

# **A Book Industry System Advisory Committee Implementation Guideline for EDI**

**997 Functional Acknowledgement**

**VERSION: DECEMBER 1997 FINAL**



# 997 Functional Acknowledgment

## Functional Group=FA

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:

- 1/010 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, 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.
- 1/020 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.
- 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.

### 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		N1/020	Required
<b><u>LOOP ID - AK2</u></b>					<b><u>999999</u></b>		
030	AK2	Transaction Set Response Header	O	1		N1/030	Used
<b><u>LOOP ID - AK3</u></b>					<b><u>999999</u></b>		
040	AK3	Data Segment Note	O	1			Used
050	AK4	Data Element Note	O	99			Used
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

# ST Transaction Set Header

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

To indicate the start of a transaction set and to assign a control number

## Semantics:

- 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).

## 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> <b>Description:</b> Code uniquely identifying a Transaction Set	M	ID	3/3	Required
		<u>Code Name</u> 997 X12.20 Functional Acknowledgment				
ST02	329	<b>Transaction Set Control Number</b> <b>Description:</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	Required

# AK1 Functional Group Response Header

Pos: 020	Max: 1
Heading - Mandatory	
Loop: N/A	Elements: 2

To start acknowledgment of a functional group

**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.

**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> <b>Description:</b> Code identifying a group of application related transaction sets	M	ID	2/2	Required
		<u>Code</u> <u>Name</u>				
		AG Application Advice (824)				
		BS Shipment and Billing Notice (857)				
		CD Credit/Debit Adjustment (812)				
		IN Invoice Information (810,819)				
		PD Product Activity Data (852)				
		PO Purchase Order (850)				
		PR Purchase Order Acknowledgement (855)				
		RA Payment Order/Remittance Advice (820)				
		SC Price/Sales Catalog (832)				
		SH Ship Notice/Manifest (856)				
		UA Retail Account Characteristics (885)				
AK102	28	<b>Group Control Number</b> <b>Description:</b> Assigned number originated and maintained by the sender	M	N0	1/9	Required

# AK2 Transaction Set Response Header

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

To start acknowledgment of a single transaction set

**Semantics:**

- AK201 is the transaction set ID found in the ST segment (ST01) in the transaction set being acknowledged.
- AK202 is the transaction set control number found in the ST segment in the transaction set 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>
AK201	143	<b>Transaction Set Identifier Code</b> <b>Description:</b> Code uniquely identifying a Transaction Set	M	ID	3/3	Required
		<u>Code</u> <u>Name</u>				
		810 X12.2 Invoice				
		812 X12.40 Credit/Debit Adjustment				
		820 X12.4 Payment Order/Remittance Advice				
		824 X12.44 Application Advice				
		832 X12.13 Price/Sales Catalog				
		850 X12.1 Purchase Order				
		852 X12.52 Product Activity Data				
		855 X12.9 Purchase Order Acknowledgment				
		856 X12.10 Ship Notice/Manifest				
		857 X12.29 Shipment and Billing Notice				
		885 X12.320 Retail Account Characteristics				
AK202	329	<b>Transaction Set Control Number</b> <b>Description:</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	Required

# AK3 Data Segment Note

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

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> <b>Description:</b> Code defining the segment ID of the data segment in error (See Appendix A - Number 77)	M	ID	2/3	Required
AK302	719	<b>Segment Position in Transaction Set</b> <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	M	N0	1/6	Required
AK303	447	<b>Loop Identifier Code</b> <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	O	AN	1/4	Used
AK304	720	<b>Segment Syntax Error Code</b> <b>Description:</b> Code indicating error found based on the syntax editing of a segment	O	ID	1/3	Used

# AK4 Data Element Note

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

To report errors in a data element 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> <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	M	Comp		Required
	722	<b>Element Position in Segment</b> <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	M	N0	1/2	Required
*	1528	<b>Component Data Element Position in Composite</b> <b>Description:</b> To identify the component data element position within the composite that is in error	O	N0	1/2	Not Used
AK402	725	<b>Data Element Reference Number</b> <b>Description:</b> Reference number used to locate the data element in the Data Element Dictionary	O	N0	1/4	Used
AK403	723	<b>Data Element Syntax Error Code</b> <b>Description:</b> Code indicating the error found after syntax edits of a data element	M	ID	1/3	Required
AK404	724	<b>Copy of Bad Data Element</b> <b>Description:</b> This is a copy of the data element in error	O	AN	1/99	Used

# AK5 Transaction Set Response Trailer

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

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	<b>Transaction Set Acknowledgment Code</b> <b>Description:</b> Code indicating accept or reject condition based on the syntax editing of the transaction set <u>Code Name</u> A Accepted E Accepted But Errors Were Noted R Rejected	M	ID	1/1	Required
AK502	718	<b>Transaction Set Syntax Error Code</b> <b>Description:</b> Code indicating error found based on the syntax editing of a transaction set	O	ID	1/3	Used
AK503	718	<b>Transaction Set Syntax Error Code</b> <b>Description:</b> Code indicating error found based on the syntax editing of a transaction set	O	ID	1/3	Used
AK504	718	<b>Transaction Set Syntax Error Code</b> <b>Description:</b> Code indicating error found based on the syntax editing of a transaction set	O	ID	1/3	Used
AK505	718	<b>Transaction Set Syntax Error Code</b> <b>Description:</b> Code indicating error found based on the syntax editing of a transaction set	O	ID	1/3	Used
AK506	718	<b>Transaction Set Syntax Error Code</b> <b>Description:</b> Code indicating error found based on the syntax editing of a transaction set	O	ID	1/3	Used

# AK9 Functional Group Response Trailer

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

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

## Comments:

1. If AK901 contains the value "A" or "E", then the transmitted functional group is accepted. If AK901 contains the value "R", then the transmitted group is 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>
AK901	715	<b>Functional Group Acknowledge Code</b> <b>Description:</b> Code indicating accept or reject condition based on the syntax editing of the functional group	M	ID	1/1	Required
		<u>Code</u> <u>Name</u>				
		A Accepted				
		E Accepted,But Errors Were Noted.				
		P Partially Accepted,At Least One Transaction Set Was Rejected				
		R Rejected				
AK902	97	<b>Number of Transaction Sets Included</b> <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	M	N0	1/6	Required
AK903	123	<b>Number of Received Transaction Sets</b> <b>Description:</b> Number of Transaction Sets received	M	N0	1/6	Required
AK904	2	<b>Number of Accepted Transaction Sets</b> <b>Description:</b> Number of accepted Transaction Sets in a Functional Group	M	N0	1/6	Required
AK905	716	<b>Functional Group Syntax Error Code</b> <b>Description:</b> Code indicating error found based on the syntax editing of the functional group header and/or trailer	O	ID	1/3	Used
AK906	716	<b>Functional Group Syntax Error Code</b> <b>Description:</b> Code indicating error found based on the syntax editing of the functional group header and/or trailer	O	ID	1/3	Used
AK907	716	<b>Functional Group Syntax Error Code</b> <b>Description:</b> Code indicating error found based on the syntax editing of the functional group header and/or trailer	O	ID	1/3	Used
AK908	716	<b>Functional Group Syntax Error Code</b> <b>Description:</b> Code indicating error found based on the syntax editing of the functional group header and/or trailer	O	ID	1/3	Used
AK909	716	<b>Functional Group Syntax Error Code</b> <b>Description:</b> Code indicating error found based on the syntax editing of the functional group header and/or trailer	O	ID	1/3	Used

# SE Transaction Set Trailer

Pos: 080	Max: 1
Heading - Mandatory	
Loop: N/A	Elements: 2

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

**Comments:**

- SE is the last segment of each 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>
SE01	96	<b>Number of Included Segments</b> <b>Description:</b> Total number of segments included in a transaction set including ST and SE segments	M	N0	1/10	Required
SE02	329	<b>Transaction Set Control Number</b> <b>Description:</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	Required