

# 997 Functional Acknowledgment

**MUVIQ USA, LLC**  
North America Division

ANSI ASC X12 4010  
Version: 4.0  
Publication: 10/01/15

### Change Control

Version ID	Date of Update	Updated By:	Description of Version and Change
2015001	10/01/15	Evelyn Herrick	Initial Deployment of this document.
2018001	02/14/18	Evan Meyer	Refreshed 997 example and example segments and removed "Dayco N.A. Helpdesk" from contacts.
2018002	05/23/18	Evan Meyer	Removed any reference to 862 or 824.
2018003	11/6/2024	Justin Phoumsengkeo	Changed document to be MUVIQ controlled

## Standards Overview

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.

## Business Overview

EDI provides many benefits to support your business in achieving its objectives. EDI reduces paperwork (forms handling), data entry labor costs, printing costs, and postage costs. EDI drives out inefficiencies in the business process.

Organizations choosing EDI should consider that the full benefits are only received when both parties fully integrate the EDI data into their application systems.

## Business Processing - Data Content

- 997 will be expected in response to an 830 and 861. MUVIQ will return a 997 in response to the 856 and 810.

## Additional Information

**Testing Procedure:** Additional information regarding EDI Startup and Testing Procedures with *MUVIQ USA, LLC* is available on request.

**Codes:** All acceptable codes required to implement the transaction sets, have been consolidated into an appendix document and are available on request.

## Contacts

### EDI Certification and Support:

MUVIQ EDI Support Team – [edisupport@dayco.com](mailto:edisupport@dayco.com)

**EDI Specifications:** [www.daycosupplier.com](http://www.daycosupplier.com)

### Business Relations:

Contact your Plant or MUVIQ Buyer

# 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.

#### Headers:

<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>
0100	ISA	Interchange Control Header	M	1			Must use
0200	GS	Functional Group Header	M	1			Must use
010	ST	Transaction Set Header	M	1			Must use
020	AK1	Functional Group Response Header	M	1			Must use
<b>LOOP ID</b>	<b>-AK2</b>				<b>999999</b>		<b>Must Use</b>
0300	AK2	Transaction Set Response	O	1			Must use
0700	AK9	Functional Group Response Trailer	M	1			Must use
0800	SE	Transaction set Trailer	M	1			Must use

#### Trailers:

<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	GE	Functional Group Trailer	M	1			Must use
020	IEA	Interchange control Trailer	M	1			Must use

The following is an example 997. All supplier mapping and set up should be based on the 997 Specs and not this example transaction.

**Inbound to MUVIQ Examples:**

```
ISA*00*          *00*          *ZZ*XXXXXXXXXX          *01*150148617          *180209*0909*U*00401*000006774*0*P*>~
GS*FA*XXXXXXXXXX*150148617*20180209*0909*7029*X*004010
ST*997*5949
AK1*AA*18000022
AK2*830*000220001
AK5*A
AK9*A*1*1*1 SE*6*5949
GE*1*7029
IEA*1*000006774
```

**Outbound from MUVIQ Example:**

```
ISA*00*          *00*          *01*150148617          *ZZ*XXXXXXXXXX          *180209*1406*U*00401*180000001*0*P*>...
GS*FA*150148617*XXXXXXXXXX*20180208*140610*180000001*X*004010
ST*997*9970001...
AK1*SH*150
AK9*A*1*1*1
SE*4*9970001
GE*1*180000001
IEA*1*180000001
```

```
ISA*00*          *00*          *01*150148617          *ZZ*XXXXXXXXXX          *180523*0845*U*00401*018000206*0*P*<^
GS*FA*150148617*XXXXXXXXXX*20180523*084516*18000206*X*004010
ST*997*0001
AK1*IN*7277
AK9*A*1*1*1 SE*4*0001
GE*1*18000206
IEA*1*018000206
```

Segment:	<b>ISA</b> Interchange Control Header
Level:	<b>Header</b>
Loop:	---
Usage:	<b>Mandatory</b>
Max Use:	1
Purpose:	To start and identify an interchange of zero or more functional groups and interchange-related control segments
Example:	ISA*00* *00* *01*150148617 *01*123456789 *180209*1123*U*00401*180000001*0*P

### Data 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	<b>Authorization Information Qualifier</b> Code to identify the type of information in the Authorization Information <b>All valid standard codes are used.</b>	M	ID	2/2	Must use
ISA02	I02	<b>Authorization Information</b> 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)	M	AN	10/10	Must use
ISA03	I03	<b>Security Information Qualifier</b> Code to identify the type of information in the Security Information <b>All valid standard codes are used.</b>	M	ID	2/2	Must use
ISA04	I04	<b>Security Information</b> 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)	M	AN	10/10	Must use
ISA05	I05	<b>Interchange ID Qualifier</b> Qualifier to designate the system/method of code structure used to designate the sender or receiver ID element being qualified <b>All valid standard codes are used.</b>	M	ID	2/2	Must use
ISA06	I06	<b>Interchange Sender ID</b> 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	M	AN	15/15	Must use

ISA07	I05	<b>Interchange ID Qualifier</b>	Qualifier to designate the system/method of code structure used to designate the sender or receiver ID element being qualified	M	ID	2/2	Must use
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**Code Name** 01 Duns (Dun & Bradstreet)

ISA08	I07	<b>Interchange Receiver ID</b>	Identification code published by the receiver of the data; When 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	M	AN	15/15	Must use
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ISA09	I08	<b>Interchange Date</b>	Date of the interchange	M	DT	6/6	Must use
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ISA10	I09	<b>Interchange Time</b>	Time of the interchange	M	TM	4/4	Must use
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ISA11	I10	<b>Interchange Control Standards Identifier</b>	Code to identify the agency responsible for the control standard used by the message that is enclosed by the interchange header and trailer <b>All valid standard codes are used.</b>	M	ID	1/1	Must use
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ISA12	I11	<b>Interchange Control Version Number</b>	Code specifying the version number of the interchange control segments	M	ID	5/5	Must use
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<u>Code</u>	<u>Name</u>
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>	A control number assigned by the interchange sender	M	N0	9/9	Must use
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ISA14	I13	<b>Acknowledgment Requested</b>	Code sent by the sender to request an interchange acknowledgment (TA1)	M	ID	1/1	Must use
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<u>Code</u>	<u>Name</u>
0	No Acknowledgment Requested

ISA15	I14	<b>Usage Indicator</b>	Code to indicate whether data enclosed by this interchange envelope is test, production or information <b>All valid standard codes are used.</b>	M	ID	1/1	Must use
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ISA16 I15 **Component Element Separator** M 1/1 Must use

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

Segment:	<b>GS</b> Functional Group Header
Level:	<b>Header</b>
Loop:	---
Usage:	<b>Mandatory</b>
Max Use:	1
Purpose:	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
Semantic:	1: GS04 is the group date. 2: GS05 is the group time. 3: 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:	GS*FA*150148617*123456789*20180209*1123*180000001*X*004010

### Data 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> Code identifying a group of application related transaction sets	M	ID	2/2	Must use
		<u>Code</u> <u>Name</u>				
		FA      Functional Acknowledgment				
GS02	142	<b>Application Sender's Code</b> Code identifying party sending transmission; codes agreed to by trading partners	M	AN	2/15	Must use
GS03	124	<b>Application Receiver's Code</b> Code identifying party receiving transmission; codes agreed to by trading partners	M	AN	2/15	Must use
GS04	373	<b>Date</b> Date expressed as CCYYMMDD	M	DT	8/8	Must use

GS05	337	<b>Time</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)	M	TM	4/8	Must use
GS06	28	<b>Group Control Number</b> Assigned number originated and maintained by the sender	M	N0	1/9	Must use
GS07	455	<b>Responsible Agency Code</b> Code identifying the issuer of the standard; this code is used in conjunction with Data Element 480 <b>All valid standard codes are used.</b>	M	ID	1/2	Must use
GS08	480	<b>Version / Release / Industry Identifier Code</b> Code indicating the version, release, subrelease, and industry identifier of the EDI standard being used, including the GS and GE segments.	M	AN	1/12	Must use

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

Segment:	<b>ST</b> Transaction Set Header
Level:	<b>Header</b>
Loop:	---
Usage:	<b>Mandatory</b>
Max Use:	1
Purpose:	To Indicate the start of a transaction set and to assign a control number
Semantic:	The transaction set identifier (ST01) used by the translation routines of the interchange partners to select the appropriate set definition
Example:	ST*997*9970001

### Data 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> Code uniquely identifying a Transaction Set	M	ID	3/3	Must use
		<u>Code</u> <u>Name</u>				
		997      Functional Acknowledgment				
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	Must use

Segment:	<b>AK1</b> Functional Group Response Header
Level:	<b>Header</b>
Loop:	---
Usage:	<b>Mandatory</b>
Max Use:	1
Purpose:	To start acknowledgment of a functional group
Semantic:	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
Example:	AK1*PS*180000014

### Data 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> Code identifying a group of application related transaction sets	M	ID	2/2	Must use
AK102	28	<b>Group Control Number</b> Assigned number originated and maintained by the sender	M	NO	1/9	Must use

Segment:	<b>AK2</b> Transaction Set Response Header
Level:	<b>Header</b>
Loop:	AK2
Usage:	<b>Mandatory</b>
Max Use:	1
Purpose:	To start acknowledgment of a single transaction set
Notes:	AK2 is used to start the acknowledgment of a transaction set with in 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
Semantic:	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.
Example	AK2*830*8300001

### Data 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> Code identifying a Transaction set	M	ID	3/3	Must use
AK202	329	<b>Transaction Set Control Number</b>		AK202	329	<b>Transaction Set Control Number</b>

Segment:	<b>AK9</b> Functional Group Trailer
Level:	<b>Header</b>
Loop:	---
Usage:	<b>Mandatory</b>
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.
Comments:	If AK901 contains the value "A", then the transmitted functional group is accepted.
Example:	AK9*A*1*1*1

### Data 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> Code indicating accept or reject conditions based on the syntax editing of the functional group.	M	ID	1/1	Must use
		<b>Code Name</b>				
		A Accepted				
		R Rejected				
		E Accepted with errors				
AK902	97	<b>Number of transaction sets Included</b> Total number of transaction sets included in the functional group or interchange (transmission) group terminated by the trailer containing this data element.	M	NO	1/6	Must use
AK903	123	<b>Number of Received Transaction sets</b> Number of transaction sets received	M	NO	1/6	Must use
AK904	2	<b>Number of accepted transaction sets</b>	M	NO	1/6	Must use

Segment:	<b>SE</b> Transaction Set Trailer
Level:	<b>Summary</b>
Loop:	---
Usage:	<b>Mandatory</b>
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)
Comment:	SE is the last segment of each transaction set.
Example:	SE*6*18000001

**Data 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> Total number of segments included in a transaction set including ST and SE segments	M	N0	1/10	Must use
SE02	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	Must use

Segment:	<b>GE</b> Functional Group Trailer
Level:	<b>Summary</b>
Loop:	---
Usage:	<b>Mandatory</b>
Max Use:	1
Purpose:	To indicate the end of a functional group and to provide control information
Set Notes:	The data interchange control number GE02 in this trailer must be identical to the same data element in the associated functional group header, GS06
Example:	GE*1*18000001

### Data 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> 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
GE02	28	<b>Group Control Number</b> Assigned number originated and maintained by the sender	M	N0	1/9	Must use



Segment:	<b>IEA</b> Interchange Control Trailer
Level:	<b>Summary</b>
Loop:	---
Usage:	<b>Mandatory</b>
Max Use:	1
Purpose:	To define the end of an interchange of zero or more functional groups and interchange related control segments
Example:	IEA*1*18000001

### Data 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> A count of the number of functional groups included in an interchange	M	N0	1/5	Must use
IEA02	I12	<b>Interchange Control Number</b> A control number assigned by the interchange sender	M	N0	9/9	Must use