

An



EIDX Convention

For
**Electronic
Data
Interchange**

Transaction Set

8nn

Name of Transaction

Functional Group ID=**XX**

Version 004

Release 010

Draft - February 2000

Revision History

Date	Description
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Contents	Page
Introduction:	4
1. Functional Definition.....	4
2. Considerations.....	4
3. Trading Partners.....	4
4. EIDX Business Models.....	4
5. Field of Application.....	5
6. Format.....	5
7. Attributes.....	6
8. Additional References (EIDX).....	6
9. Changes from version 3020.....	7
Issues Log	7
846 Inventory Inquiry/Advice - List of Used and Not Used Segments	8
846 Inventory Inquiry/Advice – List of Used Segments	9
Segment: ST Transaction Set Header	10
Segment: BIA Beginning Segment for Inventory Inquiry/Advice	11
Segment: <More segments>	13
Segment: LIN Item Identification	14
Segment: <More segments>	17
Segment: SE Transaction Set Trailer	18
846 INVENTORY INQUIRY/ADVICE EXAMPLES	19
846 Example 1.....	19
Example 1 Summary.....	19
Example 1 Explanation.....	20
846 Example 2.....	21

Introduction:

This section provides the necessary information to enable trading partners to utilize the ASC X12 standards for the exchange of electronic business documents within the electronics industry.

1. FUNCTIONAL DEFINITION

This Draft Standard for Trial Use contains the format and establishes the data contents of the Inventory Inquiry/Advice Transaction Set (846) for use within the context of an Electronic Data Interchange (EDI) environment. The transaction set can be used in the following ways: (1) for a seller of goods and services to provide inventory information to a prospective purchaser, with no obligation to the purchaser to acquire these goods or services; (2) for a representative of a seller of goods and services to supply inventory information to that seller; (3) for one location to supply another location with inventory information; and (4) for an inquiry as to the availability of inventory with no obligation on the seller of goods and services to reserve that inventory.

2. CONSIDERATIONS

N/A.

3. TRADING PARTNERS

1. Any sender to any receiver.

4. EIDX BUSINESS MODELS

This is a simple recast/version upgrade of an existing EIDX guideline. Business models were not evaluated.

The business models referenced in this document are from the EIDX Pre-Order Business Models. The EIDX models utilized in this 840 Request for Quotation document _____. These models are available from the Secretariat or on the World Wide Web at <http://www.eidx.org/busprocess.html>, then select XXX Business Models.

<u>Model</u>	<u>EIDX Business Model</u>	<u>Discussed in this Document</u>	<u>Not Discussed in this Document</u>
(1)	Business Model Title		
(2)	Business Model Title		
(3)	Etc.		
(4)			
(5)			

5. FIELD OF APPLICATION

This transaction may be applied for both national and international trade. It is based on universal commercial practice and is not dependent on the type of business or industry.

6. FORMAT

The transmission in the ASC X12 format uses two required envelopes. One is the ISA Interchange Control Header Segment, which starts and identifies an interchange of zero or more functional groups and interchange-related control segments. The ISA includes the sender's mailbox address and a receiver's mailbox address, and specifies which delimiter (a/k/a control, service) characters (data element separator, component element separator and data segment terminator) are being used.

There are no default service characters reserved for use in ASC X12. Allowable service characters should be discussed between trading partners.

The second required envelope is GS Functional Group Header, which indicates the beginning of a functional group and provides group level control information. The GS segment includes functional group level sender and receiver addresses, typically used by the trading partner(s) for internal routing. The GS also includes the GS08 ASC X12 Version/Release/Industry Identifier Code. EIDX does not recommend the use of an Industry Identifier code.

The functional groups are analogous to batches of like documents, i.e. purchase orders, invoices, etc. Each functional group contains one or more transaction sets (electronic documents).

Each transaction set is an ordered collection of segments.

Each segment is an ordered collection of data elements. Each segment has been assigned a two or three character identifier. This identifier marks the beginning of each segment. Each element within the segment is separated by a data element delimiter. EIDX recommends the use of the asterisk (*) character as a data element delimiter. A segment terminator character is used to mark the end of a segment.

Any shaded areas indicate EIDX recommended usage and comment.

7. ATTRIBUTES

Each data element has three ANSI attributes: Element usage, element type and minimum/maximum length. EIDX has additional usage indicated for optional segments and elements which are noted in the following table.

MARGIN	ATTRIBUTE	DE NOTE	MEANING
>>	M (Mandatory)	N/A	If a segment, composite, or stand alone data element is mandatory according to the standard, EIDX cannot change the mandatory status on that component. <i>DATA ELEMENT within a COMPOSITE:</i> A data element within a composite is mandatory only if the composite is used.
X	C or X (Conditional) or O (Optional)	No note or NOT USED	EIDX has determined no value in supplying the composite or data element; hence, it need not be generated.
Blank	C or X (Conditional) or O (Optional)	REQUIRED	EIDX members agree that the data concerned must be sent.
Blank	C or X (Conditional) or O (Optional)	No note	Indicates that EIDX makes no recommendation regarding usage. The trading partners must agree on usage.
Blank	C or X (Conditional) or O (Optional)	ADVISED	EIDX has determined value in supplying the data element; hence, it should be generated.
Blank	C or X (Conditional) or O (Optional)	DEPENDING	Data must be sent if a particular defined condition or set of conditions exist. The associated conditions must be explained at the appropriate level of detail.

8. ADDITIONAL REFERENCES (EIDX)

N/A.

Refer to the following EIDX documents for additional information:

- *EIDX Convention for 843 Response to Request for Quotation*, ballot draft April 1997.
- *IMPLEMENTATION RECOMMENDATIONS REQUEST FOR QUOTATION (840) AND RESPONSE TO THE REQUEST FOR QUOTATION (843)*, ballot draft April 1997.
- *IMPLEMENTATION RECOMMENDATIONS FOR PRODUCT AND OTHER IDENTIFIERS*, ballot draft March 1997.

9. CHANGES FROM VERSION 3020

Only segments, elements or codes used by EIDX are listed. Because this is a recast and EIDX is not adding codes to any code lists except codes identified in EIDX's guidelines for product and other identifiers. Type ID fields which have increased in maximum length are not listed.

- All date fields changed from 6/6 (YYMMDD) to 8/8 (CCYYMMDD)
- Max length of DE 93 Name (used in N102) changed from 35 to 60
- Max length of DE 67 Identification Code (used in N104) changed from 17 to 80
- Max length of DE 235 Product/Service ID (used in LIN segment) changed from 30 to 48.
- Requirement of DE 234 Product/Service ID Qualifier (used in LIN segment) changed from 'O' Optional to 'X' Conditional
- Requirement of DE 380 Quantity in QTY01 changed from 'M' Mandatory to 'X' Conditional.
- Max length of DE 212 Unit Price (used in UIT02) changed from 14 to 17.
- Max use of N1 loop in detail area (LIN.N1) changed from 5 to 200.
- Requirement for CTT segment changed from 'M' Mandatory to 'O' Optional.
- Max length of DE 96 Number of Included Segments in SE01 changed from 6 to 10.

Issues Log

N/A.

8nnName of Transaction- List of Used and Not Used Segments

Heading:

	<u>Pos. No.</u>	<u>Seg. ID</u>	<u>Name</u>	<u>Req. Des.</u>	<u>Max.Use</u>	<u>Loop Repeat</u>	<u>Notes and Comments</u>
Must Use	010	ST	Transaction Set Header	M	1		
Must Use	020	BIA	Beginning Segment for Inventory Inquiry/Advice	M	1		
	040	CUR	Currency	O	1		
Not Used	050	DTM	Date/Time Reference	O	10		
	060	REF	Reference Identification	O	12		
Not Used	070	PER	Administrative Communications Contact	O	3		
Not Used	075	MEA	Measurements	O	20		
			LOOP ID - N1			5	
	080	N1	Name	O	1		

Detail:

	<u>Pos. No.</u>	<u>Seg. ID</u>	<u>Name</u>	<u>Req. Des.</u>	<u>Max.Use</u>	<u>Loop Repeat</u>	<u>Notes and Comments</u>
			LOOP ID - LIN			10000	
Must Use	010	LIN	Item Identification	M	1		
Not Used	030	PID	Product/Item Description	O	200		
Not Used	040	MEA	Measurements	O	40		
Not Used	050	PKG	Marking, Packaging, Loading	O	25		
Not Used	100	DTM	Date/Time Reference	O	10		
Not Used	110	CTP	Pricing Information	O	25		
Not Used	120	CUR	Currency	O	1		

Summary:

	<u>Pos. No.</u>	<u>Seg. ID</u>	<u>Name</u>	<u>Req. Des.</u>	<u>Max.Use</u>	<u>Loop Repeat</u>	<u>Notes and Comments</u>
	010	CTT	Transaction Totals	O	1		n2
Must Use	020	SE	Transaction Set Trailer	M	1		

Transaction Set Notes

1. The REF loop conveys serial number, lot number, and inventory data.
2. Number of line items (CTT01) is the accumulation of number of LIN segments. If used, hash total (CTT02) is the sum of the values of the quantities (QTY02) of each QTY segment.

8nnName of Transaction– List of Used Segments

Heading:

	<u>Pos. No.</u>	<u>Seg. ID</u>	<u>Name</u>	<u>Req. Des.</u>	<u>Max.Use</u>	<u>Loop Repeat</u>	<u>Notes and Comments</u>
Must Use	010	ST	Transaction Set Header	M	1		
Must Use	020	BIA	Beginning Segment for Inventory Inquiry/Advice	M	1		
	040	CUR	Currency	O	1		
	060	REF	Reference Identification	O	12		
						LOOP ID - N1	5
	080	N1	Name	O	1		

Detail:

	<u>Pos. No.</u>	<u>Seg. ID</u>	<u>Name</u>	<u>Req. Des.</u>	<u>Max.Use</u>	<u>Loop Repeat</u>	<u>Notes and Comments</u>
						LOOP ID - LIN	10000
Must Use	010	LIN	Item Identification	M	1		
	140	REF	Reference Identification	O	>1		
						LOOP ID - QTY	99
	320	QTY	Quantity	O	1		
	330	UIT	Unit Detail	O	12		
	350	LDT	Lead Time	O	12		
						LOOP ID - SCH	25
	360	SCH	Line Item Schedule	O	1		
						LOOP ID - N1	200
	450	N1	Name	O	1		

Summary:

	<u>Pos. No.</u>	<u>Seg. ID</u>	<u>Name</u>	<u>Req. Des.</u>	<u>Max.Use</u>	<u>Loop Repeat</u>	<u>Notes and Comments</u>
	010	CTT	Transaction Totals	O	1		n2
Must Use	020	SE	Transaction Set Trailer	M	1		

Transaction Set Notes

1. The REF loop conveys serial number, lot number, and inventory data.
2. Number of line items (CTT01) is the accumulation of number of LIN segments. If used, hash total (CTT02) is the sum of the values of the quantities (QTY02) of each QTY segment.

Segment: **ST** Transaction Set Header

Position: 010

Loop:

Level: Heading

Usage: Mandatory

Max Use: 1

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

Syntax Notes:

Semantic Notes: 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).

Comments:

Data Element Summary

<u>Ref.</u>	<u>Data</u>	<u>Name</u>	<u>Attributes</u>
>>	ST01	143 Transaction Set Identifier Code Code uniquely identifying a Transaction Set 846 Inventory Inquiry/Advice	M ID 3/3
>>	ST02	329 Transaction Set Control Number Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set The control number is assigned by the sender. It should be sequentially assigned within each functional group to aid in error recovery and research. The control number in the SE segment (SE02) must be identical to the control number in the ST segment for each transaction.	M AN 4/9

Segment: **BIA** Beginning Segment for Inventory Inquiry/Advice
Position: 020
Loop:
Level: Heading
Usage: Mandatory
Max Use: 1
Purpose: To indicate the beginning of an Inventory Inquiry/Advice Transaction Set
Syntax Notes:
Semantic Notes: 1 BIA03 identifies the number of the inquiry/advice that is transferred.
 2 BIA04 identifies the date of the inquiry/advice that is transferred.
 3 BIA05 identifies the time of the inquiry/advice that is transferred.
Comments:

Data Element Summary

Ref.	Data	Name	Attributes
<u>Des.</u>	<u>Element</u>		
>>	BIA01	353 Transaction Set Purpose Code Code identifying purpose of transaction set	M ID 2/2
		00 Original This is a complete inventory advice transaction set. This transaction set replaces all prior transaction sets. Products/Services which were included in previous transaction sets and not listed are either no longer available or are out of stock, depending on trading partner agreements.	
		04 Change This is a transaction set of only product/services which have changed since the previous transaction set. Products/services which are not included in this transaction set have not changed since the previous transaction set. Items with a quantity of zero either are not longer available or are temporarily out of stock, depending on trading partner agreements.	
>>	BIA02	755 Report Type Code Code indicating the title or contents of a document, report or supporting item	M ID 2/2
		CM Customer/Manufacturer Inventory Report DM Distributor/Manufacturer Inventory Report LC Location Inventory Report Refers to a specific company at a physical location. MB Manufacturer/Distributor Inventory Report MC Manufacturer/Customer Inventory Report	
>>	BIA03	127 Reference Identification Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier The number of the advice that is transmitted.	M AN 1/30
>>	BIA04	373 Date Date expressed as CCYYMMDD Date is the effective inventory date, not the transmission date.	M DT 8/8

X	BIA05	337	Time Time expressed in 24-hour clock time as follows: HHMM, or HHMMSS, or HHMMSSD, or HHMMSSDD, where H = hours (00-23), M = minutes (00-59), S = integer seconds (00-59) and DD = decimal seconds; decimal seconds are expressed as follows: D = tenths (0-9) and DD = hundredths (00-99)	O TM 4/8
X	BIA06	306	Action Code Code indicating type of action Refer to 004010 Data Element Dictionary for acceptable code values.	O ID 1/2

Segment: **<More segments>**

Segment: **LIN** Item Identification

Position: 010

Loop: LIN Mandatory

Level: Detail

Usage: Mandatory

Max Use: 1

Purpose: To specify basic item identification data

Syntax Notes:

- 1 If either LIN04 or LIN05 is present, then the other is required.
- 2 If either LIN06 or LIN07 is present, then the other is required.
- 3 If either LIN08 or LIN09 is present, then the other is required.
- 4 If either LIN10 or LIN11 is present, then the other is required.
- 5 If either LIN12 or LIN13 is present, then the other is required.
- 6 If either LIN14 or LIN15 is present, then the other is required.
- 7 If either LIN16 or LIN17 is present, then the other is required.
- 8 If either LIN18 or LIN19 is present, then the other is required.
- 9 If either LIN20 or LIN21 is present, then the other is required.
- 10 If either LIN22 or LIN23 is present, then the other is required.
- 11 If either LIN24 or LIN25 is present, then the other is required.
- 12 If either LIN26 or LIN27 is present, then the other is required.
- 13 If either LIN28 or LIN29 is present, then the other is required.
- 14 If either LIN30 or LIN31 is present, then the other is required.

Semantic Notes:

- 1 LIN01 is the line item identification

Comments:

- 1 See the Data Dictionary for a complete list of IDs.
- 2 LIN02 through LIN31 provide for fifteen different product/service IDs for each item. For example: Case, Color, Drawing No., U.P.C. No., ISBN No., Model No., or SKU.

Data Element Summary

Ref.	Data	Name	Attributes
<u>Des.</u>	<u>Element</u>		
X	LIN01	350 Assigned Identification Alphanumeric characters assigned for differentiation within a transaction set	O AN 1/20
>>	LIN02	235 Product/Service ID Qualifier Code identifying the type/source of the descriptive number used in Product/Service ID (234) Reference EIDX product identification guidelines.	M ID 2/2
		AB Assembly	
		BP Buyer's Part Number	
		EC Engineering Change Level	
		EN European Article Number (EAN) (2-5-5-1)	
		MG Manufacturer's Part Number	
		PC Prime Contractor Part Number	
		UP U.P.C. Consumer Package Code (1-5-5-1)	
		VP Vendor's (Seller's) Part Number	
>>	LIN03	234 Product/Service ID Identifying number for a product or service	M AN 1/48
	LIN04	235 Product/Service ID Qualifier Code identifying the type/source of the descriptive number used in Product/Service ID (234)	X ID 2/2

See code list in first occurrence of DE 235 on this segment.

LIN05	234	Product/Service ID Identifying number for a product or service	X	AN 1/48
LIN06	235	Product/Service ID Qualifier Code identifying the type/source of the descriptive number used in Product/Service ID (234) See code list in first occurrence of DE 235 on this segment.	X	ID 2/2
LIN07	234	Product/Service ID Identifying number for a product or service	X	AN 1/48

Segment: **<More segments>**

Segment: **SE** Transaction Set Trailer

Position: 020

Loop:

Level: Summary

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:

Semantic Notes:

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

Data Element Summary

	<u>Ref.</u>	<u>Data</u>	<u>Name</u>	<u>Attributes</u>
	<u>Des.</u>	<u>Element</u>		
>>	SE01	96	Number of Included Segments	M N0 1/10
			Total number of segments included in a transaction set including ST and SE segments	
>>	SE02	329	Transaction Set Control Number	M AN 4/9
			Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set	
			The control number is assigned by the sender. It should be sequentially assigned within each functional group to aid in error recovery and research. The control number in the SE segment (SE02) must be identical to the control number in the ST segment for each transaction.	

8nnNAME OF TRANSACTION EXAMPLES

846 EXAMPLE 1 - BASIC INVENTORY REPORT

In this example a distributor is providing a manufacturer with the distributor's inventory level.

Example 1 Summary

HEADER SECTION	
ST*846*01943'	This is a Inventory Inquiry/Advice transaction with transaction set control number 01943.
BIA*00*DM*853264*930626'	The report is an original; the report type is Distributor/Manufacturer Inventory Report; the report number is 853264, issued on June 26, 1993.
N1*DS**1*123456789'	The distributor's DUNS number is 123456789.
DETAIL SECTION	
LIN**VP*IL49CS5'	The vendor's part number is IL49CS5.
QTY*17*321428*EA'	The quantity on hand is 321428.
SUMMARY SECTION	
CTT*1*321428'	There is 1 line items in the transaction set, and the sum of the QTY02 quantities is 321428.
SE*7*01943'	There are 7 segments in transaction set 01943, including the ST and ST segments.

Example 1 Explanation

HEADER SECTION	
ST*846*01943'	ST Transaction Set Header
	ST01/143 Transaction Set Identifier Code [M/ID 3/3]: 846 Inventory Inquiry/Advice
	ST02/329 Transaction Set Control Number [M/AN 4/9]: 01943
BIA*00*DM*853264*930626'	BIA Beginning Segment for Inventory Inquiry/Advice
	BIA01/353 Transaction Set Purpose Code [M/ID 2/2]: 00 (Original)
	BIA02/755 Report Type Code [M/ID 2/2]: DM (Distributor/Manufacturer Inventory Report)
	BIA03/127 Reference Identification [M/AN 1/30]: 853264
	BIA04/373 Date [M/DT 8/8]: 930626 (June 26, 1993)
N1*DS**1*123456789'	N1 Name
	N101/98 Entity Identifier Code [M/ID 2/3]: DS (Distributor)
	N103/66 Identification Code Qualifier [X/ID 1/2]: 1 (-U- N-S Number, Dun & Bradstreet)
	N104/67 Identification Code [X/AN 1/20]: 123456789
DETAIL SECTION	
LIN**VP*IL49CS5'	LIN Item Identification
	LIN02/235 Product/Service ID Qualifier [X/ID 2/2]: VP (Vendor Part Number)
	LIN03/234 Product/Service ID [X/AN 1/48]: IL49CS5
QTY*17*321428*EA'	QTY Quantity
	QTY01/673 Quantity Qualifier [M/ID 2/2]: 17 (Quantity on Hand)
	QTY02/380 Quantity [X/R 1/15]: 321428
	QTY03/C001 Composite Unit of Measure [O]
	C00101/355 Unit or Basis for Measurement Code [M/ID 2/2]: EA (Each)
SUMMARY SECTION	
CTT*1*321428'	CTT Transaction Totals
	CTT01/354 Number of Line Items [M/N0 1/6]: 1 (Count of LIN segments in the transaction)
	CTT02/347 Hash Total [O/R 1/10]: 321428
SE*7*01943'	SE Transaction Set Trailer
	SE01/96 Number of Included Segments [M/N0 1/10]: 7 (count of segments in this transaction set including ST and SE)
	SE02/329 Transaction Set Control Number [M/AN 4/9]: 01943

846 EXAMPLE 2 -

<p>BFR*00*20000123*PO*12345</p>	<p>BRC Beginning Segment (Response to Product Transfer Account Adjustment) BRC01/353 Transaction Set Purpose Code [M/ID 2/2]: 00 (Original) BRC02/373 Date [M/DT 8/8]: 20000123 (January 23, 2000) BRC03/128 Reference Identification Qualifier [X/ID 2/3]: PO (Purchase Order) BRC04/127 Reference Identification [X/AN 1/30]: 12345</p>
	<p>REF Reference Numbers REF01/128 Reference Identification Qualifier [M/ID 2/3]: REF02/127 Reference Identification [X/AN 1/30]: REF03/352 Description [X/AN 1/80]: REF04/C040 Reference Identifier [O]: REF04.01/128 Reference Identification Qualifier [M/ID 2/3]: REF04.02/127 Reference Identification [M/AN 1/30]: REF04.03/128 Reference Identification Qualifier [X/ID 2/3]: REF04.04/127 Reference Identification [X/AN 1/30]: REF04.05/128 Reference Identification Qualifier [X/ID 2/3]: REF04.06/127 Reference Identification [X/AN 1/30]:</p>