



EDI Specifications  
X12 4010 997  
Advanced Shipping Notification



# 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.

	<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	
	030	AK2	Transaction Set Response Header	O	1		n3
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

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.

**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:**  
**Business Rules:** Variable Name: STST

**Data Element Summary**

	<u>Ref.</u>	<u>Data</u>	<u>Attributes</u>
	<u>Des.</u>	<u>Element</u> <u>Name</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**

<b>Ref.</b>	<b>Data</b>			<b>Attributes</b>
<b><u>Des.</u></b>	<b><u>Element</u></b>	<b><u>Name</u></b>		
<b>M</b>	<b>AK101</b>	<b>479</b>	<b>Functional Identifier Code</b>	<b>M ID 2/2</b>
			Code identifying a group of application related transaction sets	
		GF	Response to a Load Tender (990)	
		IM	Motor Carrier Freight Details and Invoice (210, 980)	
		PO	Purchase Order (850)	
		QM	Transportation Carrier Shipment Status Message (214)	
		SH	Ship Notice/Manifest (856)	
		SM	Motor Carrier Load Tender (204)	
<b>M</b>	<b>AK102</b>	<b>28</b>	<b>Group Control Number</b>	<b>M N0 1/9</b>
			Assigned number originated and maintained by the sender	

**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>Data</u>		<u>Attributes</u>
	<u>Des.</u>	<u>Element</u>	<u>Name</u>	
M	AK201	143	<b>Transaction Set Identifier Code</b>	<b>M ID 3/3</b>
			Code uniquely identifying a Transaction Set	
			204 Motor Carrier Load Tender	
			210 Motor Carrier Freight Details and Invoice	
			214 Transportation Carrier Shipment Status Message	
			850 Purchase Order	
			856 Ship Notice/Manifest	
			990 Response to a Load Tender	
M	AK202	329	<b>Transaction Set Control Number</b>	<b>M AN 4/9</b>
			Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set	

**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	<b>Transaction Set Acknowledgment Code</b>	<b>M ID 1/1</b>
			Code indicating accept or reject condition based on the syntax editing of the transaction set	
			A Accepted	
			E Accepted But Errors Were Noted	
			R Rejected	
	AK502	718	<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	
			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	

**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.</u>	<u>Data</u>	<u>Name</u>	<u>Attributes</u>
	<u>Des.</u>	<u>Element</u>		
M	AK901	715	<b>Functional Group Acknowledge Code</b>	<b>M ID 1/1</b>
			Code indicating accept or reject condition based on the syntax editing of the functional group	
			A Accepted	
			E Accepted, But Errors Were Noted.	
			R Rejected	
M	AK902	97	<b>Number of Transaction Sets Included</b>	<b>M N0 1/6</b>
			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>	<b>M N0 1/6</b>
			Number of Transaction Sets received	
M	AK904	2	<b>Number of Accepted Transaction Sets</b>	<b>M N0 1/6</b>
			Number of accepted Transaction Sets in a Functional Group	
	AK905	716	<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	
			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	

**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

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