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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	Must use
020	AK1	Functional Group Response Header	M	1		N1/020	Must use
LOOP ID - AK2					**999999**	**N1/030L**	
030	AK2	Transaction Set Response Header	O	1		N1/030	Used
LOOP ID - AK3					**999999**	**C1/040L**	
040	AK3	Data Segment Note	O	1		C1/040	Used
050	AK4	Data Element Note	O	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

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.

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Comments:

1/040L   The data segments of this standard are used to report the results of the syntactical analysis of the functional groups of transaction sets; they report the extent to which the syntax complies with the standards for transaction sets and functional groups. They do not report on the semantic meaning of the transaction sets (for example, on the ability of the receiver to comply with the request of the sender).

1/040   The data segments of this standard are used to report the results of the syntactical analysis of the functional groups of transaction sets; they report the extent to which the syntax complies with the

standards for transaction sets and functional groups. They do not report on the semantic meaning of the transaction sets (for example, on the ability of the receiver to comply with the request of the sender).

ST   Transaction Set Header

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

User Option (Usage): Must use

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	Must use

Description: Code uniquely identifying a Transaction Set

CodeList Summary (Total Codes: 298, Included: 1)

Code	Name
997	Functional Acknowledgment

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

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): Must use

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	Must use

Description: Code identifying a group of application related transaction sets

All valid standard codes are used. (Total Codes: 234)

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

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		Must use

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	Must use

Description: Code uniquely identifying a Transaction Set
All valid standard codes are used. (Total Codes: 298)

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

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

Pos: 040	Repeat: 999999
Optional	
Loop: AK3	**Elements: N/A**

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

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

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	Must use

Description: Code defining the segment ID of the data segment in error (See Appendix A - Number 77)

Ref	Id	Element Name	Req	Type	Min/Max	Usage
AK302	719	**Segment Position in Transaction Set**	M	N0	1/6	Must use

Description: The numerical count position of this data segment from the start of the transaction set: the transaction set header is count position 1

Ref	Id	Element Name	Req	Type	Min/Max	Usage
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

Ref	Id	Element Name	Req	Type	Min/Max	Usage
AK304	720	**Segment Syntax Error Code**	O	ID	1/3	Used

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

All valid standard codes are used. (Total Codes: 8)

AK4 Data Element Note

<table>
<tr><td>Pos: 050</td><td>Max: 99</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 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		Must use

> **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

AK401-01	722	**Element Position in Segment**	M	N0	1/2	Must use

> **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

AK401-02	1528	**Component Data Element Position in Composite**	O	N0	1/2	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	Must use

> **Description:** Code indicating the error found after syntax edits of a data element
>
> **All valid standard codes are used. (Total Codes: 10)**

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

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

Semantics:

1. In no case shall a value be used for AK404 that would generate a syntax error, e.g., an invalid character.

AK5 Transaction Set Response Trailer

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

User Option (Usage): Must use

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	Must use

Description: Code indicating accept or reject condition based on the syntax editing of the transaction set
All valid standard codes are used. (Total Codes: 6)

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
All valid standard codes are used. (Total Codes: 25)

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
All valid standard codes are used. (Total Codes: 25)

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
All valid standard codes are used. (Total Codes: 25)

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
All valid standard codes are used. (Total Codes: 25)

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
All valid standard codes are used. (Total Codes: 25)

AK9 Functional Group Response Trailer

Pos: 070	Max: 1
Heading - Mandatory	
Loop: N/A	Elements: 9

User Option (Usage): Must use

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	Must use

Description: Code indicating accept or reject condition based on the syntax editing of the functional group
All valid standard codes are used. (Total Codes: 7)

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

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	Must use

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	Must use

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
All valid standard codes are used. (Total Codes: 23)

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
All valid standard codes are used. (Total Codes: 23)

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
All valid standard codes are used. (Total Codes: 23)

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
All valid standard codes are used. (Total Codes: 23)

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
All valid standard codes are used. (Total Codes: 23)

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): Must use

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	Must use

Description: Total number of segments included in a transaction set including ST and SE segments

Ref	Id	Element Name	Req	Type	Min/Max	Usage
SE02	329	**Transaction Set Control Number**	M	AN	4/9	Must use

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.