# 997

### **Functional Acknowledgment**

### Functional Group=FA

DSCR Subset - X-12 Version 3050-997 Author: Leroy Buard, Defense Supply Center Richmond Publication Date: 2/17/2003

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) and DSCR EDI procurement 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. DSCR will specifically use this Transaction Set to verify receipt of message delivery, translation, and reconcile to corresponding Transaction Set.

#### 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.

#### Segments:

<u>Pos</u>	<u>Id</u>	Segment Name	Req	Max Use	Repeat	<u>Notes</u>	<u>Usage</u>
	ISA	Interchange Control Header	M	1			Used
	GS	Functional Group Header	M	1			Used

#### **Heading:**

**LOOP ID - AK2** 

<u>Pos</u>	<u>Id</u>	Segment Name	<u>Req</u>	Max Use	Repeat	<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

030	AK2	Transaction Set Response Header	R	1	N1/030 Used	
LOOP I	D - AK3				999999	
040	AK3	Data Segment Note	R	1	Used	
050	AK4	Data Element Note	R	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	

999999

#### Segments:

<u>Pos</u>	<u>Id</u>	Segment Name	Req	Max Use	Repeat	<u>Notes</u>	<u>Usage</u>
	GE	Functional Group Trailer	M	1			Used
	IEA	Interchange Control Trailer	M	1			Used

# ISA

## **Interchange Control Header**

Pos: Max: 1
- Mandatory
Loop: N/A Elements: 16

To start and identify an interchange of zero or more functional groups and interchange-related control segments

Ref	<u>Id</u>	Element Name	Req	<b>Type</b>	Min/Max	Usage
ISA01	I01	Authorization Information Qualifier  Description: Code to identify the type of information in the Authorization Information.  Code Name  No Authorization Information Present (No Meaningful Information in I02)	M	ID	2/2	
ISA02	102	Authorization Information  Description: 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	
ISA03	103	Security Information Qualifier  Description: Code to identify the type of information in the Security Information.  Code Name  No Security Information Present (No Meaningful Information in I04)	M	ID	2/2	
ISA04	104	Security Information  Description: 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	
ISA05	105	Interchange ID Qualifier  Description: Qualifier to designate the system/method of code structure used to designate the sender or receiver ID element being qualified.  Code Name  10 Duns (Dun & Bradstreet)  20 X.121 (CCITT)  21 Phone (Telephone Companies)  22 Mutually Defined	M	ID	2/2	
ISA06	106	Interchange Sender ID  Description: 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.  User Note 1: Duns (Dun & Bradstreet)	M	AN	15/15	
ISA07	105	Interchange ID Qualifier  Description: Qualifier to designate the system/method of code structure used to designate the sender or receiver ID element being qualified.  Code Name  1 Duns (Dun & Bradstreet)  2 X.121 (CCITT)  1 Phone (Telephone Companies)  1 Duns Plus Suffix  Z Mutually Defined	M	ID	2/2	

1/6/2003			F	unction	al Acknowle	dgment - 997
Ref _	<u>Id</u>	Element Name	Req	<b>Type</b>	Min/Max	Usage
ISA08	107	Interchange Receiver ID  Description: Identification code published by the receiver of the data.  When sending, 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	
ISA09	108	Interchange Date Description: Date of the interchange.	M	DT	6/6	
ISA10	109	Interchange Time Description: Time of the interchange.	M	TM	4/4	
ISA11	<b>I10</b>	Interchange Control Standards Identifier  Description: Code to identify the agency responsible for the control	M	ID	1/1	

ISA09	108	Interchange Date	M	DT	6/6
		<b>Description:</b> Date of the interchange.			
ISA10	109	Interchange Time Description: Time of the interchange.	M	TM	4/4
ISA11	I10	Interchange Control Standards Identifier  Description: Code to identify the agency responsible for the control standard used by the message that is enclosed by the interchange header and trailer.  Code Name	M	ID	1/1
ISA12	I11	U U.S. EDI Community of ASC X12, TDCC, and UCS  Interchange Control Version Number  Description: This version number covers the interchange control segments.  Code Name  00305 Draft Standards for Trial Use Approved for Publication by ASC X12 Procedures Review Board through December 1994	M	ID	5/5
ISA13	I12	Interchange Control Number  Description: A control number assigned by the interchange sender	M	N0	9/9
ISA14	I13	Acknowledgment Requested  Description: Code sent by the sender to request an interchange acknowledgment (TA1)  All valid standard codes are used.	M	ID	1/1
ISA15	I14	Test Indicator  Description: Code to indicate whether data enclosed by this interchange envelope is test or production.  (Note: when testing with DSCR using the Mercator translator use "P" indicator).  Code Production Data (See note above)	M	ID	1/1
ISA16	I15	Component Element Separator	M	AN	1/1

## **GS** Functional Group Header

Pos: Max: 1
- Mandatory
Loop: N/A Elements: 8

To indicate the beginning of a functional group and to provide control information

#### **Semantics:**

- 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.

#### **Comments:**

1. 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.

Ref _	<u>Id</u>	Element Name	Req	<b>Type</b>	Min/Max	Usage_
GS01	479	Functional Identifier Code	M	ID	2/2	Must
		<b>Description:</b> Code identifying a group of application related Transaction Sets.				use
		Code Name				
		FA Functional Acknowledgement (997)				
GS02	142	Application Sender's Code	M	AN	2/15	Must
		<b>Description:</b> Code identifying party sending transmission. Codes agreed to by trading partners.				use
GS03	124	Application Receiver's Code	M	AN	2/15	Must
		<b>Description:</b> Code identifying party receiving transmission. Codes agreed to by trading partners.				use
GS04	373	Date	M	DT	6/6	Must
		<b>Description:</b> Date (YYMMDD).				use
GS05	337	Time	M	TM	4/8	Must
		<b>Description:</b> Time expressed in 24-hour clock time as follows: HHMM, or HHMMSSD, 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)				use
GS06	28	Group Control Number	M	N0	1/9	Must
		<b>Description:</b> Assigned number originated and maintained by the sender.				use
GS07	455	Responsible Agency Code	M	ID	1/2	Must
		<b>Description:</b> Code used in conjunction with Data Element 480 to identify the issuer of the standard.				use
		Code Name				
		X Accredited Standards Committee X12				
GS08	480	Version / Release / Industry Identifier Code	M	AN	1/12	Must
		<b>Description:</b> Code indicating the version, release, subrelease, and industry identifier of the EDI standard being used, including the GS and GE segments.				use
		Code Name				
		003050 Draft Standards Approved for Publication by ASC X12 Procedures Review Board through October 1994.				

## 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:**

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).

Ref Id	Element Name	Req	<b>Type</b>	Min/Max	Usage
ST01 143	Transaction Set Identifier Code	$\mathbf{M}$	ID	3/3	Must
	Description: Code uniquely identifying a Transaction Set.				use
	Code Name				
	997 X12.20 Functional Acknowledgement				
ST02 329	Transaction Set Control Number  Description: Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set  User Note 1: A unique number assigned by the originator of the transaction set, or the originator's application program.	M	AN	4/9	Must use

## AK1

## **Functional Group Response Header**

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

To start acknowledgment of a functional group.

#### **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.

Ref _	<u>Id</u>	Element Name	Req	<b>Type</b>	Min/Max	Usage
AK101	479	Functional Identifier Code	$\mathbf{M}$	ID	2/2	Must
		<b>Description:</b> Code identifying a group of application related Transaction Sets.				use
		All valid standard codes are used.				
AK102	28	Group Control Number	$\mathbf{M}$	N0	1/9	Must
		<b>Description:</b> Assigned number originated and maintained by the sender.				use

# AK2

### **Transaction Set Response Header**

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

To start acknowledgment of a single transaction set.

#### **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.

Ref _	<u>Id</u>	Element Name	Req	<b>Type</b>	Min/Max	Usage
AK201	143	Transaction Set Identifier Code	$\mathbf{M}$	ID	3/3	Must
		Description: Code uniquely identifying a Transaction Set.				use
		All valid standard codes are used.				
AK202	329	Transaction Set Control Number	$\mathbf{M}$	AN	4/9	Must
		<b>Description:</b> Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set				use

# **AK3** Data Segment Note

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

To report errors in a data segment and to identify the location of the data segment.

Ref _	<u>Id</u>	Element Name	Req	<b>Type</b>	Min/Max	Usage
AK301	721	Segment ID Code	$\mathbf{M}$	ID	2/3	Must
		<b>Description:</b> Code defining the segment ID of the data segment in error. See Appendix A - Number 77.				use
AK302	719	Segment Position in Transaction Set	M	N0	1/6	Must
		<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.				use
AK303	447	Loop Identifier Code	R	AN	1/4	Used
		<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				
AK304	720	Segment Syntax Error Code	R	ID	1/3	Used
		<b>Description:</b> Code indicating error found based on the syntax editing of a segment				
		All valid standard codes are used.				

## **AK4** Data Element Note

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

To report errors in a data element and to identify the location of the data element.

Ref	<u>Id</u>	Element Name	Req	<b>Type</b>	Min/Max	Usage
AK401	C030	Position in Segment	$\mathbf{M}$	Comp		Must
		<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				use
	722	<b>Element Position in Segment</b>	M	N0	1/2	Must
		<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				use
	1528	Component Data Element Position in Composite	R	N0	1/2	Used
	1020	<b>Description:</b> To identify the component data element position within the composite that is in error		110	-/-	CSCC
AK402	725	Data Element Reference Number	R	N0	1/4	Used
		<b>Description:</b> Reference number used to locate the data element in the Data Element Dictionary.				
AK403	723	Data Element Syntax Error Code	M	ID	1/3	Must
		<b>Description:</b> Code indicating the error found after syntax edits of a data element.				use
		All valid standard codes are used.				
AK404	724	Copy of Bad Data Element	R	AN	1/99	Used
		<b>Description:</b> This is a copy of the data element in error.				

# AK5 Trans

# **Transaction Set Response Trailer**

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

To acknowledge acceptance or rejection and to report errors in a transaction set.

Ref _	<u>Id</u>	Element Name	Req	<b>Type</b>	Min/Max	Usage
AK501	717	Transaction Set Acknowledgment Code	M	ID	1/1	Must
		<b>Description:</b> Code indicating accept or reject condition based on the syntax editing of the transaction set.				use
		All valid standard codes are used.				
AK502	718	Transaction Set Syntax Error Code	R	ID	1/3	Used
		<b>Description:</b> Code indicating error found based on the syntax editing of a transaction set.				
		All valid standard codes are used.				
AK503	718	Transaction Set Syntax Error Code	R	ID	1/3	Used
		<b>Description:</b> Code indicating error found based on the syntax editing of a transaction set.				
		All valid standard codes are used.				
AK504	718	Transaction Set Syntax Error Code	R	ID	1/3	Used
		<b>Description:</b> Code indicating error found based on the syntax editing of a transaction set.				
		All valid standard codes are used.				
AK505	718	Transaction Set Syntax Error Code	R	ID	1/3	Used
		<b>Description:</b> Code indicating error found based on the syntax editing of a transaction set.				
		All valid standard codes are used.				
AK506	718	Transaction Set Syntax Error Code	R	ID	1/3	Used
		<b>Description:</b> Code indicating error found based on the syntax editing of a transaction set.				
		All valid standard codes are 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 is 'A' or 'E', then the transmitted functional group is accepted. If AK901 is 'R', then the transmitted group is rejected.

Ref	<u>Id</u>	Element Name	Req	<b>Type</b>	Min/Max	Usage
AK901	715	Functional Group Acknowledge Code	$\mathbf{M}$	ID	1/1	Must
		<b>Description:</b> Code indicating accept or reject condition based on the syntax editing of the functional group.				use
		All valid standard codes are used.				
AK902	97	Number of Transaction Sets Included	$\mathbf{M}$	N0	1/6	Must
		<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.				use
AK903	123	Number of Received Transaction Sets	M	N0	1/6	Must
		<b>Description:</b> Number of Transaction Sets received.				use
AK904	2	Number of Accepted Transaction Sets	M	N0	1/6	Must
		<b>Description:</b> Number of accepted Transaction Sets in a Functional Group.				use
AK905	716	Functional Group Syntax Error Code	R	ID	1/3	Used
		<b>Description:</b> Code indicating error found based on the syntax editing of the functional group header and/or trailer.				
		All valid standard codes are used.				
AK906	716	Functional Group Syntax Error Code	R	ID	1/3	Used
		<b>Description:</b> Code indicating error found based on the syntax editing of the functional group header and/or trailer.				
		All valid standard codes are used.				
AK907	716	Functional Group Syntax Error Code	R	ID	1/3	Used
		<b>Description:</b> Code indicating error found based on the syntax editing of the functional group header and/or trailer.				
		All valid standard codes are used.				
AK908	716	Functional Group Syntax Error Code	R	ID	1/3	Used
		<b>Description:</b> Code indicating error found based on the syntax editing of the functional group header and/or trailer.				
		All valid standard codes are used.				
AK909	716	Functional Group Syntax Error Code	R	ID	1/3	Used
		<b>Description:</b> Code indicating error found based on the syntax editing of the functional group header and/or trailer.				
		All valid standard codes are 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:**

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

Ref _	<u>Id</u>	Element Name	Req	<b>Type</b>	Min/Max	Usage
SE01	96	Number of Included Segments  Description: 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 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

# **GE** Functional Group Trailer

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

To indicate the end of a functional group and to provide control information

#### **Semantics:**

1. The data interchange control number GE02 in this trailer must be identical to the same data element in the associated Functional Header GS06.

#### Comments:

1. The use of identical data interchange control numbers in the associated functional group header and trailer is designed to maximize functional group integrity. The control number is the same as that used in the corresponding header.

Ref _	<u>Id</u>	Element Name	Req	<b>Type</b>	Min/Max	Usage
GE01	97	Number of Transaction Sets Included	$\mathbf{M}$	N0	1/6	Must
		<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.				use
GE02	28	Group Control Number  Description: Assigned number originated and maintained by the sender.	M	N0	1/9	Must use

# **IEA**

## **Interchange Control Trailer**

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

To define the end of an interchange of zero or more functional groups and interchange-related control segments

Ref	<u>Id</u>	Element Name	Req	<b>Type</b>	Min/Max	Usage
IEA01	I16	Number of Included Functional Groups  Description: A count of the number of functional groups included in an interchange	M	N0	1/5	Must use
IEA02	I12	Interchange Control Number  Description: A control number assigned by the interchange sender	M	N0	9/9	Must use