

# 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.

### 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	Must use
020	AK1	Functional Group Response Header	M	1		N1/020	Must use
<b>LOOP ID - AK2</b>					<b>999999</b>	<b>N1/030L</b>	
030	AK2	Transaction Set Response Header	O	1		N1/030	Used
<b>LOOP ID - AK3</b>					<b>999999</b>	<b>C1/040L</b>	
040	AK3	Data Segment Note	O	1		C1/040	Used
050	AK4	Data Element Note	O	99			Used
060	AK5	Transaction Set Response Trailer	M	1			Must use
070	AK9	Functional Group Response Trailer	M	1			Must use
080	SE	Transaction Set Trailer	M	1			Must use

### 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.
- 1/020 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.
- 1/030L 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.

### Comments:

- 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).

# ST Transaction Set Header

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

**User Option (Usage):** Must use

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> <b>Description:</b> Code uniquely identifying a Transaction Set <b>User Note 1:</b> 997 = Functional Acknowledgement	M	ID	3/3	Must use
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 <b>User Note 1:</b> Number used for transaction reference	M	AN	4/9	Must use

## 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).

## User Note 1:

Example: ST\*997\*314001

**AK1****Functional Group Response Header**

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

**User Option (Usage):** Must use

To start acknowledgment of a 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>
AK101	479	<b>Functional Identifier Code</b> <b>Description:</b> Code identifying a group of application related transaction sets <b>User Note 1:</b> <i>Functional ID Code</i>	M	ID	2/2	Must use
AK102	28	<b>Group Control Number</b> <b>Description:</b> Assigned number originated and maintained by the sender <b>User Note 1:</b> <i>GS Control Number</i>	M	N0	1/9	Must use

**Semantics:**

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.

**User Note 1:***Example: AK1\*GP\*65120*

**AK2****Transaction Set Response  
Header**

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

**User Option (Usage):** Used

To start acknowledgment of a single 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>
AK201	143	<b>Transaction Set Identifier Code</b> <b>Description:</b> Code uniquely identifying a Transaction Set	M	ID	3/3	Must use
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	Must use

**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.

**User Note 1:***Example: AK2\*880\*651200004*

# AK3 Data Segment Note

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

**User Option (Usage):** Used

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	Must use
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	Must use
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	1/6	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

## User Note 1:

Example: G20\*81\*0300

# AK4 Data Element Note

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

**User Option (Usage):** Used

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> <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		Must use
	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	Must use
	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	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	Must use
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

## Semantics:

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

## User Note 1:

Example: AK4\*3\*355\*7\*L

**AK5**

# Transaction Set Response Trailer

Pos: 060	Max: 1
Heading - Mandatory	
Loop: AK2	Elements: 2

**User Option (Usage):** Must use

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	M	ID	1/1	Must use
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

## User Note 1:

Example: AK5\*E\*5

# AK9 Functional Group Response Trailer

Pos: 070	Max: 1
Heading - Mandatory	
Loop: N/A	Elements: 4

**User Option (Usage):** Must use

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> <b>Description:</b> Code indicating accept or reject condition based on the syntax editing of the functional group <b>User Note 1:</b> A = Accepted E = Accepted, But Errors Were Noted R = Rejected	M	ID	1/1	Must use
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	Must use
AK903	123	<b>Number of Received Transaction Sets</b> <b>Description:</b> Number of Transaction Sets received	M	N0	1/6	Must use
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	Must use

## Comments:

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

## User Note 1:

Example: AK9\*A\*5\*5\*5



# SE Transaction Set Trailer

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

**User Option (Usage):** Must use

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> <b>Description:</b> Total number of segments included in a transaction set including ST and SE segments <b>User Note 1:</b> <i>Number of segments (including ST and SE)</i>	M	N0	1/10	Must use
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 <b>User Note 1:</b> <i>Marks the end of the transaction (same as ST02)</i>	M	AN	4/9	Must use

## Comments:

1. SE is the last segment of each transaction set.

## User Note 1:

*Example: SE\*8\*314001*