

Portland General Electric  
Implementation  
Standard  
  
for  
  
Electronic  
Data  
Interchange

TRANSACTION SET

810

Ver/Rel 004010

Invoice

Outbound to Vendor

# 810 Invoice

Functional Group ID=**IN**

## Introduction:

This Draft Standard for Trial Use contains the format and establishes the data contents of the Invoice Transaction Set (810) for use within the context of an Electronic Data Interchange (EDI) environment. The transaction set can be used to provide for customary and established business and industry practice relative to the billing for goods and services provided.

## Heading:

Page No.	Pos. No.	Seg. ID	Name	Req. Des.	Max.Use	Loop Repeat	Notes and Comments
4	010	ST	Transaction Set Header	M	1		
5	020	BIG	Beginning Segment for Invoice	M	1		
6	030	NTE	Note/Special Instruction	O	100		
LOOP ID - N1						200	
7	070	N1	Name	O	1		
8	080	N2	Additional Name Information	O	2		
9	090	N3	Address Information	O	2		
10	100	N4	Geographic Location	O	1		
11	110	REF	Reference Identification	O	12		
12	120	PER	Administrative Communications Contact	O	3		
13	130	ITD	Terms of Sale/Deferred Terms of Sale	O	>1		
14	140	DTM	Date/Time Reference	O	10		

## Detail:

Page No.	Pos. No.	Seg. ID	Name	Req. Des.	Max.Use	Loop Repeat	Notes and Comments
LOOP ID - IT1						200000	
15	010	IT1	Baseline Item Data (Invoice)	O	1		
17	059	MEA	Measurements	O	40		
18	120	REF	Reference Identification	O	>1		
19	150	DTM	Date/Time Reference	O	10		
LOOP ID - SLN						1000	
20	200	SLN	Subline Item Detail	O	1		
21	230	SAC	Service, Promotion, Allowance, or Charge Information	O	25		
LOOP ID - N1						200	
23	240	N1	Name	O	1		
24	260	N3	Address Information	O	2		
25	270	N4	Geographic Location	O	1		

## Summary:

Page No.	Pos. No.	Seg. ID	Name	Req. Des.	Max.Use	Loop Repeat	Notes and Comments
26	010	TDS	Total Monetary Value Summary	M	1		

27	020	TXI	Tax Information	O	10	
			LOOP ID - SAC			25
28	040	SAC	Service, Promotion, Allowance, or Charge Information	O	1	
30	070	CTT	Transaction Totals	O	1	n1
31	080	SE	Transaction Set Trailer	M	1	

### Transaction Set Notes

1. Number of line items (CTT01) is the accumulation of the number of IT1 segments. If used, hash total (CTT02) is the sum of the value of quantities invoiced (IT102) for each IT1 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) is 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>
M	ST01	143	<b>Transaction Set Identifier Code</b> Code uniquely identifying a Transaction Set Refer to 004010 Data Element Dictionary for acceptable code values.	M ID 3/3
M	ST02	329	<b>Transaction Set Control Number</b> Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set	M AN 4/9

**Segment:** **BIG** Beginning Segment for Invoice  
**Position:** 020  
**Loop:**  
**Level:** Heading  
**Usage:** Mandatory  
**Max Use:** 1  
**Purpose:** To indicate the beginning of an invoice transaction set and transmit identifying numbers and dates

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

- 1 BIG01 is the invoice issue date.
- 2 BIG03 is the date assigned by the purchaser to purchase order.
- 3 BIG10 indicates the consolidated invoice number. When BIG07 contains code CI, BIG10 is not used.

**Comments:** 1 BIG07 is used only to further define the type of invoice when needed.

**Data Element Summary**

Ref.	Data	Name	Attributes
<u>Des.</u>	<u>Element</u>	<u>Name</u>	<u>Attributes</u>
M	BIG01	373 Date	M DT 8/8
		Date expressed as CCYYMMDD	
M	BIG02	76 Invoice Number	M AN 1/22
		Identifying number assigned by issuer	
	BIG04	324 Purchase Order Number	O AN 1/22
		Identifying number for Purchase Order assigned by the orderer/purchaser	
		'UTILITY'	
	BIG07	640 Transaction Type Code	O ID 2/2
		Code specifying the type of transaction	
		PR Product (or Service)	
	BIG08	353 Transaction Set Purpose Code	O ID 2/2
		Code identifying purpose of transaction set	
		00 Original	

**Segment:** **NTE** Note/Special Instruction  
**Position:** 030  
**Loop:**  
**Level:** Heading  
**Usage:** Optional  
**Max Use:** 100  
**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:** \*\*\*\*\* NOTE \*\*\*\*\*  
 Customer Notices: rate hikes, planned service interruptions, line repairs, etc

**Data Element Summary**

<u>Ref.</u>	<u>Data</u>	<u>Name</u>	<u>Attributes</u>
M	<u>Des.</u> NTE02	<u>Element</u> 352 <u>Description</u>	M AN 1/80
		A free-form description to clarify the related data elements and their content	

**Segment:** **N1** Name  
**Position:** 070  
**Loop:** N1 Optional  
**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.

**Data Element Summary**

Ref.	Data Element	Name	Attributes
M	<b>N101</b>	<b>98 Entity Identifier Code</b>	<b>M ID 2/3</b>
		Code identifying an organizational entity, a physical location, property or an individual	
		BT Bill-to-Party	
		RE Party to receive commercial invoice remittance	
	<b>N102</b>	<b>93 Name</b>	<b>X AN 1/60</b>
		Free-form name	
	<b>N103</b>	<b>66 Identification Code Qualifier</b>	<b>X ID 1/2</b>
		Code designating the system/method of code structure used for Identification Code (67)	
		9 D-U-N-S+4, D-U-N-S Number with Four Character Suffix	
		91 Assigned by Seller or Seller's Agent	
	<b>N104</b>	<b>67 Identification Code</b>	<b>X AN 2/80</b>
		Code identifying a party or other code	

**Segment:** **N2** Additional Name Information  
**Position:** 080  
**Loop:** N1 Optional  
**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:**

**Data Element Summary**

	<u>Ref.</u>	<u>Data</u>	<u>Name</u>	<u>Attributes</u>
M	N201	93	Name Free-form name	M AN 1/60



**Segment:** **N3** Address Information  
**Position:** 090  
**Loop:** N1 Optional  
**Level:** Heading  
**Usage:** Optional  
**Max Use:** 2  
**Purpose:** To specify the location of the named party  
**Syntax Notes:**  
**Semantic Notes:**  
**Comments:**

**Data Element Summary**

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
M	N301	166	Address Information Address information	M AN 1/55
	N302	166	Address Information Address information	O AN 1/55

<b>Segment:</b>	<b>N4 Geographic Location</b>
<b>Position:</b>	100
<b>Loop:</b>	N1 Optional
<b>Level:</b>	Heading
<b>Usage:</b>	Optional
<b>Max Use:</b>	1
<b>Purpose:</b>	To specify the geographic place of the named party
<b>Syntax Notes:</b>	1 If N406 is present, then N405 is required.
<b>Semantic Notes:</b>	
<b>Comments:</b>	<ol style="list-style-type: none"> <li>1 A combination of either N401 through N404, or N405 and N406 may be adequate to specify a location.</li> <li>2 N402 is required only if city name (N401) is in the U.S. or Canada.</li> </ol>

#### Data Element Summary

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

**Segment:** **REF** Reference Identification  
**Position:** 110  
**Loop:** N1 Optional  
**Level:** Heading  
**Usage:** Optional  
**Max Use:** 12  
**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:**

\*\*\*\*\* NOTE \*\*\*\*\*  
  
 This segment has been requested specifically by one Trading Partner for exchange of Trading Partner specific information

**Data Element Summary**

<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
REF01	128	Reference Identification Qualifier	O ID 2/3
		Code qualifying the Reference Identification	
		Trading Partner Specific Segment	
		12 Billing Account	
		Account number under which billing is rendered	
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	
		Trading Partner Specific Segment	

**Segment:** **PER** **Administrative Communications Contact**

**Position:** 120

**Loop:** N1 Optional

**Level:** Heading

**Usage:** Optional

**Max Use:** 3

**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

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
M	PER01	366	<b>Contact Function Code</b> Code identifying the major duty or responsibility of the person or group named CR Customer Relations	M ID 2/2
	PER03	365	<b>Communication Number Qualifier</b> Code identifying the type of communication number TE Telephone	X ID 2/2
	PER04	364	<b>Communication Number</b> Complete communications number including country or area code when applicable	X AN 1/80

<b>Segment:</b>	<b>ITD</b> Terms of Sale/Deferred Terms of Sale
<b>Position:</b>	130
<b>Loop:</b>	
<b>Level:</b>	Heading
<b>Usage:</b>	Optional
<b>Max Use:</b>	>1
<b>Purpose:</b>	To specify terms of sale
<b>Syntax Notes:</b>	<ol style="list-style-type: none"> <li>1 If ITD03 is present, then at least one of ITD04 ITD05 or ITD13 is required.</li> <li>2 If ITD08 is present, then at least one of ITD04 ITD05 or ITD13 is required.</li> <li>3 If ITD09 is present, then at least one of ITD10 or ITD11 is required.</li> </ol>
<b>Semantic Notes:</b>	<ol style="list-style-type: none"> <li>1 ITD15 is the percentage applied to a base amount used to determine a late payment charge.</li> </ol>
<b>Comments:</b>	<ol style="list-style-type: none"> <li>1 If the code in ITD01 is "04", then ITD07 or ITD09 is required and either ITD10 or ITD11 is required; if the code in ITD01 is "05", then ITD06 or ITD07 is required.</li> </ol>

#### Data Element Summary

<u>Ref.</u>	<u>Data</u>	<u>Name</u>	<u>Attributes</u>
<b>ITD01</b>	<b>336</b>	<b>Terms Type Code</b>	<b>O ID 2/2</b>
		Code identifying type of payment terms	
		05 Discount Not Applicable	
<b>ITD02</b>	<b>333</b>	<b>Terms Basis Date Code</b>	<b>O ID 1/2</b>
		Code identifying the beginning of the terms period	
		4 Specified Date	
<b>ITD03</b>	<b>338</b>	<b>Terms Discount Percent</b>	<b>O R 1/6</b>
		Terms discount percentage, expressed as a percent, available to the purchaser if an invoice is paid on or before the Terms Discount Due Date	
<b>ITD06</b>	<b>446</b>	<b>Terms Net Due Date</b>	<b>O DT 8/8</b>
		Date when total invoice amount becomes due expressed in format CCYYMMDD	

**Segment:** **DTM** **Date/Time Reference**  
**Position:** 140  
**Loop:**  
**Level:** Heading  
**Usage:** Optional  
**Max Use:** 10  
**Purpose:** To specify pertinent dates and times  
**Syntax Notes:**

- 1 At least one of DTM02 DTM03 or DTM05 is required.
- 2 If DTM04 is present, then DTM03 is required.
- 3 If either DTM05 or DTM06 is present, then the other is required.

**Semantic Notes:**

**Comments:**

**Notes:**

\*\*\*\*\* NOTE \*\*\*\*\*

This segment has been requested specifically by one Trading Partner for exchange of Trading Partner specific information

**Data Element Summary**

Ref.	Data			Attributes
<u>Des.</u>	<u>Element</u>	<u>Name</u>		
M	DTM01	374	<b>Date/Time Qualifier</b>	M ID 3/3
			Code specifying type of date or time, or both date and time	
		186	Invoice Period Start	
			When the billing period covered by an invoice begins	
		187	Invoice Period End	
			When the billing period covered by an invoice ends	
		514	Transferred	
	DTM02	373	<b>Date</b>	X DT 8/8
			Date expressed as CCYYMMDD	
	DTM05	1250	<b>Date Time Period Format Qualifier</b>	X ID 2/3
			Code indicating the date format, time format, or date and time format	
		D8	Date Expressed in Format CCYYMMDD	
	DTM06	1251	<b>Date Time Period</b>	X AN 1/35
			Expression of a date, a time, or range of dates, times or dates and times	

- Segment:** **IT1** **Baseline Item Data (Invoice)**
- Position:** 010
- Loop:** IT1 Optional
- Level:** Detail
- Usage:** Optional
- Max Use:** 1
- Purpose:** To specify the basic and most frequently used line item data for the invoice and related transactions
- Syntax Notes:**
- 1 If any of IT102 IT103 or IT104 is present, then all are required.
  - 2 If either IT106 or IT107 is present, then the other is required.
  - 3 If either IT108 or IT109 is present, then the other is required.
  - 4 If either IT110 or IT111 is present, then the other is required.
  - 5 If either IT112 or IT113 is present, then the other is required.
  - 6 If either IT114 or IT115 is present, then the other is required.
  - 7 If either IT116 or IT117 is present, then the other is required.
  - 8 If either IT118 or IT119 is present, then the other is required.
  - 9 If either IT120 or IT121 is present, then the other is required.
  - 10 If either IT122 or IT123 is present, then the other is required.
  - 11 If either IT124 or IT125 is present, then the other is required.
- Semantic Notes:**
- 1 IT101 is the purchase order line item identification.
- Comments:**
- 1 Element 235/234 combinations should be interpreted to include products and/or services. See the Data Dictionary for a complete list of IDs.
  - 2 IT106 through IT125 provide for ten 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**

<u>Ref.</u>	<u>Data</u>	<u>Name</u>	<u>Attributes</u>
<u>Des.</u>	<u>Element</u>		
IT101	350	<b>Assigned Identification</b> Alphanumeric characters assigned for differentiation within a transaction set BTC001 is Energy + Demand BTC002 is Energy only BTC003 is Energy + Demand +KVAR	O AN 1/20
IT102	358	<b>Quantity Invoiced</b> Number of units invoiced (supplier units)	X R 1/10
IT103	355	<b>Unit or Basis for Measurement Code</b> Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken KH Kilowatt Hour	X ID 2/2
IT104	212	<b>Unit Price</b> Price per unit of product, service, commodity, etc.	X R 1/17
IT106	235	<b>Product/Service ID Qualifier</b> Code identifying the type/source of the descriptive number used in Product/Service ID (234) SV Service Rendered	X ID 2/2
IT107	234	<b>Product/Service ID</b> Identifying number for a product or service 'ELECTRIC'	X AN 1/48
IT108	235	<b>Product/Service ID Qualifier</b> Code identifying the type/source of the descriptive number used in Product/Service ID (234) ***** NOTE ***** This element has been requested specifically by one Trading Partner for	X ID 2/2

exchange of Trading Partner specific information

**IT109**      **234**      C3                      Classification                      **X**      **AN 1/48**  
**Product/Service ID**

Identifying number for a product or service

\*\*\*\*\* NOTE \*\*\*\*\*  
  
This element has been requested specifically by one Trading Partner for exchange of Trading Partner specific information  
  
'ACCOUNT'



<b>Segment:</b>	<b>MEA</b> Measurements
<b>Position:</b>	059
<b>Loop:</b>	IT1 Optional
<b>Level:</b>	Detail
<b>Usage:</b>	Optional
<b>Max Use:</b>	40
<b>Purpose:</b>	To specify physical measurements or counts, including dimensions, tolerances, variances, and weights (See Figures Appendix for example of use of C001)
<b>Syntax Notes:</b>	<ol style="list-style-type: none"> <li>1 At least one of MEA03 MEA05 MEA06 or MEA08 is required.</li> <li>2 If MEA05 is present, then MEA04 is required.</li> <li>3 If MEA06 is present, then MEA04 is required.</li> <li>4 If MEA07 is present, then at least one of MEA03 MEA05 or MEA06 is required.</li> <li>5 Only one of MEA08 or MEA03 may be present.</li> </ol>
<b>Semantic Notes:</b>	1 MEA04 defines the unit of measure for MEA03, MEA05, and MEA06.
<b>Comments:</b>	1 When citing dimensional tolerances, any measurement requiring a sign (+ or -), or any measurement where a positive (+) value cannot be assumed, use MEA05 as the negative (-) value and MEA06 as the positive (+) value.

#### Data Element Summary

<u>Ref.</u>	<u>Data</u>	<u>Name</u>	<u>Attributes</u>
<u>Des.</u>	<u>Element</u>		
MEA01	737	<b>Measurement Reference ID Code</b>	<b>O ID 2/2</b>
		Code identifying the broad category to which a measurement applies	
		AA Meter reading-beginning actual/ending actual	
		AN Work	
		BD Billed Dimensions	
		EE Meter reading-beginning estimated/ending estimated	
MEA02	738	<b>Measurement Qualifier</b>	<b>O ID 1/3</b>
		Code identifying a specific product or process characteristic to which a measurement applies	
		MU Multiplier	
MEA03	739	<b>Measurement Value</b>	<b>X R 1/20</b>
		The value of the measurement	
MEA04	C001	<b>Composite Unit of Measure</b>	<b>X</b>
		To identify a composite unit of measure (See Figures Appendix for examples of use)	
M	C00101	<b>Unit or Basis for Measurement Code</b>	<b>M ID 2/2</b>
		Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken	
		EA Each	
		K1 Kilowatt Demand	
		Represents potential power load measured at predetermined intervals	
		KH Kilowatt Hour	
MEA05	740	<b>Range Minimum</b>	<b>X R 1/20</b>
		The value specifying the minimum of the measurement range	
MEA06	741	<b>Range Maximum</b>	<b>X R 1/20</b>
		The value specifying the maximum of the measurement range	

**Segment:** **REF** **Reference Identification**  
**Position:** 120  
**Loop:** IT1 Optional  
**Level:** Detail  
**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:**

**Data Element Summary**

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
M	REF01	128	<b>Reference Identification Qualifier</b> Code qualifying the Reference Identification	M ID 2/3
			AA Accounts Receivable Statement Number	
			LU Location Number	
			'POD' is point of delivery id number	
			MG Meter Number	
			RB Rate code number	
			ZZ Mutually Defined	
			Direct Access account designation	
	REF02	127	<b>Reference Identification</b> Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	X AN 1/30

**Segment:** **DTM** **Date/Time Reference**  
**Position:** 150  
**Loop:** IT1 Optional  
**Level:** Detail  
**Usage:** Optional  
**Max Use:** 10  
**Purpose:** To specify pertinent dates and times  
**Syntax Notes:**

- 1 At least one of DTM02 DTM03 or DTM05 is required.
- 2 If DTM04 is present, then DTM03 is required.
- 3 If either DTM05 or DTM06 is present, then the other is required.

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

**Data Element Summary**

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
M	DTM01	374	<b>Date/Time Qualifier</b> Code specifying type of date or time, or both date and time Codes 150, 151 and 514 are Trading Partner Specific	M ID 3/3
		150	Service Period Start This element code restricted to specific Trading Partner	
		151	Service Period End This element code restricted to specific Trading Partner	
		186	Invoice Period Start When the billing period covered by an invoice begins	
		187	Invoice Period End When the billing period covered by an invoice ends	
		514	Transferred This element code restricted to specific Trading Partner	
	DTM02	373	<b>Date</b> Date expressed as CCYYMMDD	X DT 8/8

**Segment:** **SLN** Subline Item Detail

**Position:** 200

**Loop:** SLN Optional

**Level:** Detail

**Usage:** Optional

**Max Use:** 1

**Purpose:** To specify product subline detail item data

**Syntax Notes:**

- 1 If either SLN04 or SLN05 is present, then the other is required.
- 2 If SLN07 is present, then SLN06 is required.
- 3 If SLN08 is present, then SLN06 is required.
- 4 If either SLN09 or SLN10 is present, then the other is required.
- 5 If either SLN11 or SLN12 is present, then the other is required.
- 6 If either SLN13 or SLN14 is present, then the other is required.
- 7 If either SLN15 or SLN16 is present, then the other is required.
- 8 If either SLN17 or SLN18 is present, then the other is required.
- 9 If either SLN19 or SLN20 is present, then the other is required.
- 10 If either SLN21 or SLN22 is present, then the other is required.
- 11 If either SLN23 or SLN24 is present, then the other is required.
- 12 If either SLN25 or SLN26 is present, then the other is required.
- 13 If either SLN27 or SLN28 is present, then the other is required.

**Semantic Notes:**

- 1 SLN01 is the identifying number for the subline item.
- 2 SLN02 is the identifying number for the subline level. The subline level is analogous to the level code used in a bill of materials.
- 3 SLN03 is the configuration code indicating the relationship of the subline item to the baseline item.
- 4 SLN08 is a code indicating the relationship of the price or amount to the associated segment.

**Comments:**

- 1 See the Data Element Dictionary for a complete list of IDs.
- 2 SLN01 is related to (but not necessarily equivalent to) the baseline item number. Example: 1.1 or 1A might be used as a subline number to relate to baseline number 1.
- 3 SLN09 through SLN28 provide for ten 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**

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
M	SLN01	350	<b>Assigned Identification</b> Alphanumeric characters assigned for differentiation within a transaction set	<b>M AN 1/20</b>
	SLN02	350	<b>Assigned Identification</b> Alphanumeric characters assigned for differentiation within a transaction set	<b>O AN 1/20</b>
M	SLN03	662	<b>Relationship Code</b> Code indicating the relationship between entities A Add	<b>M ID 1/1</b>

- Segment:** **SAC** Service, Promotion, Allowance, or Charge Information
- Position:** 230
- Loop:** SLN Optional
- Level:** Detail
- Usage:** Optional
- Max Use:** 25
- Purpose:** To request or identify a service, promotion, allowance, or charge; to specify the amount or percentage for the service, promotion, allowance, or charge
- Syntax Notes:**
- 1 At least one of SAC02 or SAC03 is required.
  - 2 If either SAC03 or SAC04 is present, then the other is required.
  - 3 If either SAC06 or SAC07 is present, then the other is required.
  - 4 If either SAC09 or SAC10 is present, then the other is required.
  - 5 If SAC11 is present, then SAC10 is required.
  - 6 If SAC13 is present, then at least one of SAC02 or SAC04 is required.
  - 7 If SAC14 is present, then SAC13 is required.
  - 8 If SAC16 is present, then SAC15 is required.
- Semantic Notes:**
- 1 If SAC01 is "A" or "C", then at least one of SAC05, SAC07, or SAC08 is required.
  - 2 SAC05 is the total amount for the service, promotion, allowance, or charge. If SAC05 is present with SAC07 or SAC08, then SAC05 takes precedence.
  - 3 SAC08 is the allowance or charge rate per unit.
  - 4 SAC10 and SAC11 is the quantity basis when the allowance or charge quantity is different from the purchase order or invoice quantity. SAC10 and SAC11 used together indicate a quantity range, which could be a dollar amount, that is applicable to service, promotion, allowance, or charge.
  - 5 SAC13 is used in conjunction with SAC02 or SAC04 to provide a specific reference number as identified by the code used.
  - 6 SAC14 is used in conjunction with SAC13 to identify an option when there is more than one option of the promotion.
  - 7 SAC16 is used to identify the language being used in SAC15.
- Comments:**
- 1 SAC04 may be used to uniquely identify the service, promotion, allowance, or charge. In addition, it may be used in conjunction to further the code in SAC02.
  - 2 In some business applications, it is necessary to advise the trading partner of the actual dollar amount that a particular allowance, charge, or promotion was based on to reduce ambiguity. This amount is commonly referred to as "Dollar Basis Amount". It is represented in the SAC segment in SAC10 using the qualifier "DO" - Dollars in SAC09.

**Data Element Summary**

Ref.	Data Element	Name	Attributes
M	SAC01	248 Allowance or Charge Indicator	M ID 1/1
		Code which indicates an allowance or charge for the service specified	
		A Allowance	
		C Charge	
	SAC03	559 Agency Qualifier Code	X ID 2/2
		Code identifying the agency assigning the code values	
		EU Electric Utilities	
	SAC04	1301 Agency Service, Promotion, Allowance, or Charge Code	X AN 1/10
		Agency maintained code identifying the service, promotion, allowance, or charge	
		ADJ000 Adjustment	
		BAS000 Customer Administrative Charge	
		CRE001 Credit	
		DIS001 Distribution Charge	
		DMD001 Demand Charge	
		DMD006 Demand - Off Peak	

DMD007	Demand - On Peak
DMD008	Demand - Intermediate Peak
ENC000	Energy Charge - SAC15 Description
ENC001	Energy Charge
ENC003	Energy Charge - Off Peak
ENC039	Energy Charge - On Peak
LPC001	Late Payment Charge
MSC000	Miscellaneous Charge - SAC15 Description
MSC001	Charge not covered under any other category
MSC023	Amount collect on behalf of public entity
MSC024	Miscellaneous Charge - State Mandated Assistance Program Funds Collections
ODL001	Flat Rate Charge - Outdoor Lighting
PRB002	Prior Balance
TRN001	Transmission Charge

<b>SAC05</b>	<b>610</b>	<b>Amount</b>	<b>O N2 1/15</b>
		Monetary amount	
<b>SAC08</b>	<b>118</b>	<b>Rate</b>	<b>O R 1/9</b>
		Rate expressed in the standard monetary denomination for the currency specified	
<b>SAC09</b>	<b>355</b>	<b>Unit or Basis for Measurement Code</b>	<b>X ID 2/2</b>
		Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken	
		EA Each	
		K1 Kilowatt Demand	
		Represents potential power load measured at predetermined intervals	
		K2 Kilovolt Amperes Reactive Demand	
		Reactive power that must be supplied for specific types of customer's equipment; billable when kilowatt demand usage meets or exceeds a defined parameter	
		KH Kilowatt Hour	
<b>SAC10</b>	<b>380</b>	<b>Quantity</b>	<b>X R 1/15</b>
		Numeric value of quantity	
<b>SAC11</b>	<b>380</b>	<b>Quantity</b>	<b>O R 1/15</b>
		Numeric value of quantity	
<b>SAC13</b>	<b>127</b>	<b>Reference Identification</b>	<b>X AN 1/30</b>
		Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	
<b>SAC15</b>	<b>352</b>	<b>Description</b>	<b>X AN 1/80</b>
		A free-form description to clarify the related data elements and their content	

**Segment:** **N1** Name  
**Position:** 240  
**Loop:** N1 Optional  
**Level:** Detail  
**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.

**Data Element Summary**

Ref.	Data Element	Name	Attributes
M	<b>N101</b>	<b>98 Entity Identifier Code</b> Code identifying an organizational entity, a physical location, property or an individual MQ Metering Location	<b>M ID 2/3</b>
	<b>N102</b>	<b>93 Name</b> Free-form name	<b>X AN 1/60</b>
	<b>N103</b>	<b>66 Identification Code Qualifier</b> Code designating the system/method of code structure used for Identification Code (67) 92 Assigned by Buyer or Buyer's Agent This element code restricted to specific Trading Partner	<b>X ID 1/2</b>
	<b>N104</b>	<b>67 Identification Code</b> Code identifying a party or other code This element code restricted to specific Trading Partner	<b>X AN 2/80</b>

**Segment:** **N3** Address Information  
**Position:** 260  
**Loop:** N1 Optional  
**Level:** Detail  
**Usage:** Optional  
**Max Use:** 2  
**Purpose:** To specify the location of the named party  
**Syntax Notes:**  
**Semantic Notes:**  
**Comments:**

**Data Element Summary**

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
M	N301	166	<b>Address Information</b> Address information	M AN 1/55
	N302	166	<b>Address Information</b> Address information	O AN 1/55



**Segment:** **N4 Geographic Location**  
**Position:** 270  
**Loop:** N1 Optional  
**Level:** Detail  
**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.

#### Data Element Summary

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

**Segment:** **TDS** Total Monetary Value Summary  
**Position:** 010  
**Loop:**  
**Level:** Summary  
**Usage:** Mandatory  
**Max Use:** 1  
**Purpose:** To specify the total invoice discounts and amounts  
**Syntax Notes:**  
**Semantic Notes:**

- 1 TDS01 is the total amount of invoice (including charges, less allowances) before terms discount (if discount is applicable).
- 2 TDS02 indicates the amount upon which the terms discount amount is calculated.
- 3 TDS03 is the amount of invoice due if paid by terms discount due date (total invoice or installment amount less cash discount).
- 4 TDS04 indicates the total amount of terms discount.

**Comments:**

- 1 TDS02 is required if the dollar value subject to discount is not equal to the dollar value of TDS01.

**Data Element Summary**

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
M	TDS01	610	Amount Monetary amount	M N2 1/15

**Segment:** **TXI** Tax Information  
**Position:** 020  
**Loop:**  
**Level:** Summary  
**Usage:** Optional  
**Max Use:** 10  
**Purpose:** To specify tax information  
**Syntax Notes:**

- 1 At least one of TXI02 TXI03 or TXI06 is required.
- 2 If either TXI04 or TXI05 is present, then the other is required.
- 3 If TXI08 is present, then TXI03 is required.

**Semantic Notes:**

- 1 TXI02 is the monetary amount of the tax.
- 2 TXI03 is the tax percent expressed as a decimal.
- 3 TXI07 is a code indicating the relationship of the price or amount to the associated segment.

**Comments:**

**Data Element Summary**

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
M	TXI01	963	Tax Type Code Code specifying the type of tax CA City Tax Service Tax imposed by City CT County Tax	M ID 2/2
	TXI02	782	Monetary Amount Monetary amount	X R 1/18

- Segment:** **SAC** Service, Promotion, Allowance, or Charge Information
- Position:** 040
- Loop:** SAC Optional
- Level:** Summary
- Usage:** Optional
- Max Use:** 1
- Purpose:** To request or identify a service, promotion, allowance, or charge; to specify the amount or percentage for the service, promotion, allowance, or charge
- Syntax Notes:**
- 1 At least one of SAC02 or SAC03 is required.
  - 2 If either SAC03 or SAC04 is present, then the other is required.
  - 3 If either SAC06 or SAC07 is present, then the other is required.
  - 4 If either SAC09 or SAC10 is present, then the other is required.
  - 5 If SAC11 is present, then SAC10 is required.
  - 6 If SAC13 is present, then at least one of SAC02 or SAC04 is required.
  - 7 If SAC14 is present, then SAC13 is required.
  - 8 If SAC16 is present, then SAC15 is required.
- Semantic Notes:**
- 1 If SAC01 is "A" or "C", then at least one of SAC05, SAC07, or SAC08 is required.
  - 2 SAC05 is the total amount for the service, promotion, allowance, or charge. If SAC05 is present with SAC07 or SAC08, then SAC05 takes precedence.
  - 3 SAC08 is the allowance or charge rate per unit.
  - 4 SAC10 and SAC11 is the quantity basis when the allowance or charge quantity is different from the purchase order or invoice quantity. SAC10 and SAC11 used together indicate a quantity range, which could be a dollar amount, that is applicable to service, promotion, allowance, or charge.
  - 5 SAC13 is used in conjunction with SAC02 or SAC04 to provide a specific reference number as identified by the code used.
  - 6 SAC14 is used in conjunction with SAC13 to identify an option when there is more than one option of the promotion.
  - 7 SAC16 is used to identify the language being used in SAC15.
- Comments:**
- 1 SAC04 may be used to uniquely identify the service, promotion, allowance, or charge. In addition, it may be used in conjunction to further the code in SAC02.
  - 2 In some business applications, it is necessary to advise the trading partner of the actual dollar amount that a particular allowance, charge, or promotion was based on to reduce ambiguity. This amount is commonly referred to as "Dollar Basis Amount". It is represented in the SAC segment in SAC10 using the qualifier "DO" - Dollars in SAC09.

**Data Element Summary**

Ref.	Data Element	Name	Attributes
M	SAC01	248 Allowance or Charge Indicator	M ID 1/1
		Code which indicates an allowance or charge for the service specified	
		A Allowance	
	SAC03	559 Agency Qualifier Code	X ID 2/2
		Code identifying the agency assigning the code values	
		EU Electric Utilities	
	SAC04	1301 Agency Service, Promotion, Allowance, or Charge Code	X AN 1/10
		Agency maintained code identifying the service, promotion, allowance, or charge	
		SAC Codes same as found in SLN LOOP	
	SAC05	610 Amount	O N2 1/15
		Monetary amount	
	SAC09	355 Unit or Basis for Measurement Code	X ID 2/2
		Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken	

		EA	Each	
<b>SAC10</b>	<b>380</b>	<b>Quantity</b>		<b>X R 1/15</b>
		Numeric value of quantity		
<b>SAC13</b>	<b>127</b>	<b>Reference Identification</b>		<b>X AN 1/30</b>
		Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier		
<b>SAC15</b>	<b>352</b>	<b>Description</b>		<b>X AN 1/80</b>
		A free-form description to clarify the related data elements and their content		

**Segment:** **CTT** Transaction Totals  
**Position:** 070  
**Loop:**  
**Level:** Summary  
**Usage:** Optional  
**Max Use:** 1  
**Purpose:** To transmit a hash total for a specific element in the transaction set  
**Syntax Notes:** 1 If either CTT03 or CTT04 is present, then the other is required.  
 2 If either CTT05 or CTT06 is present, then the other is required.  
**Semantic Notes:**  
**Comments:** 1 This segment is intended to provide hash totals to validate transaction completeness and correctness.

**Data Element Summary**

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
M	CTT01	354	Number of Line Items Total number of line items in the transaction set	M N0 1/6

**Segment:** **SE** Transaction Set Trailer  
**Position:** 080  
**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>
M	SE01	96	Number of Included Segments Total number of segments included in a transaction set including ST and SE segments	M N0 1/10
M	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	M AN 4/9