A Book Industry System Advisory Committee Implementation Guideline for EDI

997 Functional Acknowledgement

VERSION: MAY 1999 FINAL

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.

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.

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**		
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

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).

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	X12.20 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

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.

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

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.

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	X12.2 Invoice
812	X12.40 Credit/Debit Adjustment
820	X12.4 Payment Order/Remittance Advice
824	X12.44 Application Advice
832	X12.13 Price/Sales Catalog
850	X12.1 Purchase Order
852	X12.52 Product Activity Data
855	X12.9 Purchase Order Acknowledgment
856	X12.10 Ship Notice/Manifest
857	X12.29 Shipment and Billing Notice
885	X12.320 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

AK3   Data Segment Note

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

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	1/4	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

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

To report errors in a data element 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**

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

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

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 based on the syntax editing of the functional group header and/or trailer

Ref	Id	Element Name	Req	Type	Min/Max	Usage
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

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.

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				