997—Functional Acknowledgment

Functional Group = FA

This X12 Transaction Set contains the format and establishes the contents of the Functional Acknowledgment Transaction Set (997) for use within the context of an Electronic Data Interchange (EDI) environment.

Specifically, this transaction set is the canonical format used by Shipvine to advise a merchant as to the syntactical analysis of their transmitted transaction sets.

Transaction Set

POS	ID	NAME	REQ	MAX	REPEAT
	ISA	Interchange Control Header	M	1	
	GS	Functional Group Header	M	1	
0100	ST	Transaction Set Header	M	1	
0200	AK1	Functional Group Response Header	M	1	
LOOP ID – AK2			M		>1
0300	AK2	Transaction Set Response Header	M	1	
LOOP ID – AK3			M		>1
0400	AK3	Data Segment Note	M	1	
0500	AK4	Data Element Note	O	99	
0600	AK5	Transaction Set Response Trailer	M	1	
0700	AK9	Functional Group Response Trailer	M	1	
0800	SE	Transaction Set Trailer	M	1	

Segments

ISA—Interchange Control Header

Properties

PROPERTY	VALUE
SECTION	N/A
LOOP	N/A
POS	N/A
MAX	1
ELEMENTS	16

Elements

REF	ID	ELEMENT NAME	REQ	TYPE	MIN/MAX
ISA01	I01	Authorization Information Qualifier	M	ID	2/2
		<table><tr><td>CODE</td><td>NAME</td></tr><tr><td>00</td><td>No Authorization Information Present</td></tr></table> Note: Unused legacy field, Shipvine always sends "00"			
ISA02	I02	Authorization Information Note: Unused legacy field, Shipvine always sends spaces	M	AN	10/10
ISA03	I03	Security Information Qualifier	M	ID	2/2
		<table><tr><td>CODE</td><td>NAME</td></tr><tr><td>00</td><td>No Security Information Present</td></tr></table> Note: Unused legacy field, Shipvine always sends "00"			

ISA04	I04	Security Information	M	AN	10/10
		Note: Unused legacy field, Shipvine always sends spaces			
ISA05	I05	Interchange ID Qualifier	M	ID	2/2
		<table><tr><td>**CODE**</td><td>**NAME**</td></tr><tr><td>12</td><td>Phone (Telephone Companies)</td></tr></table>			
		Note: Shipvine always sends "12"			
ISA06	I06	Interchange Sender ID	M	AN	15/15
		Note: Shipvine always sends Shipvine's Sender ID of "8044333127"			
ISA07	I05	Interchange ID Qualifier	M	ID	2/2
		<table><tr><td>**CODE**</td><td>**NAME**</td></tr><tr><td>ZZ</td><td>Mutually Defined</td></tr></table>			
		Note: Always send "ZZ"			
ISA08	I07	Interchange Receiver ID	M	AN	15/15
		Note: Shipvine sends your Shipvine Logistics Merchant Code, right-padded with spaces as necessary			
ISA09	I08	Interchange Date	M	DT	6/6
		Note: UTC Date ISA was generated - YYMMDD			
ISA10	I09	Interchange Time	M	TM	4/4
		Note: 24-hour UTC Time ISA was generated - HHMM			
ISA11	I65	Repetition Separator	M		1/1
		Note: Usually '^'			
ISA12	I11	Interchange Control Version Number Code	M	ID	5/5
		Note: Always send "00801"			

ISA13	I12	Interchange Control Number	M	N0	9/9
		Note: Shipvine will start with "000000001" and increment sequentially			
ISA14	I13	Acknowledgement Requested Code	M	ID	1/1

CODE	NAME
0	No Interchange Acknowledgment Requested

Note: Not used, Shipvine always send "0".

ISA15	I14	Interchange User Indicator Code	M	ID	1/1

CODE	NAME
P	Production Data

Note: Shipvine will always send "P"

ISA16	I15	Component Element Separator	M		1/1
		Note: Usually '>'			

GS—Functional Group Header

Properties

PROPERTY	VALUE
SECTION	N/A
LOOP	N/A
POS	N/A
MAX	1
ELEMENTS	8

Elements

REF	ID	ELEMENT NAME	REQ	TYPE	MIN/MAX
GS01	479	Functional Identifier Code	M	ID	2/2
		Note: Shipvine always sends "FA"			
GS02	142	Application Sender's Code	M	AN	2/15
		Note: Shipvine will always send "8044333127"			
GS03	124	Application Receiver's Code	M	AN	2/15
		Note: Shipvine will always send your Shipvine Logistics Merchant Code			
GS04	373	Date	M	DT	8/8
		Note: UTC Date GS was generated - CCYYMMDD			
GS05	337	Time	M	DT	4/8
		Note: 24-hour UTC Time GS was generated - HHMM			

GS01 code table:

CODE	NAME
FA	Functional Acknowledgment

GS06	28	Group Control Number	M	N0	1/9

Note: Shipvine starts at "000000001" and increments sequentially.

GS07	455	Responsible Agency Code	M	ID	1/2

CODE	NAME
X	Accredited Standards Committee X12

Note: Shipvine always sends "X"

GS08	480	Version / Release / Identifier Industry Code	M	AN	1/12

CODE	NAME
008010	Standards Approved for Publication by ASC X12 Procedures Review Board through December 2019

Note: Shipvine always sends "008010"

ST—Transaction Set Header

The Transaction Set Header indicates the start of the Transaction Set and assigns a control number.

Properties

PROPERTY	VALUE
SECTION	Heading
LOOP	N/A
POS	0100
MAX	1
ELEMENTS	2

Elements

REF	ID	ELEMENT NAME	REQ	TYPE	MIN/MAX
ST01	143	Transaction Set Identifier Code	M	ID	3/3

CODE	NAME
997	Functional Acknowledgement

Note: Shipvine always sends "997"

REF	ID	ELEMENT NAME	REQ	TYPE	MIN/MAX
ST02	329	Transaction Set Control Number	M	AN	4/9

Note: Must uniquely identify this Transaction Set within the Functional Group. Since the most common convention is one Transaction Set in the Functional Group, it is usually always "0001".

AK1—Functional Group Response Header

Properties

PROPERTY	VALUE
SECTION	N/A
LOOP	N/A
POS	0200
MAX	1
ELEMENTS	3

Elements

REF	ID	ELEMENT NAME	REQ	TYPE	MIN/MAX
AK101	479	Functional Identifier Code	M	ID	2/2
AK102	28	Group Control Number Note: This is the functional group control number found in the GS segment in the functional group being acknowledged.	M	N0	1/9
AK103	480	Version / Release / Industry Identifier Code Note: Shipvine always sends "008010"	M	AN	1/12

For AK101:

CODE	NAME
AR	Warehouse Stock Transfer Shipment Advice (943)
OW	Warehouse Shipping Order (940)
SC	Price/Sales Catalog (832)

Note: Shipvine won't send functional acknowledgments for functional groups it doesn't recognize.

AK2—Transaction Set Response Header

You'll receive one AK2 segment for each transaction set you originally sent in the functional group.

Properties

PROPERTY	VALUE
SECTION	N/A
LOOP	AK2
POS	0300
MAX	1
ELEMENTS	3

Elements

REF	ID	ELEMENT NAME	REQ	TYPE	MIN/MAX
AK201	143	Transaction Set Identifier Code	M	ID	3/3

CODE	NAME
832	Price/Sales Catalog
940	Warehouse Shipping Order
943	Warehouse Stock Transfer Shipment Advice

Note: Shipvine won't send functional acknowledgments for transaction sets it doesn't recognize.

REF	ID	ELEMENT NAME	REQ	TYPE	MIN/MAX
AK202	329	Transaction Set Control Number	M	AN	4/9
AK203	1705	Implementation Convention Reference	O	AN	1/35

AK3—Data Segment Note

This segment reports what was wrong with a segment in the transaction set.

Properties

PROPERTY	VALUE
SECTION	N/A
LOOP	AK3
POS	0400
MAX	1
ELEMENTS	4

Elements

REF	ID	ELEMENT NAME	REQ	TYPE	MIN/MAX
AK301	721	Segment ID Code	M	ID	2/3
AK302	719	Segment Position in Transaction Set Note: The ST transaction set header is position 1	M	N0	1/10
AK303	447	Loop Identifier Code	O	AN	1/6

| AK304 | 720 | Segment Syntax Error Code | | | O | ID | 1/3 |

CODE	NAME
1	Unrecognized Segment ID
2	Unexpected Segment
3	Mandatory Segment Missing
4	Loop Occurs Over Maximum Times
5	Segment Exceeds Maximum Use
8	Segment Has Data Element Errors

Note: Shipvine will silently skip over segments not defined within the transaction set, and sequence errors will be reported as either "Unexpected Segment" or "Mandatory Segment Missing".

AK4—Data Element Note

This segment describes what was wrong with an element within a problematic segment.

Properties

PROPERTY	VALUE
SECTION	N/A
LOOP	AK3
POS	0500
MAX	99
ELEMENTS	4

Elements

REF	ID	ELEMENT NAME	REQ	TYPE	MIN/MAX
AK401	722	Position in Segment	M	N0	1/2
AK402	725	Data Element Reference Code	O	N0	1/10
		Note: Not used.			

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

CODE	NAME
1	Mandatory Data Element Missing
2	Conditional Required Data Element Missing
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
10	Exclusion Condition Violated
12	Too Many Repetitions
13	Too Many Components

Note: In general, Shipvine doesn't expect repeating segments and avoided component elements in its specs.

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

AK5—Transaction Set Response Trailer

Properties

PROPERTY	VALUE
SECTION	N/A
LOOP	AK2
POS	0600
MAX	1
ELEMENTS	1

Elements

REF	ID	ELEMENT NAME	REQ	TYPE	MIN/MAX
AK501	717	Transaction Set Acknowledgment Code	M	ID	1/1

CODE	NAME
A	Accepted
R	Rejected

AK9—Functional Group Response Trailer

Properties

PROPERTY	VALUE
SECTION	N/A
LOOP	N/A
POS	0700
MAX	1
ELEMENTS	4

Elements

REF	ID	ELEMENT NAME	REQ	TYPE	MIN/MAX
AK901	715	Functional Group Acknowledge Code	M	ID	1/1
AK902	97	Number of Transaction Sets Included Note: This is just whatever value you sent in GE01	M	N0	1/6
AK903	123	Number of Received Transaction Sets Note: This is the number we actually encountered in the functional group	M	N0	1/6
AK904	2	Number of Accepted Transaction Sets Note: This is the number we actually accepted	M	N0	1/6

AK901 codes:

CODE	NAME
A	Accepted
P	Partially Accepted, At Least One Transaction Set Was Rejected
R	Rejected

SE—Transaction Set Trailer

Properties

PROPERTY	VALUE
SECTION	N/A
LOOP	N/A
POS	0800
MAX	1
ELEMENTS	2

Elements

REF	ID	ELEMENT NAME	REQ	TYPE	MIN/MAX
SE01	96	Number of Included Segments Note: This is the number of total segments within the transaction set including the ST and SE segments. Do not include segments for the functional group (GS, GE) or the interchange (ISA, IEA) as these are not part of the transaction set.	M	N0	1/10
SE02	329	Transaction Set Control Number Note: This is a repeat of the number you used in the ST02 field on the ST segment.	M	AN	4/9

GE—Functional Group Trailer

Properties

PROPERTY	VALUE
SECTION	N/A
LOOP	N/A
POS	N/A
MAX	1
ELEMENTS	2

Elements

REF	ID	ELEMENT NAME	REQ	TYPE	MIN/MAX
GE01	97	Number of Transaction Sets Included Note: This is the number of transaction sets within the functional group, or the number of ST/SE pairs between the GS/GE segments. Since the modern convention is to typically have 1 transaction set per functional group, this is usually just "1".	M	N0	1/6
GE02	28	Group Control Number Note: This is a repeat of the number you used in the GS06 field of the GS segment.	M	N0	1/9

IEA—Interchange Control Trailer

Properties

PROPERTY	VALUE
SECTION	N/A
LOOP	N/A
POS	N/A
MAX	1
ELEMENTS	2

Elements

REF	ID	ELEMENT NAME	REQ	TYPE	MIN/MAX
IEA01	I16	Number of Included Functional Groups Note: This is the number of functional groups within the interchange, or the number of GS/GE pairs between the ISA/IEA segments. Since the modern convention is to typically have 1 functional group per interchange, this is usually just "1".	M	N0	1/5
IEA02	I12	Interchange Control Number Note: This is a repeat of the number you used in the ISA13 field of the ISA segment.	M	N0	9/9

Examples

The following section provides example EDI 997 X12 Transaction Sets conforming to this specification that you might receive from Shipvine.

Basic Example

The following 997 is about the simplest one that Shipvine will send, indicating successful receipt of a functional group containing one valid transaction set.

```
ISA*00*          *00*          *12*8044333127     *ZZ*CONTOSO        *210728*1120*^*00801*000000001*0*P*>~
GS*FA*8044333127*CONTOSO*20210728*1120*000000001*X*008010~
ST*997*0001~
AK1*OW*000000001*008010~
AK2*940*0001~
AK5*A~
AK9*A*1*1*1~
SE*6*0001~
GE*1*000000001~
IEA*1*000000001~
```