997 Functional Acknowledgment

Version: X12-4010

Table of Contents

997 Functional Acknowledgment

Functional Group=FA

Purpose: 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:

Pos	Id	Segment Name	Req	Max Use	Repeat	Notes	Usage
010	ST	Transaction Set Header	M	1		N1/010	Required
020	AK1	Functional Group Response Header	M	1		N1/020	Required
LOOP ID - AK2					**999999**	**N1/030L**	
030	AK2	Transaction Set Response Header	O	1		N1/030	Used
LOOP ID - AK3					**999999**		
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

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.

ST Transaction Set Header

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

User Option (Usage): Required

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

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
ST01	143	**Transaction Set Identifier Code**	M	ID	3/3	Required

Description: Code uniquely identifying a Transaction Set

Code	Name
997	Functional Acknowledgment

Ref	Id	Element Name	Req	Type	Min/Max	Usage
ST02	329	**Transaction Set Control Number**	M	AN	4/9	Required

Description: Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set

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).

AK1 Functional Group Response Header

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

User Option (Usage): Required

Purpose: To start acknowledgment of a functional group

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
AK101	479	**Functional Identifier Code**	M	ID	2/2	Required

Description: Code identifying a group of application related transaction sets

Code	Name
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)

Ref	Id	Element Name	Req	Type	Min/Max	Usage
AK102	28	**Group Control Number**	M	N0	1/9	Required

Description: Assigned number originated and maintained by the sender

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.

Loop Transaction Set Response Header

Pos: 030	**Repeat: 999999**
Optional	
Loop: AK2	**Elements: N/A**

User Option (Usage): Used

Purpose: To start acknowledgment of a single transaction set

Loop Summary:

Pos	Id	Segment Name	Req	Max Use	Repeat	Usage
030	AK2	Transaction Set Response Header	O	1		Used
040		Loop AK3	O		999999	Used
060	AK5	Transaction Set Response Trailer	M	1		Required

AK2 Transaction Set Response Header

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

User Option (Usage): Used

Purpose: To start acknowledgment of a single transaction set

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
AK201	143	**Transaction Set Identifier Code**	M	ID	3/3	Required

Description: Code uniquely identifying a Transaction Set

Code	Name
810	Invoice
812	Credit/Debit Adjustment
820	Payment Order/Remittance Advice
824	Application Advice
832	Price/Sales Catalog
850	Purchase Order
852	Product Activity Data
855	Purchase Order Acknowledgment
856	Ship Notice/Manifest
857	Shipment and Billing Notice
885	Retail Account Characteristics

Ref	Id	Element Name	Req	Type	Min/Max	Usage
AK202	329	**Transaction Set Control Number**	M	AN	4/9	Required

Description: Identifying control number that must be unique within the transaction set functional group assigned by the originator for a 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.

Loop Data Segment Note

<table>
<tr><td>Pos: 040</td><td>Repeat:
999999</td></tr>
<tr><td colspan="2" align="center">Optional</td></tr>
<tr><td colspan="2">Loop: AK3   Elements: N/A</td></tr>
</table>

User Option (Usage): Used

Purpose: To report errors in a data segment and identify the location of the data segment

Loop Summary:

Pos	Id	Segment Name	Req	Max Use	Repeat	Usage
040	AK3	Data Segment Note	O	1		Used
050	AK4	Data Element Note	O	99		Used

AK3 Data Segment Note

<table>
<tr><td>Pos: 040</td><td>Max: 1</td></tr>
<tr><td colspan="2">Heading - Optional</td></tr>
<tr><td>Loop: AK3</td><td>Elements: 4</td></tr>
</table>

User Option (Usage): Used

Purpose: To report errors in a data segment and identify the location of the data segment

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
AK301	721	**Segment ID Code**	M	ID	2/3	Required
		Description: Code defining the segment ID of the data segment in error (See Appendix A - Number 77)				
AK302	719	**Segment Position in Transaction Set**	M	N0	1/6	Required
		Description: The numerical count position of this data segment from the start of the transaction set: the transaction set header is count position 1				
AK303	447	**Loop Identifier Code**	O	AN	1/6	Used
		Description: 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**	O	ID	1/3	Used
		Description: Code indicating error found based on the syntax editing of a segment				

AK4 Data Element Note

User Option (Usage): Used

Purpose: To report errors in a data element or composite data structure and identify the location of the data element

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
AK401	C030	**Position in Segment**	M	Comp		Required

Description: 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

	722	**Element Position in Segment**	M	N0	1/2	Required

Description: 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

*	1528	**Component Data Element Position in Composite**	O	N0	1/2	Not Used

Description: To identify the component data element position within the composite that is in error

AK402	725	**Data Element Reference Number**	O	N0	1/4	Used

Description: Reference number used to locate the data element in the Data Element Dictionary

AK403	723	**Data Element Syntax Error Code**	M	ID	1/3	Required

Description: Code indicating the error found after syntax edits of a data element

AK404	724	**Copy of Bad Data Element**	O	AN	1/99	Used

Description: This is a copy of the data element in error

AK5 Transaction Set Response Trailer

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

User Option (Usage): Required

Purpose: To acknowledge acceptance or rejection and report errors in a transaction set

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
AK501	717	**Transaction Set Acknowledgment Code**	M	ID	1/1	Required

Description: Code indicating accept or reject condition based on the syntax editing of the transaction set

Code	Name
A	Accepted
E	Accepted But Errors Were Noted
R	Rejected

Ref	Id	Element Name	Req	Type	Min/Max	Usage
AK502	718	**Transaction Set Syntax Error Code**	O	ID	1/3	Used

Description: Code indicating error found based on the syntax editing of a transaction set

Ref	Id	Element Name	Req	Type	Min/Max	Usage
AK503	718	**Transaction Set Syntax Error Code**	O	ID	1/3	Used

Description: Code indicating error found based on the syntax editing of a transaction set

Ref	Id	Element Name	Req	Type	Min/Max	Usage
AK504	718	**Transaction Set Syntax Error Code**	O	ID	1/3	Used

Description: Code indicating error found based on the syntax editing of a transaction set

Ref	Id	Element Name	Req	Type	Min/Max	Usage
AK505	718	**Transaction Set Syntax Error Code**	O	ID	1/3	Used

Description: Code indicating error found based on the syntax editing of a transaction set

Ref	Id	Element Name	Req	Type	Min/Max	Usage
AK506	718	**Transaction Set Syntax Error Code**	O	ID	1/3	Used

Description: Code indicating error found based on the syntax editing of a transaction set

AK9 Functional Group Response Trailer

<table>
<tr><td>Pos: 070</td><td>Max: 1</td></tr>
<tr><td colspan="2">Heading - Mandatory</td></tr>
<tr><td>Loop: N/A</td><td>Elements: 9</td></tr>
</table>

User Option (Usage): Required

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

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
AK901	715	**Functional Group Acknowledge Code**	M	ID	1/1	Required

Description: Code indicating accept or reject condition based on the syntax editing of the functional group

Code	Name
A	Accepted
E	Accepted, But Errors Were Noted.
P	Partially Accepted, At Least One Transaction Set Was Rejected
R	Rejected

Ref	Id	Element Name	Req	Type	Min/Max	Usage
AK902	97	**Number of Transaction Sets Included**	M	N0	1/6	Required

Description: Total number of transaction sets included in the functional group or interchange (transmission) group terminated by the trailer containing this data element

Ref	Id	Element Name	Req	Type	Min/Max	Usage
AK903	123	**Number of Received Transaction Sets**	M	N0	1/6	Required

Description: Number of Transaction Sets received

Ref	Id	Element Name	Req	Type	Min/Max	Usage
AK904	2	**Number of Accepted Transaction Sets**	M	N0	1/6	Required

Description: Number of accepted Transaction Sets in a Functional Group

Ref	Id	Element Name	Req	Type	Min/Max	Usage
AK905	716	**Functional Group Syntax Error Code**	O	ID	1/3	Used

Description: Code indicating error found based on the syntax editing of the functional group header and/or trailer

Ref	Id	Element Name	Req	Type	Min/Max	Usage
AK906	716	**Functional Group Syntax Error Code**	O	ID	1/3	Used

Description: Code indicating error found based on the syntax editing of the functional group header and/or trailer

Ref	Id	Element Name	Req	Type	Min/Max	Usage
AK907	716	**Functional Group Syntax Error Code**	O	ID	1/3	Used

Description: Code indicating error found based on the syntax editing of the functional group header and/or trailer

Ref	Id	Element Name	Req	Type	Min/Max	Usage
AK908	716	**Functional Group Syntax Error Code**	O	ID	1/3	Used

Description: Code indicating error found

Ref	Id	Element Name	Req	Type	Min/Max	Usage
		based on the syntax editing of the functional group header and/or trailer				
AK909	716	**Functional Group Syntax Error Code**	O	ID	1/3	Used

Description: Code indicating error found based on the syntax editing of the functional group header and/or trailer

Comments:

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

SE Transaction Set Trailer

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

User Option (Usage): Required

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)

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
SE01	96	**Number of Included Segments**	M	N0	1/10	Required
		Description: Total number of segments included in a transaction set including ST and SE segments				
SE02	329	**Transaction Set Control Number**	M	AN	4/9	Required
		Description: Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set				

Comments:

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