



Federal Implementation Guideline for Electronic Data Interchange

**ASC X12 003060 Transaction Set 841
Specifications/Technical Information
(Provide Technical Information)**

Implementation Convention



**U.S. DEPARTMENT OF COMMERCE
Technology Administration
National Institute of
Standards and Technology**

Federal Implementation Guideline for Electronic Data Interchange

ASC X12 003060 Transaction Set 841 Specifications/Technical Information (Provide Technical Information)

Implementation Convention

Electronic Commerce Acquisition Program Management Office
Standard Management Committee - Secretariat
National Institute of Standards and Technology
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Reports on Information Technology

The National Institute of Standards and Technology (NIST)'s Information Technology Laboratory (ITL) develops standards and guidelines, provides technical assistance, and conducts research for computers and resources. As part of the overall federal effort to establish a single face to industry for conducting electronic commerce, ITL has been designated as the organization responsible for coordinating the development of Federal Implementation Conventions (ICs) for Electronic Data Interchange (EDI). ICs are defined by functional-area experts who create and select options from standard EDI Transaction Sets to yield the implementations to be used for practical EDI. These ICs are made available to federal agencies and industry by electronic means and this Special Publication Series.

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841 Specifications/Technical Information

Functional Group ID=SP

Introduction:

This Draft Standard for Trial Use contains the format and establishes the data contents of the Specifications/Technical Information Transaction Set (841) for use within the context of an Electronic Data Interchange (EDI) environment. The transaction set can be used to transmit or request specifications or technical information between trading partners. It can be used to transmit engineering change and engineering change requests. It can also be used to allow EDI trading partners the ability to exchange a complete or partial technical description of a product, process, service, etc. over the same path as any other EDI transaction. The detail area can include graphic, text, parametric, tabular, image, spectral, or audio data. A transmission includes identification information to assist the receiver in interpreting and utilizing the information included in the transaction. Further action as a consequence of the receipt and initial processing of the specification or other technical data may or may not require human intervention. The transmission and receipt of the data may require private agreement between the trading partners to automate the receipt of the data. The total transaction must be in the general form of all ASC X12 transactions so that an EDI computer system will be able to automatically recognize it as a Specification/Technical Information Transaction Set and pass it on for processing of the data itself. The transaction set is not media dependent. The detail area of the Specification/Technical Information Transaction Set provides a structure which allows for the exchange of a variety of specification information. For example, if the transaction contains information describing a complete assembly, it would be necessary to include the assembly model, the models for each of the individual parts, and the associated specifications. In the case of a process it may be necessary to transmit the specification of the product along with the specifications of the process and raw materials. This transaction set can also be linked to other transaction sets. This transaction set is not limited to a specific transmission protocol and uses other standards as applicable where they do not conflict with these requirements for specification transaction.

Notes:

1. The application name for this implementation convention is *PROVIDE TECHNICAL INFORMATION*.
2. This implementation convention is used by the government or a contractor to respond to a request for technical information.
3. It can be used by the government to transmit technical information that is part of a solicitation, as part of a contract or contract modification, or to transfer technical information between government activities.
4. It can also be used by a bidder to provide technical information that is part of a Response to a Request for Quotation, 843 transaction set, or by a contractor to provide deliverables required by an award instrument, e.g., data required on a Contract Data Requirements List (CDRL), or to submit technical information as part of a requested change to a contract, e.g., an engineering change request.
5. When used to provide technical information in support of Response to a Request for Quotation (843 transaction set), or to provide deliverables required by an award instrument, or to provide technical information as part of a requested change to a contract, the transaction set shall only transmit information applicable to a single quote or a single award instrument.

Heading:

	Pos.	Seg.		Req.		Loop	Notes and
	No.	ID	Name	Des.	Max.Use	Repeat	Comments
Must Use	010	ST	Transaction Set Header	M	1		

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			LOOP ID - SPI			>1
Must Use	020	SPI	Specification Identifier	M	1	
N/U	030	RDT	Revision Date/Time	O	>1	
	040	NTE	Note/Special Instruction	O	>1	
N/U	050	X1	Export License	O	1	
N/U	060	X2	Import License	O	1	
N/U	070	X7	Customs Information	O	1	
	080	AMT	Monetary Amount	O	>1	
			LOOP ID - REF			>1
	090	REF	Reference Identification	O	1	
N/U	100	DTM	Date/Time Reference	O	>1	
N/U	110	PER	Administrative Communications Contact	O	>1	
			LOOP ID - N1			>1
	120	N1	Name	O	1	
	130	N2	Additional Name Information	O	2	
	140	N3	Address Information	O	2	
	150	N4	Geographic Location	O	1	
	160	REF	Reference Identification	O	>1	
	170	PER	Administrative Communications Contact	O	>1	

Detail:

	Pos. No.	Seg. ID	Name	Req. Des.	Max. Use	Loop Repeat	Notes and Comments
			LOOP ID - HL			>1	
Must Use	010	HL	Hierarchical Level	M	1		n1, c1
			LOOP ID - SPI			>1	
	020	SPI	Specification Identifier	O	1		
	030	RDT	Revision Date/Time	O	>1		
N/U	033	PRR	Problem Report	O	>1		c2
N/U	034	PRT	Part Disposition	O	>1		c3
N/U	035	PRS	Part Release Status	O	1		c4
N/U	040	LIN	Item Identification	O	1		c5
N/U	045	N1	Name	O	>1		
N/U	046	PER	Administrative Communications Contact	O	>1		
	050	MSG	Message Text	O	>1		
			LOOP ID - PID			>1	
N/U	060	PID	Product/Item Description	O	1		
N/U	065	PKD	Packaging Description	O	>1		
N/U	070	QTY	Quantity	O	>1		
N/U	074	MEA	Measurements	O	>1		
N/U	075	UIT	Unit Detail	O	>1		
N/U	076	LOC	Location	O	1		
N/U	077	PWK	Paperwork	O	>1		
			LOOP ID - PKG			>1	
N/U	078	PKG	Marking, Packaging, Loading	O	1		
N/U	079	MEA	Measurements	O	>1		
			LOOP ID - REF			>1	
	080	REF	Reference Identification	O	1		
N/U	090	DTM	Date/Time Reference	O	>1		

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N/U	100	PER	Administrative Communications Contact	O	>1	
LOOP ID - LX						>1
N/U	103	LX	Assigned Number	O	1	
N/U	105	LIN	Item Identification	O	1	
N/U	107	TMD	Test Method	O	1	
N/U	110	MEA	Measurements	M	>1	
N/U	112	PSD	Physical Sample Description	O	>1	
N/U	114	SPS	Sampling Parameters for Summary Statistics	O	>1	
N/U	120	DTM	Date/Time Reference	O	>1	
N/U	130	REF	Reference Identification	O	>1	
LOOP ID - EFI						>1
	140	EFI	Electronic Format Identification	O	1	
Must Use	160	BIN	Binary Data	M	1	
LOOP ID - CID						>1
N/U	170	CID	Characteristic/Class ID	O	1	c6
N/U	180	UIT	Unit Detail	O	1	
N/U	190	TMD	Test Method	O	>1	
N/U	200	PSD	Physical Sample Description	O	1	
N/U	201	CSS	Conditional Sampling Sequence	O	1	n2
N/U	210	SPS	Sampling Parameters for Summary Statistics	O	1	
N/U	220	MSG	Message Text	O	>1	
LOOP ID - MEA						>1
N/U	230	MEA	Measurements	O	1	
N/U	240	DTM	Date/Time Reference	O	>1	
N/U	250	REF	Reference Identification	O	>1	
LOOP ID - STA						>1
N/U	260	STA	Statistics	O	1	
N/U	270	DTM	Date/Time Reference	O	>1	
N/U	280	REF	Reference Identification	O	>1	
LOOP ID - CSF						>1
N/U	282	CSF	Conditional Sampling Frequency	O	1	n3, c7
N/U	283	LS	Loop Header	O	1	
LOOP ID - CID						>1
N/U	284	CID	Characteristic/Class ID	O	1	n4, c8
N/U	285	MEA	Measurements	O	1	c9
N/U	286	STA	Statistics	O	1	c10
N/U	287	LE	Loop Trailer	O	1	
LOOP ID - EFI						>1
N/U	290	EFI	Electronic Format Identification	O	1	
N/U	310	BIN	Binary Data	M	1	

Summary:

	Pos. No.	Seg. ID	Name	Req. Des.	Max.Use	Loop Repeat	Notes and Comments
Must Use	010	SE	Transaction Set Trailer	M	1		

Transaction Set Notes

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1. To be meaningful, at least one of the SPI, PID, REF, MEA, EFI or CID loops must be present with each occurrence of the HL loop.
2. The sampling sequence specified in the CSS segment will take precedence over any other sampling rate (PSD03, PSD09, SPS06, CSF02, and CSF03) from the point the CSS01 event occurs until the specified sequence is completed.
If no other sampling is specified, then only the sampling indicated in this segment is performed when the CSS01 event occurs.
3. The sampling rate specified in the CSF segment. It would take precedence over the normal sampling rate specified in PSD03 while the conditions of the CSF segment are satisfied, but would NOT take precedence over the sampling sequence activated by the proposed CSS segment.
If no other sampling rate is specified, then the only sampling indicated in the CSF segment is performed while the CSF conditions are met. Sampling will cease when the conditions are no longer met.
Conditional values specified in DE 740 (Range Minimum) will be interpreted as "greater than or equal to this value." Values specified in DE 741 (Range Maximum) will be interpreted to mean "less than or equal to this value."
4. Either the MEA segment or the STA segment must occur, but not both.

Transaction Set Comments

1. The HL segment may be used to define the hierarchical relationship of product-related specifications reported in the associated HL loop. Product-related specifications may refer to the product in its entirety or to subunits of the product. For example, if the top level refers to an assembly, the second-level HL segment may refer to parts or subassemblies of the top assembly. This pattern may be repeated as often as required.
2. The PRR segment contains the reason for an engineering change.
3. The PRT segment is used to describe what should be done with the parts or assemblies specified in the preceding SPI segment.
4. The PRS segment is used to tell the current status of the parts specified in the SPI segment required to make the change.
5. The repeated pairs of 234 and 234 data elements in the LIN segment can be used to list where this modified part or assembly is used.
6. The CID segment may be used to define either a general class of properties, such as physical properties, or an individual property within a class. The CID loop allows the user the ability to define specifications such as the properties of the item or class, the environmental conditions under which the specifications apply, the test methods to be used, and other parameters related to properties within the current HL hierarchical level.
7. Repetitions of the CSF loop allow several frequency changes (and the conditions that would trigger those changes) to be specified.
If the conditions are such that several CSF values are activated at the same time, the value with the highest sampling rate shall prevail.
8. The CID loop within the CSF loop is used to specify the conditions that will trigger activation of the conditional value in the CSF segment.
Repetitions of the CID loop will have an implied logical AND between the conditions set in each iteration.
9. The elements of the CID segment identify the conditional property. If the property is a measurement from within the manufacturing process of a plant environment, rather than the product, the segment also identifies the location where the measurements are to be observed.
10. If the condition is based on single test measurements, the MEA segment is used to specify the units of measure, and the open or closed numeric range of the conditional test.

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>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	ST01	143	Transaction Set Identifier Code Code uniquely identifying a Transaction Set 841 X12.51 Specifications/Technical Information	M ID 3/3
Must Use	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 <i>This unique number is assigned by the originator of the transaction set. This same number is carried in SE02.</i>	M AN 4/9

Segment: **SPI** Specification Identifier
Position: 020
Loop: SPI
Level: Heading
Usage: Mandatory
Max Use: 1
Purpose: To provide a description of the included specification or technical data items
Syntax Notes: 1 If either SPI02 or SPI03 is present, then the other is required.
Semantic Notes:
Comments:

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	SPI01	786	Security Level Code Code indicating the level of confidentiality assigned by the sender to the information following <i>1. Use the data element to identify the highest level of protection (government or commercial) assigned to the provided information. Use the SPI segment at the Detail Level to indicate the protection level of individual items.</i> <i>2. When the transaction set is originated by a contractor, if the data have both a government security classification and a commercial protection requirement, this data element will carry the government security classification code and the commercial protection requirement code will be carried in SPI09.</i> <i>3. When the transaction set is originated by the government, this data element may carry either the government security classification or the commercial protection requirement code, as applicable, with the government security classification code taking precedence. In this instance, SPI09 may only cite code 99, when it is necessary to indicate that data referenced in the transaction set is restricted to certified contractors.</i> <i>4. If neither a government security classification nor a commercial protection requirement applies to the information, code 90 shall be cited.</i>	M ID 2/2
Must Use	SPI02	128	Reference Identification Qualifier Code Qualifying the Reference Identification <i>USE OF THIS DATA ELEMENT IS REQUIRED.</i> TN Transaction Reference Number <i>Use to indicate the unique reference number of this transaction set. This number is assigned by the originator of the transaction set.</i>	X ID 2/3
Must Use	SPI03	127	Reference Identification Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier <i>USE OF THIS DATA ELEMENT IS REQUIRED.</i>	X AN 1/30
Must Use	SPI07	353	Transaction Set Purpose Code Code identifying purpose of transaction set <i>USE OF THIS DATA ELEMENT IS REQUIRED.</i> 00 Original	O ID 2/2

					<i>Use to indicate an original transmission when none of the other codes apply.</i>
		08	Status		<i>Use to indicate only a portion of a request is being satisfied. Provide an explanation in the 1/NTE/040 segment.</i>
		12	Not Processed		<i>Use to indicate a request could not be satisfied. Provide the reason in the 1/NTE/040 segment.</i>
		25	Incremental		<i>Use to indicate 2 or more 841 transaction sets are being sent to transmit all technical information. Identify the unique reference number of the previous 841 transaction set in the 1/REF/090 segment using code Q4.</i>
		53	Completion		<i>When 2 or more 841 transaction sets are being sent to transmit all technical information, use to indicate the final transaction set. Identify the unique reference number of the previous 841 transaction set in the 1/REF/090 segment using code Q4.</i>
Must Use	SPI08	755	Report Type Code	O ID 2/2	
			Code indicating the title or contents of a document, report or supporting item <i>USE OF THIS DATA ELEMENT IS REQUIRED.</i>		
			AE	Attachment	<i>Use to indicate miscellaneous information not applicable to any other listed code is being provided.</i>
			B1	Batch Report	<i>Use to indicate technical information provided in response to a request.</i>
			KA	Contract Data Requirements List (CDRL)	1. <i>Use to indicate an award instrument deliverable.</i>
					2. <i>This code is only used by a contractor.</i>
			KH	Proposal Support Data	1. <i>Use to indicate technical information in support of proposal, i.e., 843 transaction set.</i>
					2. <i>This code is only used by a contractor.</i>
			KJ	Change Proposal Data	<i>Use to indicate information in support of a requested change (including waivers and deviations) to an award instrument that is transmitted in an 860 or an 865 transaction set.</i>
			PC	Process Change Notice	1. <i>Use to indicate information applicable to a contract modification, i.e., an 860 transaction set.</i>
					2. <i>This code is used only by the government.</i>
			PF	Product Specification	1. <i>Use to indicate technical information applicable to an award instrument, i.e., an 850 transaction set.</i>
					2. <i>This code is only used by the government.</i>
			SD	Support Data for a Request for Quote	1. <i>Use to indicate technical information applicable to a solicitation, i.e., an 840 transaction set.</i>

2. *This code is only used by the government.***SPI09****786****Security Level Code****O ID 2/2**

Code indicating the level of confidentiality assigned by the sender to the information following

1. *When the transaction set is originated by a contractor, use this data element ONLY when SPI01 is Code 92, 93, or 94 and the information also has a commercial protection requirement.*

2. *Codes 06 and 11 indicate the highest level of commercial security protection assigned to the information being provided. Use the SPI segment at the Detail Level to indicate the commercial protection requirement of individual data items.*

3. *When the transaction set is originated by the government, this data element may cite only code 99, if applicable.*

06

Supplier Proprietary

This code is only used by a contractor.

11

Competition Sensitive

This code is only used by a contractor.

99

Government Defined (Trading Partner Level)

1. *Use to indicate that information referenced in this transaction set is restricted to certified contractors.*

2. *This code is used only by the government.*

Segment: **NTE** Note/Special Instruction
Position: 040
Loop: SPI
Level: Heading
Usage: Optional
Max Use: >1
Purpose: To transmit information in a free-form format, if necessary, for comment or special instruction

Syntax Notes:

Semantic Notes:

Comments: 1 The NTE segment permits free-form information/data which, under ANSI X12 standard implementations, is not machine processable. The use of the NTE segment should therefore be avoided, if at all possible, in an automated environment.

Notes: *Use this segment to provide information applicable to the entire transaction set. To provide information applicable to a specific item, use the 2/MSG/050 segment.*

Data Element Summary

Ref.	Data	Name	Attributes
Des.	Element		
Must Use NTE01	363	Note Reference Code Code identifying the functional area or purpose for which the note applies <i>If the NTE segment is used, this data element is REQUIRED.</i>	O ID 3/3
		ACN Action Taken <i>When SPI07 is code 08 or 12, use to provide the reasons for not processing or satisfying the total request.</i>	
		GEN Entire Transaction Set <i>Use to indicate information related to the data in this transaction set.</i>	
Must Use NTE02	352	Description A free-form description to clarify the related data elements and their content	M AN 1/80

Segment: **AMT** Monetary Amount
Position: 080
Loop: SPI
Level: Heading
Usage: Optional
Max Use: >1
Purpose: To indicate the total monetary amount
Syntax Notes:
Semantic Notes:
Comments:
Notes:

1. Use this segment to identify the cost associated with providing the information and the balance of the requester's account.
2. This segment is only used by the government when responding to a request from a contractor that contained codes 24, AE, KE, KG, or KI in SPI08 of the 1/SPI/020 segment of the request.

Data Element Summary

Ref.	Data	Name	Attributes
Des.	Element		M ID 1/2
Must Use AMT01	522	Amount Qualifier Code Code to qualify amount	
		PB Billed Amount Use to indicate the amount charged the requester for the information provided.	
		T4 Total Current Balance Use to indicate the current balance of a requester's account after the charge for the information in this transaction set has been deducted.	
Must Use AMT02	782	Monetary Amount Monetary amount	M R 1/15

Segment: **REF** Reference Identification
Position: 090
Loop: REF
Level: Heading
Usage: Optional
Max Use: 1
Purpose: To specify identifying information
Syntax Notes: 1 At least one of REF02 or REF03 is required.
2 If either C04003 or C04004 is present, then the other is required.
3 If either C04005 or C04006 is present, then the other is required.
Semantic Notes: 1 REF04 contains data relating to the value cited in REF02.
Comments:
Notes: Use this 1/REF/090 segment to identify reference numbers applicable to the technical information being provided in this transaction set.

Data Element Summary

Ref. Des.	Data Element	Name	Attributes
Must Use REF01	128	Reference Identification Qualifier Code Qualifying the Reference Identification	M ID 2/3
	39	Proposal Number <i>Use to indicate either a contractor originated change proposal number, found in an 865 transaction set or a draft contract modification number, found in an 860 transaction set to which the information provided in this transaction set applies. When used, a second REF segment citing code CT in REF01 must be transmitted.</i>	
	C4	Change Number <i>Use to indicate the award instrument modification number assigned in an 860 transaction set to which the information provided in this transaction set applies. When used, a second REF segment citing code CT in REF01 must be transmitted.</i>	
	CT	Contract Number <i>Use to indicate the award instrument number to which the information provided in this transaction set applies.</i>	
	DO	Delivery Order Number <i>Use to indicate a delivery order number, call or release to which the information provided in this transaction set applies. When used, a second REF segment must be transmitted citing code CT in REF01 to identify the basic award instrument applicable to the delivery, call or release.</i>	
	KS	Solicitation <i>Use to indicate the solicitation number to which the information provided in this transaction set applies.</i>	
	PR	Price Quote Number <i>1. Use to indicate the bid, quote or proposal number to which the information provided in this transaction set applies.</i>	

2. *This code is only used by a contractor when SPI08 in the 1/SPI/020 segment is code KH.*

Q4 **Prior Identifier Number**

When SPI07 is code 25 or 53, use to indicate the unique reference number of the prior transaction set that transmitted a portion of the requested information. If more than one transaction set has been transmitted, cite the unique reference number of the last transmission.

TN **Transaction Reference Number**

Use to indicate the reference number of the transaction set to which this transaction set is responding.

REF02	127	Reference Identification	X	AN	1/30
Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier					

Segment: **N1** Name
Position: 120
Loop: N1
Level: Heading
Usage: Optional
Max Use: 1
Purpose: To identify a party by type of organization, name, and code
Syntax Notes: 1 At least one of N102 or N103 is required.
 2 If either N103 or N104 is present, then the other is required.
Semantic Notes:
Comments: 1 This segment, used alone, provides the most efficient method of providing organizational identification. To obtain this efficiency the "ID Code" (N104) must provide a key to the table maintained by the transaction processing party.
 2 N105 and N106 further define the type of entity in N101.
Notes: *Whenever possible, identification and address information should be provided using N101, N103, and N104. Use N102 and segments N2 through N4, as applicable, when this information cannot be provided by using one of the codes listed in N103.*

Data Element Summary

Ref.	Data	Name	Attributes
Des.	Element		
Must Use	N101	98 Entity Identifier Code	M ID 2/2
		Code identifying an organizational entity, a physical location, or an individual	
		BY Buying Party (Purchaser)	
		<i>Use to indicate a government activity that is receiving technical information.</i>	
		KY Technical Office	
		<i>Use to indicate a government activity that is transmitting technical information.</i>	
		SE Selling Party	
		<i>Use to indicate a commercial party that is either transmitting or receiving technical information.</i>	
N102	93	Name	X AN 1/35
		Free-form name	
N103	66	Identification Code Qualifier	X ID 1/2
		Code designating the system/method of code structure used for Identification Code (67)	
		<i>While the federal EDI program uses the DUNS number, other government users of this implementation convention may require the use of other and additional numbers for a transition period in order to cross reference existing data bases.</i>	
		1 D-U-N-S Number, Dun & Bradstreet	
		<i>Use of the DUNS and DUNS +4 number is preferred over other codes to identify an entity.</i>	
		9 D-U-N-S+4, D-U-N-S Number with Four Character Suffix	
		<i>Use of the DUNS and DUNS +4 number is preferred over other codes to identify an entity.</i>	
		10 Department of Defense Activity Address Code (DODAAC)	
		33 Commercial and Government Entity (CAGE)	
N104	67	Identification Code	X AN 2/20
		Code identifying a party or other code	

Segment: **N2** Additional Name Information
Position: 130
Loop: N1
Level: Heading
Usage: Optional
Max Use: 2
Purpose: To specify additional names or those longer than 35 characters in length
Syntax Notes:
Semantic Notes:
Comments:
Notes: *This segment should only be used when N102 is used and it is necessary to provide additional name information.*

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
Must Use	N201	93	Name Free-form name	M AN 1/35
	N202	93	Name Free-form name	O AN 1/35

Segment: **N3** Address Information
Position: 140
Loop: N1
Level: Heading
Usage: Optional
Max Use: 2
Purpose: To specify the location of the named party
Syntax Notes:
Semantic Notes:
Comments:
Notes: *This segment should only be used when N102 is used.*

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	N301	166	Address Information Address information	M AN 1/35
	N302	166	Address Information Address information	O AN 1/35

Segment: **N4 Geographic Location**
Position: 150
Loop: N1
Level: Heading
Usage: Optional
Max Use: 1
Purpose: To specify the geographic place of the named party
Syntax Notes: 1 If N406 is present, then N405 is required.
Semantic Notes:
Comments: 1 A combination of either N401 through N404, or N405 and N406 may be adequate to specify a location.
 2 N402 is required only if city name (N401) is in the U.S. or Canada.
Notes: *This segment should only be used when N102 is used.*

Data Element Summary

<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
N401	19	City Name Free-form text for city name	O AN 2/30
N402	156	State or Province Code Code (Standard State/Province) as defined by appropriate government agency	O ID 2/2
N403	116	Postal Code Code defining international postal zone code excluding punctuation and blanks (zip code for United States)	O ID 3/15
N404	26	Country Code Code identifying the country	O ID 2/3

Segment: **REF** Reference Identification
Position: 160
Loop: N1
Level: Heading
Usage: Optional
Max Use: >1
Purpose: To specify identifying information
Syntax Notes:

- 1 At least one of REF02 or REF03 is required.
- 2 If either C04003 or C04004 is present, then the other is required.
- 3 If either C04005 or C04006 is present, then the other is required.

Semantic Notes:

- 1 REF04 contains data relating to the value cited in REF02.

Comments:
Notes: *When N101 is code SE and the selling party is transmitting technical information, use this segment to identify reference numbers applicable to the selling party.*

Data Element Summary

Ref. Des.	Data Element	Name	Attributes
Must Use REF01	128	Reference Identification Qualifier Code Qualifying the Reference Identification	M ID 2/3
		EL Electronic device pin number <i>1. Use to indicate the identification number assigned to a selling party at the time of registration.</i>	
		TJ Federal Taxpayer's Identification Number <i>2. Use of this code is REQUIRED when the selling party is transmitting technical information.</i>	
		W7 Commercial and Government Entity (CAGE) Code <i>When N101 is code SE and the selling party is transmitting technical information use to indicate the CAGE code of the selling party if N103 is other than code 33.</i>	
REF02	127	Reference Identification Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	X AN 1/30

Segment: **PER Administrative Communications Contact**
Position: 170
Loop: N1
Level: Heading
Usage: Optional
Max Use: >1
Purpose: To identify a person or office to whom administrative communications should be directed
Syntax Notes:

- 1 If either PER03 or PER04 is present, then the other is required.
- 2 If either PER05 or PER06 is present, then the other is required.
- 3 If either PER07 or PER08 is present, then the other is required.

Semantic Notes:
Comments:

Data Element Summary

Ref. Des.	Data Element	Name	Attributes
Must Use PER01	366	Contact Function Code Code identifying the major duty or responsibility of the person or group named IC Information Contact <i>Use to indicate the information point of contact at the location of the party transmitting the technical data.</i>	M ID 2/2
PER02	93	Name Free-form name <i>1. Use to provide the name of the point of contact.</i> <i>2. Cite last name first followed by first name. If the whole name is longer than 35 characters, truncate or use initials for the first name.</i>	O AN 1/35
PER03	365	Communication Number Qualifier Code identifying the type of communication number AU Defense Switched Network EM Electronic Mail FT Federal Telecommunications System (FTS) FX Facsimile IT International Telephone TE Telephone <i>Use to indicate a commercial telephone number.</i> <i>Include the area code.</i>	X ID 2/2
PER04	364	Communication Number Complete communications number including country or area code when applicable	X AN 1/80
PER05	365	Communication Number Qualifier Code identifying the type of communication number <i>Use to identify a second communication number for the party cited in PER02.</i> <i>For example, if PER03/04 cites a telephone number, PER05/06 could cite a FAX number.</i> AU Defense Switched Network EM Electronic Mail EX Telephone Extension <i>Use only if PER03 cites code TE.</i> FT Federal Telecommunications System (FTS) FX Facsimile IT International Telephone TE Telephone <i>Use to indicate a commercial telephone number.</i>	X ID 2/2

Include the area code.

PER06	364	Communication Number	X	AN	1/80
--------------	------------	-----------------------------	----------	-----------	-------------

Complete communications number including country or area code when applicable

PER07	365	Communication Number Qualifier	X	ID	2/2
--------------	------------	---------------------------------------	----------	-----------	------------

Code identifying the type of communication number

Use to identify a third communication number for the party cited in PER02.

AU	Defense Switched Network
----	--------------------------

EM	Electronic Mail
----	-----------------

EX	Telephone Extension
----	---------------------

Use only if PER05 cites code TE.

FT	Federal Telecommunications System (FTS)
----	---

FX	Facsimile
----	-----------

IT	International Telephone
----	-------------------------

TE	Telephone
----	-----------

Use to indicate a commercial telephone number.

Include the area code.

PER08	364	Communication Number	X	AN	1/80
--------------	------------	-----------------------------	----------	-----------	-------------

Complete communications number including country or area code when applicable

PER09	443	Contact Inquiry Reference	O	AN	1/20
--------------	------------	----------------------------------	----------	-----------	-------------

Additional reference number or description to clarify a contact number

Use to identify the title or office symbol of the party identified in PER02.

Segment: **HL Hierarchical Level**
Position: 010
Loop: HL
Level: Detail
Usage: Mandatory
Max Use: 1
Purpose: To identify dependencies among and the content of hierarchically related groups of data segments

Syntax Notes:**Semantic Notes:****Comments:**

- 1 The HL segment is used to identify levels of detail information using a hierarchical structure, such as relating line-item data to shipment data, and packaging data to line-item data.
- 2 HL01 shall contain a unique alphanumeric number for each occurrence of the HL segment in the transaction set. For example, HL01 could be used to indicate the number of occurrences of the HL segment, in which case the value of HL01 would be "1" for the initial HL segment and would be incremented by one in each subsequent HL segment within the transaction.
- 3 HL02 identifies the hierarchical ID number of the HL segment to which the current HL segment is subordinate.
- 4 HL03 indicates the context of the series of segments following the current HL segment up to the next occurrence of an HL segment in the transaction. For example, HL03 is used to indicate that subsequent segments in the HL loop form a logical grouping of data referring to shipment, order, or item-level information.
- 5 HL04 indicates whether or not there are subordinate (or child) HL segments related to the current HL segment.

Notes:

1. When transmitting multiple items that may or may not have a hierarchical relationship, repeat the HL loop as many times as required to specify all levels and use as many iterations of the HL, SPI, and REF loops as necessary.
2. Each file or image transmitted in the BIN segment must be a separate HL loop.

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	HL01	628	Hierarchical ID Number A unique number assigned by the sender to identify a particular data segment in a hierarchical structure <i>This is a unique and progressive number assigned by the originator of the transaction set starting with the number 1 and following with whole numbers 2, 3, 4, etc.</i>	M AN 1/12
	HL02	734	Hierarchical Parent ID Number Identification number of the next higher hierarchical data segment that the data segment being described is subordinate to <i>Use of this data element is REQUIRED when the current HL segment is subordinate to another HL segment. For example, the second HL segment may be subordinate to the first HL segment, therefore, the number 1 would be cited; or the sixth HL segment may be subordinate to the fourth HL segment, therefore, the number 4 would be cited. If an HL segment is not subordinate to another HL segment, this data element is left blank.</i>	O AN 1/12
Must Use	HL03	735	Hierarchical Level Code Code defining the characteristic of a level in a hierarchical structure <i>Use any appropriate listed code to indicate the hierarchical relationship of the transmitted data.</i>	M ID 1/2
		26	Member <i>Use to indicate a section or portion of an award instrument deliverable. A portion of the deliverable is a separate file which is referenced by the base document. The separate file is included in the base document when</i>	

it is processed by the appropriate software. Used only by a contractor when SPI08 in the 1/SPI/020 segment is code KA.

A Assembly
 DG Drawing
 ED Engineering Data List
 F Component
 FR Frame

Use to indicate a drawing sheet frame.

I Item

Use to indicate an item Technical Information Package (TIP). The TIP includes EDLs, drawings, specifications, standards, etc. and may also contain a statement of work (SOW).

IB Contract

RP Report

Use to indicate an award instrument deliverable. This document is the entire deliverable or it is the base document which references additional sections or portions of the document in other HL loops where HL03 cites code 26. If this is the base document, the other portions are included when the base document is processed by the appropriate software. Used only by a contractor when SPI08 in the 1/SPI/020 segment is code KA.

SD Support Document

Use to indicate a specification, standard, engineering change order, bill of materials, technical manual, software application, or other type of list.

SH Sheet

Use to indicate a drawing sheet.

SL Solicitation

SY System

U Subassembly

ZZ Mutually Defined

1. Use to indicate a miscellaneous hierarchical level that cannot be identified by use of any other listed code. When used, this is a stand alone hierarchical level, i.e., it may not be subordinate to any other hierarchical level and cannot have any subordinate hierarchical levels.

2. This code is only used when SPI08 in the 1/SPI/020 segment is code AE.

Must Use HL04

736

Hierarchical Child Code

O ID 1/1

Code indicating if there are hierarchical child data segments subordinate to the level being described

1. Use to identify whether or not there are subordinate HL segments.

2. Use of this data element is REQUIRED.

Refer to 003060 Data Element Dictionary for acceptable code values.

Segment: **SPI** **Specification Identifier**
Position: 020
Loop: SPI
Level: Detail
Usage: Optional
Max Use: 1
Purpose: To provide a description of the included specification or technical data items
Syntax Notes: 1 If either SPI02 or SPI03 is present, then the other is required.
Semantic Notes:
Comments:
Notes: *Use this segment to provide identifying reference numbers for the hierarchical level specified in the HL segment and to identify the government security classification or commercial protection level applicable to the referenced item.*

Data Element Summary

Ref.	Data	Name	Attributes
Des.	Element		
Must Use SPI01	786	Security Level Code Code indicating the level of confidentiality assigned by the sender to the information following <i>1. When this transaction set is originated by a contractor, if the information represented by the identified hierarchical level has both a government security classification and a commercial protection requirement, this data element will carry the government security classification code and the commercial protection code will be carried in SPI09. If the item being transmitted has only one protection requirement, then this data element can carry either the government security classification code or the commercial protection code.</i> <i>2. When the transaction set is originated by the government, this data element may carry either the government security classification or the commercial protection requirement code, as applicable, with the government security classification code taking precedence. In this instance, SPI09 may only cite code 99, when it is necessary to indicate that data referenced in the transaction set is restricted to certified contractors.</i> <i>3. The identified security classification or commercial protection requirement represents the highest classification of the specified hierarchical level.</i>	M ID 2/2
		06 Supplier Proprietary 11 Competition Sensitive 90 Government Non-Classified 92 Government Confidential 93 Government Secret 94 Government Top Secret	
SPI02	128	Reference Identification Qualifier Code Qualifying the Reference Identification <i>Use to identify, by a number, an item represented by the hierarchical level specified in the preceding HL segment.</i> 7K List of Materials <i>1. Use to indicate a List of Materials (LOM) or a Bill of Materials (BOM) number. Identify the contractor applicable to the LOM or BOM in the 2/REF/080 segment citing either code W7 or ZZ in REF01.</i> 7M Frame <i>2. Use when HL03 is code SD.</i> <i>1. Use to indicate a drawing sheet frame number.</i>	X ID 2/3

7P	<p>2. Use when HL03 is code FR. Sheet</p> <p>1. Use to indicate a drawing sheet number.</p>
7Q	<p>2. Use when HL03 is code SH. Engineering Change Order</p> <p>1. Use to indicate an Engineering Change Order number.</p>
89	<p>2. Use when HL03 is code SD. Assembly Number</p> <p>Use when HL03 is code A.</p>
90	<p>Subassembly Number</p> <p>Use when HL03 is code U.</p>
97	<p>Package Number</p> <p>1. Use to indicate a Technical Information Package (TIP).</p>
CT	<p>2. Use when HL03 is code I. Contract Number</p> <p>Use when HL03 is code IB.</p>
DD	<p>Document Identification Code</p> <p>When HL03 is code 26 or RP, use to indicate the number assigned to the deliverable or portion/section of the deliverable. The identifying number for an award instrument deliverable is the Exhibit Line Item Number (ELIN) that requires the deliverable. If necessary, cite the name of the deliverable in SPI04.</p>
DG	<p>Drawing Number</p> <p>1. Use when HL03 is code DG. Identify the contractor applicable to the drawing in the 2/REF/080 segment citing either code W7 or ZZ in REF01.</p> <p>2. When used, there must be at least one 2/REF/080 segment with REF01 citing code KV.</p>
HF	<p>Engineering Data List</p> <p>1. Use to indicate a Engineering Data List (EDL) number. Identify the manufacturer applicable to the EDL in the 2/REF/080 segment using code W7 or ZZ in REF01.</p>
IX	<p>2. Use when HL03 is code ED. Item Number</p> <p>1. Use to indicate the number of a component.</p>
KS	<p>2. Use when HL03 is code F. Solicitation</p> <p>1. Use to indicate the solicitation technical data package number.</p>
MU	<p>2. Use when HL03 is code SL. Military Specification (MILSPEC) Number</p> <p>Use when HL03 is code SD.</p>
NI	<p>Military Standard (MIL-STD) Number</p> <p>Use when HL03 is code SD.</p>

		NJ	Technical Document Number			
			1. Use to indicate the number of a technical manual.			
		S3	Specification Number			
			1. Use to indicate a contractor specification number. Identify the contractor in the 2/REF/080 segment using code W7 or ZZ in REF01.			
		VW	Standard			
			1. Use to indicate a contractor standard number. Identify the contractor in the 2/REF/080 segment citing either code W7 or ZZ in REF01.			
		W2	Weapon System Number			
			1. Use to indicate the number of a system.			
		WF	Locally Assigned Control Number			
			Use to indicate another type of list, e.g., list of circuits that comprise a network. Use only if appropriate when HL03 is code SD. Identify the name of the list in SPI04.			
		ZS	Software Application Number			
			1. Use to indicate a software application. If applicable, identify the contractor applicable to the software application in the 2/REF/080 segment citing either code W7 or ZZ in REF01.			
		ZZ	Mutually Defined			
			1. Use to indicate another type of reference number not associated with any other code. When used, a number or name must be cited in SPI03. SPI04 should be used, if necessary, to further identify the referenced item.			
			2. This code will typically be used when HL03 is code ZZ.			
SPI03	127	Reference Identification		X	AN	1/30
		Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier				
SPI04	790	Entity Title		O	AN	1/132
		Title of the data entity				
		1. When HL03 is code ZZ, use to identify, by name, the item applicable to the hierarchical level.				
		2. If necessary, use to identify the noun name applicable to any item number cited in SPI03.				
SPI06	792	Entity Status Code		O	ID	1/1
		Code indicating the current status of the data item specified by the electronic data item				
		1. When SPI02 is code DD, use to identify the status of a deliverable or of a portion/section of the deliverable.				
		2. When SPI02 is code DG, use to identify the status of a drawing, i.e., current drawing or proposed drawing.				

A

Approved Version

1. When SPI02 is code DD use to indicate a final deliverable.

2. When SPI02 is code DG, use to indicate a current approved drawing.

J

Proposed

1. When SPI02 is code DD, use to indicate a draft deliverable.

2. When SPI02 is code DG, use to indicate a proposed drawing.

SPI09

786

Security Level Code

O ID 2/2

Code indicating the level of confidentiality assigned by the sender to the information following

1. When the transaction set is originated by a contractor, use this data element ONLY when SPI01 is Code 92, 93, or 94 and the information also has a commercial protection requirement.

2. The identified commercial protection level represents the highest classification of the specified hierarchical level.

3. When the transaction set is originated by the government, this data element may cite only code 99, if applicable.

06

Supplier Proprietary

This code is used only by a contractor.

11

Competition Sensitive

This code is used only by a contractor.

99

Government Defined (Trading Partner Level)

1. Use to indicate that information referenced in this transaction set is restricted to certified contractors.

2. This code is used only by the government.

Segment: **RDT** **Revision Date/Time**
Position: 030
Loop: SPI
Level: Detail
Usage: Optional
Max Use: >1
Purpose: To specify the revision level of the electronic data item
Syntax Notes: 1 If RDT01 is present, then RDT02 is required.
 2 If RDT03 is present, then at least one of RDT04 or RDT05 is required.
 3 If RDT06 is present, then RDT05 is required.

Semantic Notes:**Comments:**

Notes: *This segment is used to identify a revision or a version of the data item cited in SPI03. If multiple revisions or versions are being requested and they cannot be identified by use of the specific words in RDT02, use as many repetitions of the RDT segment as required to identify them.*

Data Element Summary

Ref.	Data	Name	Attributes
Des.	Element		
RDT01	795	Revision Level Code	O ID 1/1
		Code indicating the revision or engineering change level of the data items referred to by the specification number	
		E Revision Level	
		<i>Use, if applicable, to indicate a revision of any document, e.g., drawing, standard, specification, etc.</i>	
		H Version Level	
		<i>Use when SPI02 is code ZS.</i>	
RDT02	796	Revision Value	X AN 1/30
		Revision or engineering change level of the data items referred to by the specification number	
RDT03	374	Date/Time Qualifier	O ID 3/3
		Code specifying type of date or time, or both date and time	
		171 Revision	
		<i>Use to indicate the date of the revision.</i>	
		405 Production	
		<i>When SPI02 is code HF, use to indicate the preparation date of an EDL.</i>	
		824 Version	
		<i>Use to indicate the date of the version.</i>	
RDT04	373	Date	X DT 6/6
		Date (YYMMDD)	

Segment: **MSG** Message Text

Position: 050

Loop: SPI

Level: Detail

Usage: Optional

Max Use: >1

Purpose: To provide a free-form format that allows the transmission of text information

Syntax Notes:

Semantic Notes:

Comments: 1 MSG02 is not related to the specific characteristics of a printer, but identifies top of page, advance a line, etc.

Notes:

1. *Use this segment to transmit information applicable to a specific data item.*
2. *When transmitting an EDL, if the data item on the EDL is not available from the government, use this segment to provide that information and to identify, if known, where the item can be obtained.*
3. *Do not use this segment to provide specifications, standards, manuals, instructions, lists, SOWs or any other type of technical information that can be provided in the BIN segment.*

Data Element Summary

Ref.	Data			
Des.	Element	Name	Attributes	
Must Use MSG01	933	Free-Form Message Text	M	AN 1/264
		Free-form message text		

Segment:	REF Reference Identification
Position:	080
Loop:	REF
Level:	Detail
Usage:	Optional
Max Use:	1
Purpose:	To specify identifying information
Syntax Notes:	<ol style="list-style-type: none"> 1 At least one of REF02 or REF03 is required. 2 If either C04003 or C04004 is present, then the other is required. 3 If either C04005 or C04006 is present, then the other is required.
Semantic Notes:	1 REF04 contains data relating to the value cited in REF02.
Comments:	
Notes:	<ol style="list-style-type: none"> 1. Use to identify reference numbers applicable to the item specified in SPI02/03. 2. When SPI02 is code DG, use of this segment is <i>REQUIRED</i> with REF01 citing code KV.

Data Element Summary

Ref. Des.	Data Element	Name	Attributes
Must Use	REF01	128	M ID 2/3
		Reference Identification Qualifier	
		Code Qualifying the Reference Identification	
		2M Federal Communications Commission (FCC) Identifier	
		Use to indicate a circuit number.	
		7S Drawing Type	
		Use to indicate a type of drawing, e.g., assembly, interpretation, installation, etc. Identify the type of drawing in REF03	
		C7 Contract Line Item Number	
		Use to indicate a line item in either a contract or a solicitation.	
		F3 Submission Number	
		When SPI02 is code DD, use to indicate the submission number of the deliverable, e.g., 1, 2, 3, etc., if applicable.	
		GO Exhibit Identifier	
		When SPI02 is code DD, use to indicate the exhibit letter to which the deliverable applies.	
		KV Distribution Statement Code	
		Use to indicate the Distribution Statement Code that is required on all drawings.	
		L6 Subcontract Line Item Number	
		Use to indicate a sub line item in either a contract or a solicitation.	
		NS National Stock Number	
		QZ Reference Drawing Number	
		Use to indicate the reference number found on an Engineering Data List (EDL).	
		W7 Commercial and Government Entity (CAGE) Code	
		When SPI02 is code 7K, DG, S3, VW, or ZS, use to indicate the CAGE code of the manufacturer applicable to the document.	
		ZZ Mutually Defined	
		When SPI02 is code 7K, DG, S3, VW, or ZS, use to indicate the DUNS number of the manufacturer applicable to the document.	

REF02	127	Reference Identification	X	AN	1/30
		Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier			
REF03	352	Description	X	AN	1/80
		A free-form description to clarify the related data elements and their content			
		<i>When REF01 is code 7S, use to identify the type of drawing.</i>			

Segment: **EFI** **Electronic Format Identification**
Position: 140
Loop: EFI
Level: Detail
Usage: Optional
Max Use: 1
Purpose: To provide basic information about the electronic format of the interchange data
Syntax Notes:

- 1 If EFI05 is present, then EFI04 is required.
- 2 If EFI07 is present, then EFI06 is required.
- 3 If EFI09 is present, then EFI08 is required.
- 4 If either EFI15 or EFI16 is present, then the other is required.

Semantic Notes:
Comments:
Notes: *Use this segment to provide information applicable to data being transmitted in the BIN segment or to identify the media and format in which a document is available.*

Data Element Summary

Ref.	Data	Name	Attributes
Des.	Element		
Must Use	EFI01	786 Security Level Code	M ID 2/2
		Code indicating the level of confidentiality assigned by the sender to the information following	
		1. The security level code specified here relates to the specific binary data provided in the BIN segment.	
		2. The security code provided for the binary data being transmitted in the BIN segment is the highest protection level assigned to the data. If the data have both a government security classification and a commercial security protection requirement, the government security classification takes precedence and shall be provided in this data element.	
		06 Supplier Proprietary	
		11 Competition Sensitive	
		90 Government Non-Classified	
		92 Government Confidential	
		93 Government Secret	
		94 Government Top Secret	
EFI02	933	Free-Form Message Text	O AN 1/264
		Free-form message text	
		1. When an Engineering Data List (EDL) is being provided within the transaction set, use to identify the media in which the data identified on the EDL is available. Use only the following words:	
		CARD to indicate data is only available on an aperture card	
		DIGIT to indicate the data is available as a digital file that can be provided on a CD-ROM or transmitted over the DoD network architecture	
		PAPER to indicate the data is only available in hard copy form	
		2. When identifying the media in which data is being provided, use only the following words:	
		NET to indicate transmission via the DoD network architecture	
		CD-ROM to indicate data provided on CD-ROM and delivered by mail	
		CARD to indicate an aperture card is being provided by mail	
		PAPER to indicate the data is being provided in hard copy form	
EFI04	799	Version Identifier	X AN 1/30
		Revision level of a particular format, program, technique or algorithm	

EFI05	802	<p><i>Use to specify the version, e.g., 2.0, 3.2, etc., of the program being used to create the data transmitted in the following BIN segment. This data element pertains to the program identifier specified in EFI05.</i></p> <p>Program Identifier O AN 1/30</p> <p>Identifies the name of the software program from which the technical data originates</p> <p><i>Use to specify the application software program used to create the data being transmitted in the following BIN segment, e.g., TruckCad, Class8Cad, etc.</i></p>
EFI06	799	<p>Version Identifier X AN 1/30</p> <p>Revision level of a particular format, program, technique or algorithm</p> <p><i>Use to identify the specific version of the interchange standard used to transmit the data in the following BIN segment. This data element pertains to the interchange format specified in EFI07.</i></p>
EFI07	801	<p>Interchange Format O AN 1/30</p> <p>Industry or proprietary standard used to identify the format of the data</p> <p><i>Use to identify the format in which the item is available or is being transmitted. When the data format is one of the formats in the following list, use the associated code. Other values may be used only if mutually agreed between the trading partners.</i></p>

CODE

FORMAT

ANSI	ANSI Text - (entire ANSI character set))
ASCII	ASCII TEXT - (letters and numerals only)
BMP	Windows Bitmap
C4	JEDMICS proprietary format
dBASE	Borland dBASE
EXCEL	Microsoft Excel
GIF	Graphics Interchange Format
Harvard	Software Publishing Company Harvard Graphics
HTML	HyperText Markup Language
ISO-10918	Joint Photographics Expert Group (JPEG) - Lossy compression of photographic images
KODAK	Kodak Photo-CD format
LOTUS	Lotus 123
MAC	MacIntosh Apple Application Program
MSDOS	Microsoft DOS Application Program
MIL-D-28000	IGES format
MIL-R-28001	SGML
MIL-R-28002	CALS/Raster format
MIL-D-28003	Computer Graphics Metafile (CGM)
ISO-11172	Motion Pictures Experts Group (MPEG) - Lossy compression of video
PDES	Product Data Exchange Standard - STEP
PDF	Adobe Portable Document Format
PPOINT	Microsoft Powerpoint
PROJECT	Microsoft Project
RTF	Rich Text Format
TIFF	Tagged Interchange File Format
WINDOWS	Microsoft Windows Application Program
WORD	Microsoft Word
WORDP	Novell WordPerfect

EFI08	799	<p>Version Identifier X AN 1/30</p> <p>Revision level of a particular format, program, technique or algorithm</p> <p><i>Use to identify the version of the program used to compress the data</i></p>
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EFI09	800	<p>Compression Technique O AN 1/30</p> <p>Identifies the digital data compression means and the type</p> <p><i>Use to identify the compression method, if any, applied to the data transmitted in the following BIN segment. Examples include TR, Moyer, Fish, PKZIP, etc.</i></p>
EFI10	789	<p>Drawing Sheet Size Code O AN 2/2</p> <p>Code indicating the drawing size and orientation of a technical drawing as specified and described in the current version of standards ANSI Y14.1 and ISO 5457 (E); see the listed ANSI and ISO standards for the maximum lengths for rolled sheets *</p> <p><i>1. Use to specify the drawing sheet size.</i></p> <p><i>2. Use any code.</i></p> <p>Refer to 003060 Data Element Dictionary for acceptable code values.</p>
EFI11	803	<p>File Name O AN 1/64</p> <p>Name assigned or declared for a file or used by a program to identify a file; exact format of the name depends on the computer operating system being used; name also may be known as the file's "data set name"</p> <p><i>Format of the file name must conform to ISO 9660 standard, i.e., 8.3 format (8 character file name followed by a 3 character extension with the dot passed. Leading spaces are not passed).</i></p>
EFI13	787	<p>Record Length O N 1/15</p> <p>Quantity of characters or bytes in a record. Synonyms are "logical record length" and "record size"</p> <p><i>Use to identify the size of a file.</i></p>

Segment: **BIN** Binary Data
Position: 160
Loop: EFI
Level: Detail
Usage: Mandatory
Max Use: 1
Purpose: To transfer binary data in a single data segment and allow identification of the end of the data segment through a count; there is no identification of the internal structure of the binary data in this segment

Syntax Notes:
Semantic Notes:
Comments:

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
Must Use	BIN01	784	Length of Binary Data The length in integral octets of the binary data <i>When SPI02 is code HF, cite the number one (1) to comply with the mandatory nature of this data element.</i>	M N0 1/15
Must Use	BIN02	785	Binary Data A string of octets which can assume any binary pattern from hexadecimal 00 to FF <i>When SPI02 is code HF, cite the number zero (0) to comply with the mandatory nature of this data element.</i>	M B 1/1

Segment: **SE** Transaction Set Trailer
Position: 010
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>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	SE01	96	Number of Included Segments Total number of segments included in a transaction set including ST and SE segments	M N0 1/10
Must Use	SE02	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 <i>Cite the same number carried in ST02.</i>	M AN 4/9

NIST Technical Publications

Periodical

Journal of Research of the National Institute of Standards and Technology—Reports NIST research and development in those disciplines of the physical and engineering sciences in which the Institute is active. These include physics, chemistry, engineering, mathematics, and computer sciences. Papers cover a broad range of subjects, with major emphasis on measurement methodology and the basic technology underlying standardization. Also included from time to time are survey articles on topics closely related to the Institute's technical and scientific programs. Issued six times a year.

Nonperiodicals

Monographs—Major contributions to the technical literature on various subjects related to the Institute's scientific and technical activities.

Handbooks—Recommended codes of engineering and industrial practice (including safety codes) developed in cooperation with interested industries, professional organizations, and regulatory bodies.

Special Publications—Include proceedings of conferences sponsored by NIST, NIST annual reports, and other special publications appropriate to this grouping such as wall charts, pocket cards, and bibliographies.

National Standard Reference Data Series—Provides quantitative data on the physical and chemical properties of materials, compiled from the world's literature and critically evaluated. Developed under a worldwide program coordinated by NIST under the authority of the National Standard Data Act (Public Law 90-396). NOTE: The Journal of Physical and Chemical Reference Data (JPCRD) is published bimonthly for NIST by the American Chemical Society (ACS) and the American Institute of Physics (AIP). Subscriptions, reprints, and supplements are available from ACS, 1155 Sixteenth St., NW, Washington, DC 20056.

Building Science Series—Disseminates technical information developed at the Institute on building materials, components, systems, and whole structures. The series presents research results, test methods, and performance criteria related to the structural and environmental functions and the durability and safety characteristics of building elements and systems.

Technical Notes—Studies or reports which are complete in themselves but restrictive in their treatment of a subject. Analogous to monographs but not so comprehensive in scope or definitive in treatment of the subject area. Often serve as a vehicle for final reports of work performed at NIST under the sponsorship of other government agencies.

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