



X12 Implementation

Guidelines

For

**Inbound
Functional
Acknowledgement**

(997i)

997 Functional Acknowledgment

Functional Group ID=**FA**

Introduction:

The purpose of this standard is 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.

	Pos. No.	Seg. ID	Name	Req. Des.	Max.Use	Loop Repeat	Notes and Comments
M	010	ST	Transaction Set Header	M	1		
M	020	AK1	Functional Group Response Header	M	1		
			LOOP ID - AK2			999999	
	030	AK2	Transaction Set Response Header	O	1		
			LOOP ID - AK3			999999	
	040	AK3	Data Segment Note	O	1		
	050	AK4	Data Element Note	O	1		
	060	AK5	Transaction Set Response Trailer	O	1		
M	070	AK9	Functional Group Response Trailer	M	1		
M	080	SE	Transaction Set Trailer	M	1		

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:
Notes: ST*997*0001'

Data Element Summary

	<u>Ref.</u>	<u>Data</u>	<u>Name</u>	<u>Attributes</u>
M	ST01	143	Transaction Set Identifier Code Code uniquely identifying a Transaction Set 997 X12.20 Functional Acknowledgment	M ID 3/3
M	ST02	329	Transaction Set Control Number Identifying control number assigned by the originator for a Transaction Set. Also see: Data Interchange Control Number (28.) This number must match the value in SE02.	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:
Notes: AK1*PO*12345'

Data Element Summary

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
M	AK101	479	Functional Identifier Code Code identifying a group of application related transaction sets This value must match the functional group identifier GS01 or the group being acknowledged.	M ID 2/2
M	AK102	28	Data Interchange Control Number Assigned number originated and maintained by the sender Control number must match number of GS06 of group being acknowledged.	M N0 1/9

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:
Notes: AK2*850*0002'

Data Element Summary

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
M	AK201	143	Transaction Set Identifier Code Code uniquely identifying a Transaction Set Must match the value in ST01 of transaction being acknowledged. Refer to 002002 Data Element Dictionary for acceptable code values.	M ID 3/3
M	AK202	329	Transaction Set Control Number Identifying control number assigned by the originator for a Transaction Set. Also see: Data Interchange Control Number (28.) Must match the value in ST02 of transaction being acknowledged.	M AN 4/9

Segment: **AK3** Data Segment Note
Position: 040
Loop: AK3 Optional
Level:
Usage: Optional
Max Use: 1
Purpose: To report errors in a data segment and identify the location of the data segment
Syntax Notes:
Notes: AK3*FST*10**2'

Data Element Summary

	<u>Ref.</u>	<u>Data</u>	<u>Name</u>	<u>Attributes</u>
	<u>Des.</u>	<u>Element</u>		
M	AK301	721	Segment ID Code Code defining the segment ID of the data segment in error. See Segment Directory.	M ID 2/3
M	AK302	719	Segment Position in Transaction Set The numerical count position of this data segment from the start of the transaction set: the transaction set header is count position 1	M N0 1/6
	AK303	447	Loop Identifier Code Code identifying a loop within the transaction set which is bounded by the related LS and LE segments (corresponding LS and LE segments must have the same value for loop identifier). (Note: The loop ID number given on the transaction set diagram is recommended as the value for this data element in segments LS and LE.)	O ID 1/4
	AK304	720	Segment Note Code Code indicating the error found processing the data segment. Refer to 002002 Data Element Dictionary for acceptable code values.	O ID 1/3
	AK305	720	Segment Note Code Code indicating the error found processing the data segment. Refer to 002002 Data Element Dictionary for acceptable code values.	O ID 1/3
	AK306	720	Segment Note Code Code indicating the error found processing the data segment. Refer to 002002 Data Element Dictionary for acceptable code values.	O ID 1/3
	AK307	720	Segment Note Code Code indicating the error found processing the data segment. Refer to 002002 Data Element Dictionary for acceptable code values.	O ID 1/3
	AK308	720	Segment Note Code Code indicating the error found processing the data segment. Refer to 002002 Data Element Dictionary for acceptable code values.	O ID 1/3

Segment: **AK4** Data Element Note
Position: 050
Loop: AK3 Optional
Level:
Usage: Optional
Max Use: 1
Purpose: To report errors in a data element and identify the location of the data element
Syntax Notes:
Notes: AK4*2*680*1'

Data Element Summary

	<u>Ref.</u>	<u>Data</u>	<u>Name</u>	<u>Attributes</u>
	<u>Des.</u>	<u>Element</u>		
M	AK401	722	Element Position in Segment This is used to indicate the relative position of the data element in error in this data segment. The count starts with 1 for the data element immediately following the segment ID. This value is 0 for an error in the segment ID.	M N0 1/2
	AK402	725	Data Element Reference Number Reference number used to locate the Data Element Dictionary.	O N0 1/4
M	AK403	723	Data Element Syntax Error Code Code indicating the error found after syntax edits of a data element Refer to 002002 Data Element Dictionary for acceptable code values.	M ID 1/3
	AK404	724	Copy of Bad Data Element This is a copy of the data element in error	O AN 1/99

Segment: **AK5** Transaction Set Response Trailer
Position: 060
Loop: AK2 Optional
Level:
Usage: Optional
Max Use: 1
Purpose: To acknowledge acceptance or rejection and report errors in a transaction set
Syntax Notes:
Notes: AK5*E*2'

Data Element Summary

Ref.	Data		
<u>Des.</u>	<u>Element</u>	<u>Name</u>	<u>Attributes</u>
M	AK501	717 Set Acknowledge Code	M ID 1/1 Code indicating if the transaction set is accepted or rejected after transfer. Refer to 002002 Data Element Dictionary for acceptable code values.
	AK502	718 Transaction Set Note Code	O ID 1/3 Code indicating the error found in processing the transaction set. Refer to 002002 Data Element Dictionary for acceptable code values.
	AK503	718 Transaction Set Note Code	O ID 1/3 Code indicating the error found in processing the transaction set. Refer to 002002 Data Element Dictionary for acceptable code values.
	AK504	718 Transaction Set Note Code	O ID 1/3 Code indicating the error found in processing the transaction set. Refer to 002002 Data Element Dictionary for acceptable code values.
	AK505	718 Transaction Set Note Code	O ID 1/3 Code indicating the error found in processing the transaction set. Refer to 002002 Data Element Dictionary for acceptable code values.
	AK506	718 Transaction Set Note Code	O ID 1/3 Code indicating the error found in processing the transaction set. Refer to 002002 Data Element Dictionary for acceptable code values.

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:
Notes:

AK9*A*1*1*1'

Data Element Summary

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
M	AK901	715	Functional Group Acknowledge Code This indicates if the full or partial functional group is accepted or rejected after transfer. Refer to 002002 Data Element Dictionary for acceptable code values.	M ID 1/1
M	AK902	97	Number of Transaction Sets Included 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
M	AK903	123	Number of Received Transaction Sets Number of Transaction Sets received	M N0 1/6
M	AK904	2	Number of Accepted Transaction Sets Number of accepted Transaction Sets in a Functional Group	M N0 1/6
	AK905	716	Functional Group Note Code Code indicating the error found processing the functional group. Refer to 002002 Data Element Dictionary for acceptable code values.	O ID 1/3
	AK906	716	Functional Group Note Code Code indicating the error found processing the functional group. Refer to 002002 Data Element Dictionary for acceptable code values.	O ID 1/3
	AK907	716	Functional Group Note Code Code indicating the error found processing the functional group. Refer to 002002 Data Element Dictionary for acceptable code values.	O ID 1/3
	AK908	716	Functional Group Note Code Code indicating the error found processing the functional group. Refer to 002002 Data Element Dictionary for acceptable code values.	O ID 1/3
	AK909	716	Functional Group Note Code Code indicating the error found processing the functional group. Refer to 002002 Data Element Dictionary for acceptable code values.	O ID 1/3

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:

Notes: SE*6*0001'

Data Element Summary

	Ref.	Data	Attributes
	<u>Des.</u>	<u>Element</u> <u>Name</u>	
M	SE01	96 Number of Included Segments Total number of segments included in a transaction set including ST and SE segments	M N0 1/6
M	SE02	329 Transaction Set Control Number Identifying control number assigned by the originator for a Transaction Set. Also see: Data Interchange Control Number (28.)	M AN 4/9

Data Element Dictionary

715 Functional Group Acknowledge Code

REPRESENTATION = ID 1/1

This indicates if the full or partial functional group is accepted or rejected after transfer.

CODE	DEFINITION
A	The transmitted functional group is accepted. An acceptance of a functional group is an acceptance of all transaction sets in that functional group.
E	The transmitted functional group is accepted, but errors are noted. This means that the sender must not resend this data.
P	Part of the transmitted functional group is accepted by transaction set.
R	The transmitted functional group is rejected. A rejection of a functional group is a rejection of all transaction sets in that functional group. Depending on the error reason, the sender may resend this data.

716 Functional Group Note Code

REPRESENTATION = ID 1/3

Code indicating the error found processing the functional group.

CODE	DEFINITION
1	Functional Group Not Supported
2	Functional Group Version Not Supported
3	Functional Group Trailer Missing
4	The data interchange control number in the header and trailer do not match. The value from the header is used in the acknowledgment.
5	Number of Included Transaction Sets Does Not Match Actual Count

717 Set Acknowledge Code

REPRESENTATION = ID 1/1

Code indicating if the transaction set is accepted or rejected after transfer.

CODE	DEFINITION
A	The transmitted transaction set is accepted.
E	The transmitted transaction set is accepted, but errors are noted. This means that the sender must not resend this data.
R	The transmitted transaction set is rejected. Depending on the error reason, the sender may resend this data.

718 Transaction Set Note Code

REPRESENTATION = ID 1/3

Code indicating the error found in processing the transaction set.

CODE	DEFINITION
1	Transaction Set Not Supported
2	Transaction Set Trailer Missing
3	The transaction set control number in the header and trailer do not match. The value from the header is used in the acknowledgment.
4	Number of Included Segments Does Not Match Actual Count
5	One or More Segments in Error

720 Segment Note Code

REPRESENTATION = ID 1/3

Code indicating the error found processing the data segment.

CODE	DEFINITION
1	Unrecognized segment ID
2	Unexpected segment
3	Mandatory segment missing
4	Loop Occurs Over Maximum Times
5	Segment Within Loop Exceeds Maximum Use

723 Data Element Syntax Error Code

REPRESENTATION = ID 1/3

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

CODE	DEFINITION
1	Mandatory data element missing
2	Conditional required data element missing.
3	Too many data elements.
4	Data element too short.
5	Data element too long.
6	Invalid character in data element.
7	Invalid code value.
8	Invalid Date
9	Invalid Time

Example

GS~FA~CESWA~AP13A~011008~0802~000000176~X~002002'
ST~997~0001'
AK1~SS~000000176'
AK2~862~0001'
AK5~A'
AK9~A~1~1~1'
SE~6~0001'
GE~1~000000176IEA~1~000000176'

GS*FA*V3F1A*F159B*011005*1012*000001774*X*002002\
ST*997*0001\
AK1*FA*1909\
AK2*997*19090001\
AK3*AK1*2\
AK4*3*6*000001502\
AK5*R*5\
AK2*997*19090002\
AK3*AK1*2\
AK4*3*6*000001510\
AK5*R*5\
AK9*R*2*2*0\
SE*12*0001\
GE*1*000001774\