

# 997 Functional Acknowledgment

Functional Group ID=**FA**

## Introduction:

This standard provides the format and establishes the data contents of a functional acknowledgment transaction set. The purpose of this standard is 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.

	<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	010	ST	Transaction Set Header	M	1		n1
M	020	AK1	Functional Group Response Header	M	1		n2
			LOOP ID - AK2			999999	
M	030	AK2	Transaction Set Response Header	M	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		

## Transaction Set Notes

- These acknowledgments shall not be acknowledged, thereby preventing an endless cycle of acknowledgments of acknowledgments.  
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, on acknowledgment functional group responds to only those functional groups from on application receiver's code to one application sender's code.  
There is only one Functional Acknowledgment Transaction Set per acknowledged functional group.
- 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.
- 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

- 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:** **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:**  
**Comments:** 1 The transaction set identifier (ST01) is intended for use by the translation routines of the interchange partners to select the appropriate transaction set definition (e.g., 810 selects the invoice transaction set).

**Data Element Summary**

	<b>Ref.</b>	<b>Data</b>	<b>Attributes</b>
	<b><u>Des.</u></b>	<b><u>Element</u> <u>Name</u></b>	
M	ST01	143 <b>Transaction Set Identifier Code</b>	M ID 3/3
		Code uniquely identifying a Transaction Set 997 X12.20 Functional Acknowledgment	
M	ST02	329 <b>Transaction Set Control Number</b>	M AN 4/9
		Identifying control number assigned by the originator for a transaction set.	

**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:**  
**Comments:**

- 1 AK01 is the functional ID found in the GS segment (GS01) in the functional group being acknowledged.
- 2 AK102 is the data interchange control number found in the GS segment in the functional group being acknowledged.

**Data Element Summary**

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

**Segment:** **AK2** Transaction Set Response Header

**Position:** 030

**Loop:** AK2 Mandatory

**Level:**

**Usage:** Mandatory

**Max Use:** 1

**Purpose:** To start acknowledgment of a single transaction set

**Syntax Notes:**

**Semantic Notes:**

- Comments:**
- 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.

#### Data Element Summary

	<u>Ref.</u>	<u>Data</u>		
	<u>Des.</u>	<u>Element</u>	<u>Name</u>	<u>Attributes</u>
M	AK201	143	Transaction Set Identifier Code	M ID 3/3
			Code uniquely identifying a Transaction Set	
			Refer to 003020 Data Element Dictionary for acceptable code values.	
M	AK202	329	Transaction Set Control Number	M AN 4/9
			Identifying control number assigned by the originator for a transaction set.	

**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**

<b>Ref.</b>	<b>Data</b>	<b>Attributes</b>
<b>Des.</b>	<b>Element Name</b>	<b>Attributes</b>
M	AK301 721 <b>Segment ID Code</b>	M ID 2/3 Code defining the segment ID of the data segment in error (See Appendix A - Number 77)
M	AK302 719 <b>Segment Position in Transaction Set</b>	M N0 1/6 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 1/4 Code identifying a loop within the transaction set which is bounded by the related LS and LE segments (corresponding LS and LE segments must have the same value for loop identifier). (Note: The loop ID number given on the transaction set diagram is recommended as the value for this data element in segments LS and LE.)
	AK304 720 <b>Segment Syntax Error Code</b>	O ID 1/3 Code indicating error found based on the syntax editing of a segment Refer to 003020 Data Element Dictionary for acceptable code values.
	AK305 720 <b>Segment Syntax Error Code</b>	O ID 1/3 Code indicating error found based on the syntax editing of a segment Refer to 003020 Data Element Dictionary for acceptable code values.
	AK306 720 <b>Segment Syntax Error Code</b>	O ID 1/3 Code indicating error found based on the syntax editing of a segment Refer to 003020 Data Element Dictionary for acceptable code values.
	AK307 720 <b>Segment Syntax Error Code</b>	O ID 1/3 Code indicating error found based on the syntax editing of a segment Refer to 003020 Data Element Dictionary for acceptable code values.
	AK308 720 <b>Segment Syntax Error Code</b>	O ID 1/3 Code indicating error found based on the syntax editing of a segment Refer to 003020 Data Element Dictionary for acceptable code values.

**Segment:** **AK4** Data Element Note  
**Position:** 050  
**Loop:** AK3 Optional  
**Level:**  
**Usage:** Optional  
**Max Use:** 99  
**Purpose:** To report errors in a data element and identify the location of the data element  
**Syntax Notes:**  
**Semantic Notes:**  
**Comments:**

**Data Element Summary**

	<u>Ref.</u>	<u>Data</u>	<u>Attributes</u>
	<u>Des.</u>	<u>Element Name</u>	
M	AK401	722 <b>Element Position in Segment</b>	M N0 1/2
		This is used to indicate the relative position of the data element in error in this data segment. The count starts with 1 for the data element immediately following the segment ID. This value is 0 for an error in the segment ID.	
	AK402	725 <b>Data Element Reference Number</b>	O N0 1/4
		Reference number used to locate the Data Element Dictionary.	
M	AK403	723 <b>Data Element Syntax Error Code</b>	M ID 1/3
		Code indicating the error found after syntax edits of a data element Refer to 003020 Data Element Dictionary for acceptable code values.	
	AK404	724 <b>Copy of Bad Data Element</b>	O AN 1/99
		This is a copy of the data element in error	

**Segment:** **AK5** Transaction Set Response Trailer  
**Position:** 060  
**Loop:** AK2 Mandatory  
**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>Attributes</u>
	<u>Des.</u>	<u>Element Name</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	
		Refer to 003020 Data Element Dictionary for acceptable code values.	
	AK502	718 Transaction Set Syntax Error Code	O ID 1/3
		Code indicating error found based on the syntax editing of a transaction set	
		Refer to 003020 Data Element Dictionary for acceptable code values.	
	AK503	718 Transaction Set Syntax Error Code	O ID 1/3
		Code indicating error found based on the syntax editing of a transaction set	
		Refer to 003020 Data Element Dictionary for acceptable code values.	
	AK504	718 Transaction Set Syntax Error Code	O ID 1/3
		Code indicating error found based on the syntax editing of a transaction set	
		Refer to 003020 Data Element Dictionary for acceptable code values.	
	AK505	718 Transaction Set Syntax Error Code	O ID 1/3
		Code indicating error found based on the syntax editing of a transaction set	
		Refer to 003020 Data Element Dictionary for acceptable code values.	
	AK506	718 Transaction Set Syntax Error Code	O ID 1/3
		Code indicating error found based on the syntax editing of a transaction set	
		Refer to 003020 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 is 'A' or 'E', then the transmitted functional group is accepted. If AK901 is 'R', then the transmitted group is rejected.

**Data Element Summary**

	<u>Ref.</u>	<u>Data</u>	<u>Attributes</u>
	<u>Des.</u>	<u>Element Name</u>	
M	AK901	715 <b>Functional Group Acknowledge Code</b>	M ID 1/1
		Code indicating accept or reject condition based on the syntax editing of the functional group Refer to 003020 Data Element Dictionary for acceptable code values.	
M	AK902	97 <b>Number of Transaction Sets Included</b>	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	
M	AK903	123 <b>Number of Received Transaction Sets</b>	M N0 1/6
		Number of Transaction Sets received	
M	AK904	2 <b>Number of Accepted Transaction Sets</b>	M N0 1/6
		Number of accepted Transaction Sets in a Functional Group	
	AK905	716 <b>Functional Group Syntax Error Code</b>	O ID 1/3
		Code indicating error found based on the syntax editing of the functional group header and/or trailer Refer to 003020 Data Element Dictionary for acceptable code values.	
	AK906	716 <b>Functional Group Syntax Error Code</b>	O ID 1/3
		Code indicating error found based on the syntax editing of the functional group header and/or trailer Refer to 003020 Data Element Dictionary for acceptable code values.	
	AK907	716 <b>Functional Group Syntax Error Code</b>	O ID 1/3
		Code indicating error found based on the syntax editing of the functional group header and/or trailer Refer to 003020 Data Element Dictionary for acceptable code values.	
	AK908	716 <b>Functional Group Syntax Error Code</b>	O ID 1/3
		Code indicating error found based on the syntax editing of the functional	

group header and/or trailer

Refer to 003020 Data Element Dictionary for acceptable code values.

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

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

Refer to 003020 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

	<b>Ref.</b>	<b>Data</b>		
	<b><u>Des.</u></b>	<b><u>Element</u></b>	<b><u>Name</u></b>	<b><u>Attributes</u></b>
M	SE01	96	Number of Included Segments	M N0 1/6
			Total number of segments included in a transaction set including ST and SE segments	
M	SE02	329	Transaction Set Control Number	M AN 4/9
			Identifying control number assigned by the originator for a transaction set.	