</b> Code uniquely identifying a Transaction Set						
		<u>Code</u>		<u>Name</u>		
		997		Functional Acknowledgment		
ST02	329	<b>Transaction Set Control Number</b>	M	AN	4/9	Required
<b>Description:</b> Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set						

**Semantics:**

1. The transaction set identifier (ST01) used by the translation routines of the interchange partners to select the appropriate transaction set definition (e.g., 810 selects the Invoice Transaction Set).

**Notes:**  
 ST\*997\*0001~



<h1 style="margin: 0;">AK1</h1> <h2 style="margin: 0;">Functional Group Response Header</h2>	Pos: 020	Max: 1
	Heading - Mandatory	
	Loop: N/A	Elements: 2

**User Option (Usage):** Required  
**Purpose:** 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.

**Element Summary:**

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
AK101	479	<b>Functional Identifier Code</b>	M	ID	2/2	Required
<b>Description:</b> Code identifying a group of application related transaction sets						
		<u>Code</u>	<u>Name</u>			
		HC	Health Care Claim (837)			
		HR	Health Care Claim Status Request (276)			
AK102	28	<b>Group Control Number</b>	M	NO	1/9	Required
<b>Description:</b> Assigned number originated and maintained by the sender						

**Semantics:**

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

**Notes:**  
AK1\*HC\*0~  
AK1\*HR\*0~

# Loop Transaction Set Response Header

Pos: 030	Repeat: 999999
Optional	
Loop: AK2	Elements: N/A

**User Option (Usage):** Situational  
**Purpose:** To start acknowledgment of a single transaction set

**Loop Summary:**

<u>Pos</u>	<u>Id</u>	<u>Segment Name</u>	<u>Req</u>	<u>Max Use</u>	<u>Repeat</u>	<u>Usage</u>
030	AK2	Transaction Set Response Header	O	1		Situational
040		Loop AK3	O		999999	Situational
060	AK5	Transaction Set Response Trailer	M	1		Required



# AK2 Transaction Set Response Header

Pos: 030	Max: 1
Heading - Optional	
Loop: AK2	Elements: 2

**User Option (Usage):** Situational  
**Purpose:** To start acknowledgment of a single transaction set. This segment is sent if the 837 is accepted or rejected.

**Element Summary:**

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
AK201	143	Transaction Set Identifier Code	M	ID	3/3	Required
<b>Description:</b> Code uniquely identifying a Transaction Set						
		<u>Code</u>	<u>Name</u>			
		276	Health Care Claim Status Request			
		837	Health Care Claim			
AK202	329	Transaction Set Control Number	M	AN	4/9	Required
<b>Description:</b> Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set						

**Semantics:**

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.

**Notes:**  
AK2\*837\*0001~  
AK2\*276\*0001~



# Loop Data Segment Note

Pos: 040	Repeat: 999999
Optional	
Loop: AK3	Elements: N/A

**User Option (Usage):** Situational  
**Purpose:** To report errors in a data segment and identify the location of the data segment

**Loop Summary:**

<u>Pos</u>	<u>Id</u>	<u>Segment Name</u>	<u>Req</u>	<u>Max Use</u>	<u>Repeat</u>	<u>Usage</u>
040	AK3	Data Segment Note	O	1		Situational
050	AK4	Data Element Note	O	99		Situational



# AK3 Data Segment Note

Pos: 040	Max: 1
Heading - Optional	
Loop: AK3	Elements: 4

**User Option (Usage):** Situational

**Purpose:** To report errors in a data segment and identify the location of the data segment

## Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
AK301	721	<b>Segment ID Code</b>	M	ID	2/3	Required
		<b>Description:</b> Code defining the segment ID of the data segment in error				
AK302	719	<b>Segment Position in Transaction Set</b>	M	N0	1/6	Required
		<b>Description:</b> The numerical count position of this data segment from the start of the transaction set: the transaction set header is count position 1				
AK303	447	<b>Loop Identifier Code</b>	O	AN	1/6	Situational
		<b>Description:</b> The loop ID number given on the transaction set diagram is the value for this data element in segments LS and LE				
AK304	720	<b>Segment Syntax Error Code</b>	O	ID	1/3	Situational
		<b>Description:</b> Code indicating error found based on the syntax editing of a segment				
		<b><u>Code</u></b>		<b><u>Name</u></b>		
		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		

## Notes:

AK3\*HI\*3115\*2300\*8~

# AK4 Data Element Note

Pos: 050	Max: 99
Heading - Optional	
Loop: AK3	Elements: 4

**User Option (Usage):** Situational

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

## Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
AK401	C030	<b>Position in Segment</b>	M	Comp		Required
		<b>Description:</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				
AK401-01	722	<b>Element Position in Segment</b>	M	N0	1/2	Required
		<b>Description:</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				
AK401-02	1528	<b>Component Data Element Position in Composite</b>	O	N0	1/2	Situational
		<b>Description:</b> To identify the component data element position within the composite that is in error				
AK402	725	<b>Data Element Reference Number</b>	O	N0	1/4	Situational
		<b>Description:</b> Reference number used to locate the data element in the Data Element Dictionary				
AK403	723	<b>Data Element Syntax Error Code</b>	M	ID	1/3	Required
		<b>Description:</b> Code indicating the error found after syntax edits of a data element				
		<b><u>Code</u></b>		<b><u>Name</u></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>	O	AN	1/99	Situational
		<b>Description:</b> This is a copy of the data element in error				

## Semantics:

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

# AK5 Transaction Set Response Trailer

Pos: 060	Max: 1
Heading - Mandatory	
Loop: AK2	Elements: 6

**User Option (Usage):** Required

**Purpose:** To acknowledge acceptance or rejection and report errors in a transaction set

## Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
AK501	717	Transaction Set Acknowledgment Code	M	ID	1/1	Required

**Description:** Code indicating accept or reject condition based on the syntax editing of the transaction set

<u>Code</u>	<u>Name</u>
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	Situational
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**Description:** Code indicating error found based on the syntax editing of a transaction set

<u>Code</u>	<u>Name</u>
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 Segment
26	S4E Security End Segment Missing for S4S Security Start Segment
27	S4S Security Start Segment Missing for S4E Security End Segment

AK503	718	Transaction Set Syntax Error Code	O	ID	1/3	Situational
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**Description:** Code indicating error found based on the syntax editing of a transaction set

<u>Code</u>	<u>Name</u>
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 Segment
26	S4E Security End Segment Missing for S4S Security Start Segment
27	S4S Security Start Segment Missing for S4E Security End Segment

AK504

718

**Transaction Set Syntax Error Code**

O

ID

1/3

Situational

**Description:** Code indicating error found based on the syntax editing of a transaction set

<u>Code</u>	<u>Name</u>
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 Segment

26 S4E Security End Segment Missing for S4S Security Start Segment  
 27 S4S Security Start Segment Missing for S4E Security End Segment  
 AK505 718 **Transaction Set Syntax Error Code** O ID 1/3 Situational

**Description:** Code indicating error found based on the syntax editing of a transaction set

<u>Code</u>	<u>Name</u>
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 Segment
26	S4E Security End Segment Missing for S4S Security Start Segment
27	S4S Security Start Segment Missing for S4E Security End Segment

AK506 718 **Transaction Set Syntax Error Code** O ID 1/3 Situational

**Description:** Code indicating error found based on the syntax editing of a transaction set

<u>Code</u>	<u>Name</u>
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 Segment
- 26 S4E Security End Segment Missing for S4S Security Start Segment
- 27 S4S Security Start Segment Missing for S4E Security End Segment

**Notes:**

AK5\*R\*5~

# AK9 Functional Group Response Trailer

Pos: 070	Max: 1
Heading - Mandatory	
Loop: N/A	Elements: 9

**User Option (Usage):** Required  
**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

**Element Summary:**

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
AK901	715	<b>Functional Group Acknowledge Code</b>	M	ID	1/1	Required
<b>Description:</b> Code indicating accept or reject condition based on the syntax editing of the functional group						
		<b><u>Code</u></b>	<b><u>Name</u></b>			
		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			
AK902	97	<b>Number of Transaction Sets Included</b>	M	N0	1/6	Required
<b>Description:</b> Total number of transaction sets included in the functional group or interchange (transmission) group terminated by the trailer containing this data element Note: This is the value in the original GE01						
AK903	123	<b>Number of Received Transaction Sets</b>	M	N0	1/6	Required
<b>Description:</b> Number of Transaction Sets received						
AK904	2	<b>Number of Accepted Transaction Sets</b>	M	N0	1/6	Required
<b>Description:</b> Number of accepted Transaction Sets in a Functional Group						
AK905	716	<b>Functional Group Syntax Error Code</b>	O	ID	1/3	Situational
<b>Description:</b> Code indicating error found based on the syntax editing of the functional group header and/or trailer						
		<b><u>Code</u></b>	<b><u>Name</u></b>			
		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 Segment
- 20 S1S Security Start Segment Missing for S1E 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 S3E Security End Segment Missing for S3S Security Start Segment
- 24 S3S Security Start Segment Missing for S3E End Segment
- 25 S4E Security End Segment Missing for S4S Security Start Segment
- 26 S4S Security Start Segment Missing for S4E Security End Segment

AK906 716 **Functional Group Syntax Error Code** O ID 1/3 Situational

**Description:** Code indicating error found based on the syntax editing of the functional group header and/or trailer

<u>Code</u>	<u>Name</u>
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 Segment
20	S1S Security Start Segment Missing for S1E 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	S3E Security End Segment Missing for S3S Security Start Segment
24	S3S Security Start Segment Missing for S3E End Segment
25	S4E Security End Segment Missing for S4S Security Start Segment
26	S4S Security Start Segment Missing for S4E Security End Segment

AK907 716 **Functional Group Syntax Error Code** O ID 1/3 Situational

**Description:** Code indicating error found based on the syntax editing of the functional group header and/or trailer

<u>Code</u>	<u>Name</u>
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 Segment
- 20 S1S Security Start Segment Missing for S1E 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 S3E Security End Segment Missing for S3S Security Start Segment
- 24 S3S Security Start Segment Missing for S3E End Segment
- 25 S4E Security End Segment Missing for S4S Security Start Segment
- 26 S4S Security Start Segment Missing for S4E Security End Segment

AK908 716 **Functional Group Syntax Error Code** O ID 1/3 Situational

**Description:** Code indicating error found based on the syntax editing of the functional group header and/or trailer

<u>Code</u>	<u>Name</u>
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 Segment
20	S1S Security Start Segment Missing for S1E 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	S3E Security End Segment Missing for S3S Security Start Segment
24	S3S Security Start Segment Missing for S3E End Segment
25	S4E Security End Segment Missing for S4S Security Start Segment
26	S4S Security Start Segment Missing for S4E Security End Segment

AK909 716 **Functional Group Syntax Error Code** O ID 1/3 Situational

**Description:** Code indicating error found based on the syntax editing of the functional group header and/or trailer

<u>Code</u>	<u>Name</u>
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 Segment
20	S1S Security Start Segment Missing for S1E 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	S3E Security End Segment Missing for S3S Security Start Segment
24	S3S Security Start Segment Missing for S3E End Segment
25	S4E Security End Segment Missing for S4S Security Start Segment
26	S4S Security Start Segment Missing for S4E Security End Segment

**Notes:**

AK9\*A\*1\*1\*1~

<b>SE</b>	<b>Transaction Set Trailer</b>	<b>Pos: 080</b>	<b>Max: 1</b>
		<b>Heading - Mandatory</b>	
		<b>Loop: N/A</b>	<b>Elements: 2</b>

**User Option (Usage):** Required  
**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)

**Element Summary:**

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
SE01	96	<b>Number of Included Segments</b>	M	NO	1/10	Required
		<b>Description:</b> Total number of segments included in a transaction set including ST and SE segments				
SE02	329	<b>Transaction Set Control Number</b>	M	AN	4/9	Required
		<b>Description:</b> Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set				

**Comments:**

1. SE is the last segment of each transaction set.
2. The transaction set control numbers in ST02 and SE02 must be identical.

**Notes:**  
 SE\*45\*1234~

# GE Functional Group Trailer

<b>Pos:</b> Not Defined - Mandatory	<b>Max:</b> 1
<b>Loop:</b> N/A	<b>Elements:</b> 2

**User Option (Usage):** Required  
**Purpose:** To indicate the end of a functional group and to provide control information

**Element Summary:**

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
GE01	97	<b>Number of Transaction Sets Included</b>	M	N0	1/6	Required
<b>Description:</b> Total number of transaction sets included in the functional group or interchange (transmission) group terminated by the trailer containing this data element						
GE02	28	<b>Group Control Number</b>	M	N0	1/9	Required
<b>Description:</b> Assigned number originated and maintained by the sender						

**Semantics:**

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.

**Notes:**  
 GE\*5\*614~



# IEA Interchange Control Trailer

<b>Pos:</b>	<b>Max: 1</b>
<b>Not Defined - Mandatory</b>	
<b>Loop: N/A</b>	<b>Elements: 2</b>

**User Option (Usage):** Required  
**Purpose:** To define the end of an interchange of zero or more functional groups and interchange-related control segments

**Element Summary:**

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
IEA01	I16	<b>Number of Included Functional Groups</b>	M	N0	1/5	Required
<b>Description:</b> A count of the number of functional groups included in an interchange						
IEA02	I12	<b>Interchange Control Number</b>	M	N0	9/9	Required
<b>Description:</b> A control number assigned by the interchange sender						

**Notes:**  
 IEA\*1\*000000636~