# Electronic Data Interchange 

Invoice<br>Implementation Guideline

Transaction Set 810 X12 Version 4010

## ICS Interchange Control Structures

## Introduction:

The purpose of this standard is to define the control structures for the electronic interchange of one or more encoded business transactions including the EDI (Electronic Data Interchange) encoded transactions of Accredited Standards Committee X12. This standard provides the interchange envelope of a header and trailer for the electronic interchange through a data transmission, and it provides a structure to acknowledge the receipt and processing of this envelope.

| Page <br> No. | Pos. Seg. No. ID | Name | Req. <br> Des. | $\underline{M}$ | $\underline{\text { Max.Use }}$ | Loop <br> Repeat |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | | Notes and |
| :---: |
| Comments |


| Segment: | ISA | Interchange Control Header |
| :---: | :---: | :---: |
| Position: | 010 |  |
| Loop: |  |  |
| Level: |  |  |
| Usage: | Mandatory |  |
| Max Use: | 1 |  |
| Purpose: | To start intercha | and identify an interchange of zero or more functional groups and ange-related control segments |
| Syntax Notes: Semantic Notes: <br> Comments: |  |  |
|  |  | Data Element Summary |
| Ref. | Data |  |
| Des. | Element | Name $\quad$ Attributes |
| ISA01 | 101 | Authorization Information Qualifier $\quad$ M ID 2/2 |
|  |  | Code to identify the type of information in the Authorization Information |
|  |  | $00 \quad$No Authorization Information Present (No Meaningful <br> Information in I02) |
| ISA02 | 102 | Authorization Information M AN 10/10 |
|  |  | Information used for additional identification or authorization of the interchange sender or the data in the interchange; the type of information is set by the Authorization Information Qualifier (I01) |
| ISA03 | I03 | Security Information Qualifier M ID 2/2 |
|  |  | Code to identify the type of information in the Security |
|  |  | Information |
|  |  | $00 \quad \begin{aligned} & \text { No Security Information Present (No Meaningful } \\ & \text { Information in I04) }\end{aligned}$ |
| ISA04 | I04 | Security Information M AN 10/10 |
|  |  | This is used for identifying the security information about the interchange sender or the data in the interchange; the type of information is set by the Security Information Qualifier (I03) |
| ISA05 | I05 | Interchange ID Qualifier M ID 2/2 |
|  |  | Qualifier to designate the system/method of code structure used to designate the sender or receiver ID element being qualified <br> ZZ <br> Mutually Defined |
| ISA06 | 106 | Interchange Sender ID M AN 15/15 |
|  |  | Identification code published by the sender for other parties to use as the receiver ID to route data to them; the sender always codes this value in the sender ID element |
|  |  | 07253615T - TVA Test ID |
|  |  | 07253615E - TVA Production ID |
| ISA07 | 105 | Interchange ID Qualifier M ID 2/2 |
|  |  | Qualifier to designate the system/method of code structure used to designate the sender or receiver ID element being qualified |
|  |  | $\mathbf{0 1} \quad$ Duns (Dun \& Bradstreet) |
|  |  | 02 SCAC (Standard Carrier Alpha Code) |
|  |  | 12 Phone (Telephone Companies) |


| ISA08 | I07 | Interchange Receiver ID <br> Identification code published by the receiver of the data; When <br> sending, it is used by the sender as their sending ID, thus other <br> parties sending to them will use this as a receiving ID to route <br> data to them |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| ISA09 | I08 | Determined by Receiver <br> Interchange Date <br> Date of the interchange <br> Interchange Time <br> Time of the interchange <br> Interchange Control Standards Identifier <br> Code to identify the agency responsible for the control standard <br> used by the message that is enclosed by the interchange header <br> and trailer <br> ISA10 | I09 | U.S. EDI Community of Asc x12, TDCC, and UCS |



GE segments; if code in DE455 in GS segment is X, then in DE 480 positions 1-3 are the version number; positions 4-6 are the release and subrelease, level of the version; and positions 7-12 are the industry or trade association identifiers (optionally assigned by user); if code in DE455 in GS segment is T, then other formats are allowed

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Procedures Review Board through October 1997

## 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:



## Detail:

| M | Pos. <br> No. | Seg. <br> ID | $\frac{\text { Name }}{\text { LOOP ID - IT1 }}$ | Req. <br> Des. | Max.Use | Loop Repeat | Notes and Comments |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | 200000 |  |
|  | 010 | IT1 | Baseline Item Data (Invoice) | M | 1 |  |  |
|  |  |  | LOOP ID - PID |  |  | 1000 |  |
|  | 060 | PID | Product/Item Description | O | 1 |  |  |
|  |  |  | LOOP ID - SLN |  |  | 1000 |  |
|  | 200 | SLN | Subline Item Detail | O | 1 |  |  |

## Summary:

| M | Pos. <br> $\frac{\text { No. }}{010}$ | Seg. <br> $\stackrel{\text { ID }}{\text { TDS }}$ | Name <br> Total Monetary Value Summary | $\begin{aligned} & \text { Req. } \\ & \text { Des. } \\ & \frac{M}{2} \end{aligned}$ | $\frac{\text { Max.Use }}{1}$ | Loop Repeat | Notes and Comments |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | LOOP ID - SAC |  |  | 25 |  |
|  | 040 | SAC | Service, Promotion, Allowance, or Charge Information | O | 1 |  |  |
| M | 080 | SE | Transaction Set Trailer | M | 1 |  |  |



| Segment: | BTG Beginning Segment for Invoice |
| ---: | :--- |
| Position: | 020 |
| Loop: |  |
| Level: |  |
| Usage: | Heading |
| Max Use: | 1 |
| Purpose: | To indicate the beginning of an invoice transaction set and transmit identifying numbers <br> and dates |
| Syntax Notes: |  |
| Semantic Notes: | $\mathbf{1}$ BIG01 is the invoice issue date. |
|  | $\mathbf{2}$ BIG03 is the date assigned by the purchaser to purchase order. |
|  | $\mathbf{3}$ BIG10 indicates the consolidated invoice number. When BIG07 contains code CI, |
| BIG10 is not used. |  |

Data Element Summary
Ref. Data
Des. Element Name
373 Date
Attributes
BIG01

BIG02

BIG04
32
Purchase Order Number
O AN 1/22
Identifying number for Purchase Order assigned by the orderer/purchaser
TVA Purchase Order Number from the 850 BEG03 segment
BIG05
328 Release Number
O AN 1/30
Number identifying a release against a Purchase Order previously placed by the parties involved in the transaction
TVA Release Number from the 850 BEG04 segment


```
    Segment: TTD Terms of Sale/Deferred Terms of Sale
    Position:
                1 3 0
        Loop:
        Level:
        Usage:
    Max Use: >1
    Purpose: To specify terms of sale
    Syntax Notes: }1\mathrm{ If ITD03 is present, then at least one of ITD04 ITD05 or ITD13 is required.
        2 If ITD08 is present, then at least one of ITD04 ITD05 or ITD13 is required.
        3 If ITD09 is present, then at least one of ITD10 or ITD11 is required.
Semantic Notes: }1\mathrm{ ITD15 is the percentage applied to a base amount used to determine a late payment
        charge.
    Comments: }1\mathrm{ 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.
```


## Data Element Summary

| Ref. <br> Des. | Data Element | Name | Attributes |  |
| :---: | :---: | :---: | :---: | :---: |
| ITD01 | 336 | Terms Type Code | O ID 2/2 |  |
|  |  | Code identifying type of payment terms |  |  |
|  |  | 05 Discount Not Applicable |  |  |
|  |  | 08 Basic Discount Offered |  |  |
| ITD02 | 333 | Terms Basis Date Code | O ID 1/2 |  |
|  |  | Code identifying the beginning of the terms period 3 Invoice Date |  |  |
| ITD03 | 338 | Terms Discount Percent |  |  |
|  |  | Terms discount percentage, expressed as a percent, available to the purchaser an invoice is paid on or before the Terms Discount Due Date <br> Format: 999.999 |  |  |
| ITD05 | 351 | Terms Discount Days Due <br> Number of days in the terms discount period by which payment is due if term discount is earned |  |  |
|  |  |  |  |  |  |  |
| ITD07 | 386 | Terms Net Days | $\text { O N0 } 1 / 3$ |  |
|  |  | Number of days until total invoice amount is due ( |  |  |



| Segment: P1D Product/Item Description |  |  |
| :---: | :---: | :---: |
| Position: | 060 |  |
| Loop: | PID | Optional |
| Level: | Detail |  |
| Usage: | Optional |  |
| Max Use: | 1 |  |
| Purpose: | To describe a product or process in coded or free-form format |  |
| Syntax Notes: | 1 If PID04 is present, then PID03 is required. |  |
|  | 2 At least one of PID04 or PID05 is required. |  |
|  | 3 If PID07 is present, then PID03 is required. |  |
|  | 4 If PID08 is present, then PID04 is required. |  |
|  | 5 If PID09 is present, then PID05 is required. |  |
| Semantic Notes: | 1 Use PID03 to indicate the organization that publishes the code list being referred to. |  |
|  | 2 PID04 should be used for industry-specific product description codes. |  |
|  | $\begin{array}{ll} 3 & \text { PID0 } \\ & \text { "Y" i } \\ & \text { not a } \end{array}$ | 8 describes the physical characteristics of the product identified in PID04. A indicates that the specified attribute applies to this item; an "N" indicates it does pply. Any other value is indeterminate. |
|  | 4 PID0 | 99 is used to identify the language being used in PID05. |
| Comments: | $1 \begin{array}{ll} 1 & \text { If PII } \\ & \text { PID0 } \end{array}$ | D01 equals " F ", then PID05 is used. If PID01 equals "S", then PID04 is used. If 01 equals " X ", then both PID04 and PID05 are used. |
|  | 2 Use the s | PID06 when necessary to refer to the product surface or layer being described in egment. |
|  | 3 PID0 | 7 specifies the individual code list of the agency specified in PID03. |
| Ref. Des. PID01 | Data Element Summary |  |
|  | Data Element |  |
|  |  | Name $\quad$ Attributes |
|  | 349 | Item Description Type $\quad$ M ID 1/1 |
| Code indicating the format of a description |  |  |
|  |  | F Free-form |
| PID05 | 352 | Description $X$ AN 1/80 |
|  |  | A free-form description to clarify the related data elements and their content |
|  |  | Line Item Description |


| 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 1 A 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

| M | Ref. <br> Des. | Data Element | Name <br> Attributes |
| :---: | :---: | :---: | :---: |
|  |  | 350 | Assigned Identification M AN 1/20 |
|  |  |  | Alphanumeric characters assigned for differentiation within a transaction set |
|  |  |  | TVA Purchase Order Line Item Number from 850 PO101 segment |
| >> | SLN02 | 350 | Assigned Identification O AN 1/20 |
|  |  |  | Alphanumeric characters assigned for differentiation within a transaction set |
|  |  |  | CONT Contract Charges |
|  |  |  | COVR Cover Charges |
|  |  |  | ENVI Environmental Fee |
|  |  |  | EXPD Expediting Charge |
|  |  |  | MISC Miscellaneous |
|  |  |  | PAMW Payment Amount Withheld |
|  |  |  | PDSC Discount Amount Taken |
|  |  |  | PFRT Payment Freight Amount |
|  |  |  | PTAX Payment Tax Amount |
|  |  |  | RDEP Reconciliation Deposit |
|  |  |  | RWTH Reconciliation Withdrawal |
|  |  |  | SCHG Special Charges |
|  |  |  | SHDR Subline Header |
|  |  |  | SRCD Origin Location For Freight |
| M | SLN03 | 662 | Relationship Code M ID 1/1 |
|  |  |  | Code indicating the relationship between entities |



| 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: | $\mathbf{1} \quad$TDS01 is the total amount of invoice (including charges, less allowances) before <br> terms discount (if discount is applicable). |
|  | $\mathbf{2}$ TDS02 indicates the amount upon which the terms discount amount is calculated. |
|  | $\mathbf{3}$ TDS03 is the amount of invoice due if paid by terms discount due date (total invoice |
|  | $\mathbf{4}$or installment amount less cash discount). <br> TDS04 indicates the total amount of terms discount. |
| Comments: | $\mathbf{1}$TDS02 is required if the dollar value subject to discount is not equal to the dollar <br> value of TDS01. |

## Data Element Summary

| M | Ref. <br> Des. | Data <br> Element <br> $\mathbf{T D S 0 1}$ |
| :--- | :--- | :--- | | Name |
| :--- |
|  |




```
Segment: SE Transaction Set Trailer
Position: 080
Loop:
Level:
Usage:
Max Use:
Purpose: To indicate the end of the transaction set and provide the count of the transmitted
    segments (including the beginning (ST) and ending (SE) segments)
    Syntax Notes:
Semantic Notes:
Comments:
SE Tranasation Set Trailer
080
Summary
Mandatory
1
segments (including the beginning (ST) and ending (SE) segments)
1 SE is the last segment of each transaction set.
```

Ref.
Des.
SE01

SE02

## Data Element Summary

## Data

Element Name
Attributes
96 Number of Included Segments
M N0 1/10
Total number of segments included in a transaction set including ST and SE segments
329 Transaction Set Control Number
M AN 4/9
Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set
Segment:GE Functional Group Trailer
Position: ..... 030
Loop:
Level:
Usage: Mandatory
Max Use: ..... 1
Purpose: To indicate the end of a functional group and to provide controlinformation

## Syntax Notes:

1 The data interchange control number GE02 in this trailer must be identical to the same data element in the associated functional group header, GS06.
1 The use of identical data interchange control numbers in the associated functional group header and trailer is designed to maximize functional group integrity. The control number is the same as that used in the corresponding header.

## Data Element Summary

Ref. Data
Des. Element Name Attributes
$\begin{array}{llllll}\text { GE01 } & 97 & \text { Number of Transaction Sets Included } & \text { M } & \text { N0 1/6 }\end{array}$
Total number of transaction sets included in the functional group or interchange (transmission) group terminated by the trailer containing this data element
GE02 28 Group Control Number M N0 1/9 Assigned number originated and maintained by the sender
Segment: IEA Interchange Control TrailerPosition:
Loop:
Level:Usage:
Max Use:Mandatory
Purpose:1To define the end of an interchange of zero or more functional groups andinterchange-related control segments
Syntax Notes:
Semantic Notes:Comments:
Data Element Summary
Ref. Data
Des. Element Name Attributes
IEA01 116 Number of Included Functional Groups ..... M N0 1/5
A count of the number of functional groups included in an interchange
IEA02 I12 Interchange Control Number ..... M N0 9/9
A control number assigned by the interchange sender

