## Electronic Commerce Customer Guide

## 811 Transaction Set (Version/Release 004010)

Electronic Data Interchange - Electronic Funds Transfer

AT\&T


Building Electronic Partnerships For The Future...Today
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## 1 EDI Billing Program

### 1.1 Introduction

This Implementation Guide describes the EDI Billing Products of AT\&T in business and technical terms. It is intended for those new to EDI as well as those who are experienced. The estimated time to implement EDI Billing based on this document is 3 to 4 months, depending on a CLEC's level of experience.

The following briefly describes the Implementation Guide’s sections.

## Section 1 EDI Billing Program

Section 1 contains EDI background information as well as a brief, nontechnical description of the EDI Billing Products offered.

## Section 2 EDI Processing Overview

Section 2 describes how the EDI Billing Products are produced and transmitted, providing both a technical and non-technical understanding of the EDI Billing system.

## Section 3 EDI Implementation Steps

Section 3 provides the steps to implement the 811 transaction set.

## Section 4 EDI Technical Specifications

Section 4 furnishes detailed information on the structure of the EDI Detail Bill.

### 1.2 EDI Overview

Electronic Data Interchange (EDI) is the computer to computer exchange of business documents in a standardized format. The EDI world has evolved significantly over the past 5 years, with the introduction of many new products and services to make the implementation process easier and more successful.

EDI systems have four major technical components:

- Standards
- Translators
- Communication Links
- Application Interfaces


## Standards

Standards refer to ASC (Accredited Standards Committee) X12 Transactions or structured computer readable business documents. Standards are managed by several committees in the American National Standards Institute (ANSI), a national organization. The committee that defines EDI transactions for the US and Canada is ASC X12.

Industries may interpret transactions differently, based upon a particular industry need. Several industry-based groups have been formed for EDI guideline development. The telecommunications industry group is the Ordering and Billing Forum (OBF). AT\&T supports and participates in the development of EDI guidelines, including the development of the Consolidated Service Invoice/Statement (811 transaction set) and the Text Message (864 transaction set).

ASC X12 Standards are evolving yearly. It is neither required nor anticipated that a company will change with every standard release. All transactions become part of a version release whether or not they have changed from previously released versions.

Version/Release 004010 of the 811 Transaction Set is currently supported. See Section 4 for more information.

### 1.2 EDI Overview, Continued

Standards have four components:

Transactions A series of segments that are defined by ASC X12 assigned transaction numbers.

Segments A series of related data elements that are the equivalent of data processing records.

Data elements The smallest component, the equivalent of data processing fields.
Delimiters Special characters used to separate data elements and segments.

Before transmission, transactions are compressed to remove all spaces for economical data transfer.

## Translators

Translators are commercial software packages that make the transmission of EDI data more efficient. The most important functions include:

- Translation of application data to EDI formatted data (and vice versa)
- X12 compliance checking
- Version control
- Acknowledgment processing
- Audit reports and journalizing
- Trading partner profile management

Translators are available for all major platforms (PC, Mini, and Mainframe). While the purchase of a translator is not mandatory, custom development of the required EDI functionality may be cost prohibitive.

### 1.2 EDI Overview, Continued

## Communication Links

Communication Links use three major routes:

- Direct
- Value Added Networks (VANs)
- Gateways (similar to VANs)

VANs and gateways are the most popular transmission route because they remove two communication barriers: time and protocol dependence. VANs and gateways provide multiple protocol links so that a trading partner may access EDI transmissions from a PC, client/server, mini, or mainframe environment. Time independence is possible through the use of electronic mailboxes, where transactions are stored until retrieved by a trading partner. Direct links may be used if a high volume of data is consistently transferred between the two companies, otherwise they may be cost prohibitive.

## Application Interface

The application interface connects the EDI system to existing or new applications. An application interface may be a manual or automated interface. The application interface may provide outbound data or receive inbound data.

Combination translator/application interface packages are available for PC-based systems from third party vendors. The CLEC application interface development may be as simple as linking EDI formatted billing data to an existing application or as complex as a business process redesign for the bill processing application.

### 1.3 EDI Detail Bill

EDI Detail Bill provides CLECs complete billing information in an electronic format. CLECs who perform detailed analysis of telecommunications usage and billing are the intended subscribers. The EDI Detail Bill is sent to the EDI CLECs using the ASC X12 811 Transaction Set.

EDI Detail Bill has three areas:

| Area | Contains |
| :---: | :--- |
| Heading | Account information, such as invoice number, invoice date, and invoice <br> terms. |
| Detail | Service subtotals for each service provider, plus supporting detail <br> information (such as Call detail, Recurring Charges, Other Charges, <br> Credit line items, and other billing data). |
| Summary | Bill balance, payment, and adjustment information. |

### 1.4 The Telecommunications Industry Forum

AT\&T is an active member of the Ordering and Billing Forum (OBF) EDI
Telecommunications Billing (ETB) Committee, and this Implementation Guide conforms to ETB guidelines. The ASC X12 811 transaction, like other standards, is evolving and AT\&T is committed to remaining current with changes recommended by the ETB committee.

### 1.5 CLEC Contacts for EDI

If you have questions about the EDI Billing Program, please contact your AT\&T Account Representative or the Billing Products Help Desk at 1-(888) 800-6325.

## 2 EDI Processing Overview

### 2.1 System Overview

The following illustrates the exchange of data using the AT\&T EDI Billing System.


Legend
811 Consolidated Service Invoice/Statement
997 Functional Acknowledgement

### 2.2 Connect:Direct or Value Added Network

EDI billing data, both test and production, will be transmitted via Connect:Direct or VAN (Value Added Network). Other means of delivery are impractical for transmitting 811 transactions due to file size. Value Added Network (VAN) interconnections may be arranged when a CLEC uses a VAN to receive 811 transactions. The CLEC may incur significant charges from a VAN, considering a typical telecommunications bill's data volume.

### 2.3 EDI Billing Transmission

An EDI Billing Transmission has one or more 811 transactions and the required EDI Enveloping.


The bills are produced in 10 separate cycles throughout the month. CLECs receive their EDI telecommunications bills on the same bill cycles as the paper bills.

AT\&T sends EDI 811 billing data with each bill cycle and expect an electronic acknowledgment ( 997 Transaction Set) within 48 hours. Bill payment is expected through traditional methods, by the bill's due date. AT\&T will retransmit 811 transaction sets upon request, for up to 30 days after the original transmission.

### 2.4 EDI Enveloping

EDI Enveloping has two components:

- Interchange Envelope (ISA/IEA)
- Functional Group Envelope (GS/GE)

The Interchange Envelope routes the transaction through telecommunications links from the sender to the receiver. It also has security, authorization codes, and transaction version information. The ISA envelope's security and authorization features are not used for EDI Billing Transactions. The Functional Group envelope groups a series of like transactions into a single envelope. The 811 Transaction Set only uses the CI (Consolidated Invoice) Functional Group Identifier.

### 2.5 EDI Transactions

EDI Transactions are a series of data segments and elements that represent common business documents in a standardized computer readable format. AT\&T uses the 811 transaction set as developed by the ASC X12 standards committee. AT\&T follows the industry guidelines established by the Ordering and Billing Forum (OBF) ETB Committee and are active members of this industry group.

### 2.6 EDI Acknowledgment Processing

EDI Acknowledgments are a control mechanism to ensure the successful delivery of EDI documents through telecommunications links. The 997 transaction set is the most common acknowledgment document and the one required by AT\&T. The 997 Functional Acknowledgment communicates to the document sender that the EDI transaction was successfully received and that the document complies with X12 standards, but does not authorize the content of the transaction. One acknowledgment per functional group is expected within 48 hours of receipt of the 811 transmission. There are two methods for formatting the 997 transaction. One method is variable length unwrapped records and the other, which is the format used, is 80-byte wrapped records.

## 3 EDI Implementation Steps

### 3.1 Required Forms

During this step, AT\&T requests that resale and unbundling CLECs complete and submit the CLEC and EDI Trading Partner Profiles. These profiles are designed to provide AT\&T with the necessary information to accurately update systems and tables. Due to the critical nature of the required information, the CLEC's service cannot be established until they have successfully completed these profiles.

The current version of these profiles may be found on the CLEC online web site. Here is the link to the Web-Based CLEC Profile area and instructions for completing the profile:
https://clec.att.com/clec/shell.cfm?section=174
Here is the link directly to the EDI Trading Partner Profile:
https://clec.att.com/clec_documents/unrestr/custguide/miscforms/tpp/att_tpp.pdf
The CLEC will arrange through their AT\&T Account Representative to receive EDI billing files as "test" or "production". In most cases, the CLEC chooses to receive test data files (ISA15 $=\mathrm{T}$ ) in order to verify their internal bill processing application. Information related to parallel testing is found in Section 3.5.

### 3.2 Establish Trading Partner

Receipt of the Trading Partner Profile initiates the establishment of the trading partner relationship. Connectivity must be verified with the receiving company. The trading information (ISA/GS identifiers) and delivery options are defined within the AT\&T process. The CLEC's accounts are identified for EDI processing and established on EDI. The timeframe for completion of these activities is 30 to 90 days from receipt of the Trading Partner Profile.

### 3.3 Letter of Agency (LOA)

AT\&T requires a letter of agency from any CLEC that is requesting delivery of their EDI bills to a vendor rather than a CLEC location. The EDI bills will be sent to the vendor once the trading partner relationship has been established.

If a CLEC changes vendors, EDI bills will be sent to the new vendor once AT\&T establishes the trading partner relationship with that vendor. As mentioned in Section 3.2 above, this is a 30 to 90 day process. If an EDI cancellation request is not submitted by the previous vendor, EDI bills will continue to be sent to the previous vendor up until the time the trading partner relationship is established with the new vendor. The new vendor will not be able to receive any CLEC EDI bills processed prior to AT\&T establishing the trading partner relationship with the new vendor.

### 3.4 Connectivity

The Connectivity step tests the communication link between the CLEC and AT\&T. It does not test the 811 transaction. Connectivity is required and must be established before files can be transmitted between the CLEC and AT\&T. The AT\&T CLEC Operation Support System Interconnection Procedures may be used as a reference for additional information related to connectivity. The connectivity test is successful when:
A. AT\&T sends the 811 transaction is to the CLEC
B. CLEC receives the 811 transaction
C. CLEC sends the 997 acknowledgment to the EDI Billing system of AT\&T
D. AT\&T receives and processes the 997 acknowledgment

The 997 functional acknowledgment is a basic transaction that most translators produce automatically and is a function to consider when evaluating translator packages.

The CLEC may choose to implement the parallel transmission process once connectivity is established to receive the 811 transaction set. Implementing the parallel transmission process is not dependent on successful receipt of the 997 acknowledgment. CLEC billing data must be available in order to start the parallel transmission process.

### 3.5 Parallel Transmissions for Testing CLEC Applications

The Parallel Transmissions step builds CLEC confidence with their EDI bill processing application. During this step, production billing data in the form of EDI and the paper (or other format) bills are sent to the CLEC. To verify that both formats are producing similar results, parallel billing data transmissions are sent until the CLEC requests the paper (or other format) be discontinued.

Production billing data for the CLEC must be available before testing of the CLEC bill processing applications can begin. The parallel transmissions will consist of production billing data formatted to EDI and sent to the CLEC with ISA15 set to indicate 'test'. These transmissions can then be used by the CLEC to develop and test their applications for processing the 811 and creating the 997 transactions. The CLEC bill processing applications can also be developed prior to receiving the parallel transmissions using the technical specifications in Section 4 of this guide.

Once the CLEC has verified the integrity of their EDI bill processing application, they should contact their AT\&T Account Representative to begin receiving the EDI 811 transaction into their production environment. At that time, ISA15 will be changed to indicate 'production' and if necessary, their ISA and GS Sender and Receiver Qualifiers and Ids can also be changed.

### 3.6 Maintenance

Telecommunications bills are dynamic documents. A 30 day notification is sent to the CLEC regarding EDI Billing revisions. The revisions may or may not require CLEC software changes.

ASC X12 Version 4, Release 1, of the 811 transaction set (ETB EDI Guidelines, Issue 9) is transmitted. A new 811 version/release may not be implemented every time the ASC X12 committee issues a new version or release of the transaction set. When a change is made to a new ASC X12 version/release of the 811 transaction set, the previous version/release is discontinued after an interval in which CLECs are asked to migrate to the new version/release.

## 4 Technical Specifications

The 811 presentation that follows is derived from the telecommunications industry presentation of the 811 transaction set. The Ordering and Billing Forum (OBF) guidelines can be viewed at the following website http://www.atis.org/obf/etb home.asp

Select "Guidelines" and view the Issue 9 documents. Section 7 is a Business Model overview which provides information related to the transaction set structure, use of the hierarchical loops and segments, along with summing rules for balancing the transaction set. Section 10.4 is the data element code list used by ETB. Section 10.7 is the industry presentation of the 811 transaction set.

## Detail Area hierarchy structure starting with HL4

| Monthly Service | Other Charges \& Credits | Miscellaneous Charges \& Credits |
| :--- | :--- | :--- |
| HL4 (SV 0200) | HL4 | HL4 |
| IT1 (SV 0400) | IT1 (SV 0520) |  |
| DTM | IT1 | HL5 |
| HL5 | HL5 | LX |
| LX | LX | SI |
| SI | SI | HL8 |
| HL8 | HL8 | SLN |
| SLN | SLN | SI |
| SI | SI | PID |
| PID | PID | QTY |
| REF | INC |  |
| QTY | REF |  |
|  | DTM |  |


| Usage | Contracts/Discounts | Itemized Calls |
| :--- | :--- | :--- |
| HL4 (SV 0700) | HL4 | HL4 |
| IT1 1 (SV 2110) | HL5 |  |
| HL5 0500) |  |  |
| LX | IT1 | HL5 |
| SI | LX | LX |
| HL8 | SI | HL9 |
| SLN | HL8 | TCD |
| SI | SLN | SI |
| ITA | SI | ITA |
| QTY | PID |  |
|  | ITA |  |
|  | QTY |  |
| NOTE: In all of the structures, | HL5 is an optional loop. |  |

## 811 Consolidated Service Invoice/Statement

## Functional Group ID=CI

## Introduction:

This Draft Standard for Trial Use contains the format and establishes the data contents of the Consolidated Service Invoice/Statement Transaction Set (811) for use within the context of an Electronic Data Interchange (EDI) environment. This transaction set provides for the billing or reporting of complex and structured service invoice/statement detail. This standard can be used by organizations who are interested in sending or receiving either consolidated or standalone invoices for service arrangements which require processing other than that done for the typical product invoice. The Consolidated Service Invoice/Statement can be used as a credit/debit memo to differentiate between payable invoice items and information-only memo items. This transaction set should not be used as a standalone notification of a credit/debit adjustment.

## Heading:

|  | Pos. <br> No. | Seg. <br> ID | Name | Req. Des. | Max.Use | Loop Repeat | Notes and Comments |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| M | 010 | ST | Transaction Set Header | M | 1 |  |  |
| M | 020 | BIG | Beginning Segment for Invoice | M | 1 |  |  |
| Not Used | 030 | NTE | Note/Special Instruction | O | 100 |  |  |
| Not Used | 040 | CUR | Currency | O | 1 |  |  |
|  | 050 | REF | Reference Identification | O | >1 |  |  |
| Not Used | 060 | PER | Administrative Communications Contact | O | 3 |  |  |
|  | 070 | ITD | Terms of Sale/Deferred Terms of Sale | O | 5 |  |  |
|  | 080 | DTM | Date/Time Reference | O | 10 |  |  |
| Not Used | 090 | TXI | Tax Information | O | >1 |  |  |
|  |  |  | LOOP ID - N1 |  |  | >1 |  |
|  | 100 | N1 | Name | O | 1 |  |  |
|  | 110 | N2 | Additional Name Information | O | 2 |  |  |
|  | 120 | N3 | Address Information | O | 2 |  |  |
|  | 130 | N4 | Geographic Location | O | 1 |  |  |
| Not Used | 140 | REF | Reference Identification | O | 12 |  |  |
| Not Used | 150 | PER | Administrative Communications Contact | O | 3 |  |  |
| Not Used | 155 | DMG | Demographic Information | O | 1 |  |  |
|  |  |  | LOOP ID - FA1 |  |  | >1 |  |
| Not Used | 170 | FA1 | Type of Financial Accounting Data | O | 1 |  |  |
| Not Used | 180 | FA2 | Accounting Data | M | >1 |  |  |

Detail:




Summary:

| M | Pos. <br> No. <br> 010 | Seg. <br> $\frac{\text { ID }}{\text { TDS }}$ | Name <br> Total Monetary Value Summary | $\begin{aligned} & \text { Req. } \\ & \text { Des. } \\ & \text { M } \end{aligned}$ | $\frac{\text { Max.Use }}{1}$ | Loop <br> Repeat | Notes and Comments |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | LOOP ID - ITA |  |  | >1 |  |
|  | 020 | ITA | Allowance, Charge or Service | O | 1 |  |  |
| Not Used | 030 | DTM | Date/Time Reference | O | 1 |  |  |
| Not Used | 035 | REF | Reference Identification | O | 5 |  |  |
|  |  |  | LOOP ID - BAL |  |  | >1 |  |
|  | 040 | BAL | Balance Detail | O | 1 |  |  |
|  | 050 | DTM | Date/Time Reference | O | 1 |  |  |
|  |  |  | LOOP ID - N1 |  |  | >1 |  |
|  | 060 | N1 | Name | O | 1 |  |  |
|  |  |  | LOOP ID - BAL |  |  | $>1$ |  |
| Not Used | 070 | BAL | Balance Detail | O | 1 |  |  |
| Not Used | 080 | DTM | Date/Time Reference | O | 1 |  |  |
|  |  |  | LOOP ID - ITA |  |  | >1 |  |
|  | 090 | ITA | Allowance, Charge or Service | O | 1 |  |  |
|  | 100 | DTM | Date/Time Reference | O | 2 |  |  |
| Not Used | 102 | AMT | Monetary Amount | O | 1 |  |  |
| Not Used | 103 | SI | Service Characteristic Identification | O | 2 |  |  |
| Not Used | 105 | REF | Reference Identification | O | 5 |  |  |
| Not Used | 106 | CUR | Currency | O | 1 |  |  |
|  |  |  | LOOP ID - LX |  |  | >1 |  |
| Not Used | 107 | LX | Assigned Number | O | 1 |  |  |
| Not Used | 108 | REF | Reference Identification | O | 1 |  |  |
|  |  |  | LOOP ID - AMT |  |  | $>1$ |  |
| Not Used | 109 | AMT | Monetary Amount | O | 1 |  |  |
| Not Used | 110 | DTM | Date/Time Reference | O | 1 |  |  |
|  |  |  | LOOP ID - ITA |  |  | >1 |  |
| Not Used | 111 | ITA | Allowance, Charge or Service | O | 1 |  |  |
| Not Used | 112 | DTM | Date/Time Reference | O | 1 |  |  |
|  | 115 | CTT | Transaction Totals | O | 1 |  | n8 |
| M | 120 | SE | Transaction Set Trailer | M | 1 |  |  |

## Transaction Set Notes

1. Valid codes for HL03 to define levels for this transaction set are given below: 1 - Service/Billing Provider (Identifies the Company Providing the Service/Billing) 2 - Billing Arrangement (Identifies a Specific Billing Arrangement) 3 - Sub-billing Arrangement (Identifies a More Detailed Billing Arrangement) 4 - Group (Identifies a Group of Charges on the Bill) 5 - Category (Identifies the Subdivision of the Group) 6 Subcategory (Identifies a Further Breakdown of the Category) 7 - Type (Identifies a Further Breakdown of the Subcategory) 8 - Charge Detail (Identifies the Lowest Level of Charges within a Billing Arrangement) 9 Line Detail (Identifies the Supporting Detail Associated with the Charge or Group Level) They must be used in the (hierarchical) order in which they are listed; however, certain levels are optional and may be omitted. At least one occurrence each of the service/billing provider level and group level is required.
2. When used for telecommunications billing, the service/billing provider level is defined by the NM1 loop.
3. The group level is defined by at least one occurrence of the IT1 loop which may only appear at the group level.
4. The NX2 segment is used to convey parsed address information.
5. The SLN loop may only appear at the charge detail level.
6. The TCD loop may only appear at the line detail level.
7. The USD loop may only appear at the line detail level.
8. The number of line items (CTT01) is the accumulation of the number of IT1 segments.


## Position: 010

Loop:
Level:
Usage:
Max Use:
Purpose: Syntax Notes: Semantic Notes:

## Comments:




Segment: REF $_{\text {Reference Identification }}$
Position:
Loop: Level: Usage:
Max Use: Purpose: Syntax Notes:

Semantic Notes: Comments:

050
Heading
Optional
$>1$
To specify identifying information
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.
1 REF04 contains data relating to the value cited in REF02.

## Data Element Summary

| M |  | Data Element | Name $\quad$ Attributes |
| :---: | :---: | :---: | :---: |
|  |  | 128 | Reference Identification Qualifier $\quad$ M ID 2/3 |
|  |  |  | Code qualifying the Reference Identification |
|  |  |  | 12 Billing Account |
|  |  |  | Account number under which billing is rendered |
|  | REF02 | 127 | Reference Identification $\quad$ X AN 1/30 |
|  |  |  | Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier |
| X | REF03 | 352 | Description X AN 1/80 |
|  |  |  | A free-form description to clarify the related data elements and their content |
| X | REF04 | C040 | Reference Identifier O |
|  |  |  | To identify one or more reference numbers or identification numbers as specified by the Reference Qualifier |
| X | C04001 | 128 | Reference Identification Qualifier M ID 2/3 |
|  |  |  | Code qualifying the Reference Identification |
|  |  |  | Refer to 004010 Data Element Dictionary for acceptable code values. |
| X | C04002 | 127 | Reference Identification M AN 1/30 |
|  |  |  | Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier |
| X | C04003 | 128 | Reference Identification Qualifier X ID 2/3 |
|  |  |  | Code qualifying the Reference Identification |
|  |  |  | Refer to 004010 Data Element Dictionary for acceptable code values. |
| X | C04004 | 127 | Reference Identification $\quad$ X AN 1/30 |
|  |  |  | Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier |
| X | C04005 | 128 | Reference Identification Qualifier X ID 2/3 |
|  |  |  | Code qualifying the Reference Identification |
|  |  |  | Refer to 004010 Data Element Dictionary for acceptable code values. |
| X | C04006 | 127 | Reference Identification $\quad$ X AN 1/30 |
|  |  |  | Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier |

Position: 070
Loop: Level: Usage:
Max Use: Purpose: Syntax Notes:

## Semantic Notes:

Comments:
Ref. Data
Des. Element

ITD04

ITD07
ITD08

ITD10

Data Element Summary

336 Terms Type Code
Attributes
Terms Type Code
Code identifying type of payment terms
O ID 2/2
$03 \quad$ Fixed Date
Code identifying the beginning of the terms period
Refer to 004010 Data Element Dictionary for acceptable code values.
338 Terms Discount Percent O R 1/6
Terms discount percentage, expressed as a percent, available to the purchaser if an invoice is paid on or before the Terms Discount Due Date
370 Terms Discount Due Date
X DT 8/8
Date payment is due if discount is to be earned expressed in format CCYYMMDD
351 Terms Discount Days Due X N0 1/3
Number of days in the terms discount period by which payment is due if terms discount is earned
ITD06 446 Terms Net Due Date
O DT 8/8
Date when total invoice amount becomes due expressed in format CCYYMMDD
386 Terms Net Days
O N0 1/3
Number of days until total invoice amount is due (discount not applicable)
362

Terms Discount Amount
O N2 1/10
Total amount of terms discount
388 Terms Deferred Due Date
O DT 8/8
Date deferred payment or percent of invoice payable is due expressed in format CCYYMMDD
389 Deferred Amount Due
X N2 1/10
Deferred amount due for payment

| X | ITD11 | 342 | Percent of Invoice Payable | X R 1/5 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Amount of invoice payable expressed in percent |  |  |
| X | ITD12 | 352 | Description | 0 | AN 1/80 |
|  |  |  | A free-form description to clarify the related data elements and their content |  |  |
| X | ITD13 | 765 | Day of Month | X | N0 1/2 |
|  |  |  | The numeric value of the day of the month between 1 and the maximum day of the month being referenced |  |  |
| X | ITD14 | 107 | Payment Method Code | O ID 1/2 |  |
|  |  |  | Code identifying type of payment proceduresRefer to 004010 Data Element Dictionary for acceptable code values. |  |  |
|  |  |  |  |  |  |  |  |
| X | ITD15 | 954 | PercentPercentage expressed as a decimal | O R 1/10 |  |
|  |  |  |  |  |  |

Segment:
Position:
Loop:
Level:
Usage:
Max Use:
Purpose:
Syntax Notes:

## Semantic Notes:

Comments:

## DTM Date/Time Reference <br> 080

Heading
Optional
10
To specify pertinent dates and times
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.

DTM04

DTM05

DTM06

## Data Element Summary



## Segment: <br> N1 <br> Name

Position:
100
Loop: N1 Optional
Level:
Usage:
Heading
Optional
Max Use:
Purpose:
Syntax Notes:

## Semantic Notes:

## Comments:

Data

## Data Element Summary



| Segment: | $\mathbf{N 2}$ Additional Name Information |
| ---: | :--- |
| Position: | 110 |
| Loop: | N1 Optional |
| Level: | Heading |
| Usage: | Optional |
| Max Use: | 2 |
| Purpose: | To specify additional names or those longer than 35 characters in length |
| ntax Notes: |  |
| Comments: |  |


| M | Data Element Summary |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Ref. Des. | Data Element | Name | Attributes |
|  | N201 | 93 | Name | M AN 1/60 |
|  |  |  | Free-form name |  |
| X | N202 | 93 | Name | O AN 1/60 |
|  |  |  | Free-form name |  |

Segment:
Position:
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

Ref. Data

Element Name
166 Address Information
Address information
166 Address Information
Address information

Attributes
M AN 1/55
O AN 1/55

Segment:
Position:
Leop:
Loop: N1 Optional
Level:
Usage:
Max Use: Purpose: Syntax Notes: Semantic Notes: Comments:

Heading
Optional
1

## N4 Geographic Location

To specify the geographic place of the named party
1 If N406 is present, then N405 is required.
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

Ref.
Des. N401

N402
N403

X
N404

N405

## X

X N406
Data
Element Name $\quad \underline{\text { Attributes }}$
19 City Name
O AN 2/30
Free-form text for city name
156 State or Province Code
O ID 2/2
Code (Standard State/Province) as defined by appropriate government agency
116 Postal Code O ID 3/15
Code defining international postal zone code excluding punctuation and blanks (zip code for United States)
26 Country Code
309 Location Qualifier $\quad$ X ID 1/2
Code identifying type of location
Refer to 004010 Data Element Dictionary for acceptable code values.
310 Location Identifier
O AN 1/30

Code which identifies a specific location


Segment:
Position: Loop: Level: Usage: Max Use: Purpose: Syntax Notes: Semantic Notes: Comments:

LX Assigned Number
020
LX Optional
Detail
Optional
1
To reference a line number in a transaction set

## Data Element Summary

| Ref. |
| :--- |
| Des. |
| LX01 |

Data
Element Name
554 Assigned Number
Attributes
Number assigned for differentiation within a transaction set Sequential number assigned to the LX segment

| Segment: | SI Service Characteristic Identification |
| :--- | :--- |
| Position: | 030 |

## Semantic Notes: Comments: <br> Semantic Notes: Comments: <br> Notes:

Position:
Loop:
Level:
Usage:
Max Use: Purpose: Syntax Notes:

030
LX Optional
Detail
Optional
8
To specify service characteristic data
1 If either SI04 or SI05 is present, then the other is required.
2 If either SI06 or SI07 is present, then the other is required.
3 If either SI08 or SI09 is present, then the other is required.
4 If either SI10 or SI11 is present, then the other is required.
5 If either SI12 or SI13 is present, then the other is required.
6 If either SI14 or SI15 is present, then the other is required.
7 If either SI16 or SI17 is present, then the other is required.
8 If either SI18 or SI19 is present, then the other is required.
9 If either SI20 or SI21 is present, then the other is required.
1 SI01 defines the source for each of the service characteristics qualifiers.
The SI segment actually contains 21 data elements. SI01 provides an Agency Qualifier Code and the other 20 data elements are matched pairs. The DE1000/DE234 paired information is presented when the associated data is available. The paired information may not be in the same positional placement as noted within the SI segment.

Data Element Summary

| Ref. |
| :--- |
| Des. |
| SI01 |
|  |
| SI02 |

SI03
M

X
X
SI05
SI06
X
Data
Element Name
Attributes
559 Agency Qualifier Code
M ID 2/2
Code identifying the agency assigning the code values TI Telecommunications Industry
Service Characteristics Qualifier
Code from an industry code list qualifying the typ
BN $\quad$ Billing Telephone Number
TN
Product/Service ID
M AN 2/2

Product/Service ID
M AN 1/48
Identifying number for a product or service
This element will contain a locally defined code associated with one of the preceding DE1000 values. Examples of a locally defined value include a telephone number, Class of Service USOC, calling card number, circuit number, etc
1000 Service Characteristics Qualifier
X AN 2/2
Code from an industry code list qualifying the type of service characteristics
234 Product/Service ID $\quad$ X AN 1/48
Identifying number for a product or service
1000 Service Characteristics Qualifier
X AN 2/2
Code from an industry code list qualifying the type of service characteristics
234 Product/Service ID
X AN 1/48

Identifying number for a product or service

| X | SI08 |
| :--- | :---: |
| X | SI09 |
| X | SI10 |
| X | SI11 |
| X | SI12 |
| X | SI13 |
| X | SI14 |
| X | SI15 |
| X | SI17 |
| X | SI18 |
| X | SI21 |
| X |  |


| 1000 | Service Characteristics Qualifier X | AN 2/2 |
| :---: | :---: | :---: |
|  | Code from an industry code list qualifying the type of service cha | cteristics |
| 234 | Product/Service ID X | AN 1/48 |
|  | Identifying number for a product or service |  |
| 1000 | Service Characteristics Qualifier X | AN 2/2 |
|  | Code from an industry code list qualifying the type of service cha | cteristics |
| 234 | Product/Service ID X | AN 1/48 |
|  | Identifying number for a product or service |  |
| 1000 | Service Characteristics Qualifier X | AN 2/2 |
|  | Code from an industry code list qualifying the type of service cha | cteristics |
| 234 | Product/Service ID X | AN 1/48 |
|  | Identifying number for a product or service |  |
| 1000 | Service Characteristics Qualifier X | AN 2/2 |
|  | Code from an industry code list qualifying the type of service char | acteristics |
| 234 | Product/Service ID X | AN 1/48 |
|  | Identifying number for a product or service |  |
| 1000 | Service Characteristics Qualifier X | AN 2/2 |
|  | Code from an industry code list qualifying the type of service cha | acteristics |
| 234 | Product/Service ID X | AN 1/48 |
|  | Identifying number for a product or service |  |
| 1000 | Service Characteristics Qualifier X | AN 2/2 |
|  | Code from an industry code list qualifying the type of service char | acteristics |
| 234 | Product/Service ID X | AN 1/48 |
|  | Identifying number for a product or service |  |
| 1000 | Service Characteristics Qualifier X | AN 2/2 |
|  | Code from an industry code list qualifying the type of service char | acteristics |
| 234 | Product/Service ID X | AN 1/48 |
|  | Identifying number for a product or service |  |


| Segment: | AMT Monetary Amount |
| ---: | :--- |
| Position: | 060 |
| Loop: | LX Optional |
| Level: | Detail |
| Usage: | Optional |
| Max Use: | 5 |
| Purpose: | To indicate the total monetary amount |
| yntax Notes: |  |
| Comments: |  |

## Data Element Summary

Ref.
Des.

Attributes
522 Amount Qualifier Code
M ID 1/3
Code to qualify amount SC Total Service Charge
AMT02

AMT03

Monetary Amount
M R 1/18
Monetary amount
Credit/Debit Flag Code
$O$ ID 1/1

Code indicating whether amount is a credit or debit
Refer to 004010 Data Element Dictionary for acceptable code values.

Segment: NM1 Individual or Organizational Name
Position: 110
Loop: NM1 Optional
Level: Detail
Usage: Optional
Max Use: 1
Purpose: To supply the full name of an individual or organizational entity
Syntax Notes: 1 If either NM108 or NM109 is present, then the other is required.
2 If NM111 is present, then NM110 is required.
Semantic Notes: $\quad \mathbf{1}$ NM102 qualifies NM103.
Comments: $\quad 1 \quad$ NM110 and NM111 further define the type of entity in NM101.

## Data Element Summary

M
Ref.
Des.
NM101

Data
Element Name
98 Entity Identifier Code
Attributes
M ID 2/3
Code identifying an organizational entity, a physical location, property or an
Code identif
individual
SJ $\quad$ Service Provider $\quad$ Identifies name and address information as pertaining to a
service provider for which billing is being rendered

| M | NM102 | 1065 | Entity Type Qualifier Code qualifying the type of entity 2 <br> Non-Person Entity | M | ID 1/1 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | NM103 | 1035 | Name Last or Organization Name Individual last name or organizational name | 0 | AN 1/35 |
| X | NM104 | 1036 | Name First | 0 | AN 1/25 |
|  |  |  | Individual first name |  |  |
| X | NM105 | 1037 | Name Middle | 0 | AN 1/25 |
|  |  |  | Individual middle name or initial |  |  |
| X | NM106 | 1038 | Name Prefix | 0 | AN 1/10 |
|  |  |  | Prefix to individual name |  |  |
| X | NM107 | 1039 | Name Suffix | 0 | AN 1/10 |
|  |  |  | Suffix to individual name |  |  |
|  | NM108 | 66 | Identification Code Qualifier | X | ID 1/2 |

Code designating the system/method of code structure used for Identification Code (67)

91 Assigned by Seller or Seller's Agent
NM109
X

X
NM111
Code qualifying the type of entity
2 Non-Person Entity
Individual last name or organizational name
Individual first name
Name Middle O AN 1/25
Individual middle name or initial
Prefix to individual name
Suffix to individual name
66 Identification Code Qualifier

67 Identification Code
X AN 2/80
Code identifying a party or other code
706 Entity Relationship Code
X ID 2/2
Code describing entity relationship
Refer to 004010 Data Element Dictionary for acceptable code values.
98 Entity Identifier Code
O ID 2/3

Code identifying an organizational entity, a physical location, property or an individual
Refer to 004010 Data Element Dictionary for acceptable code values.

| Segment: | PER Administrative Communications Contact |
| ---: | :--- |
| Position: | 160 |
| Loop: | NM1 Optional |
| Level: | Detail |
| Usage: | Optional |
| Max Use: | $>1$ |
| Purpose: | To identify a person or office to whom administrative communications should be directed |
| tax Notes: | $\mathbf{1}$ If either PER03 or PER04 is present, then the other is required. |
|  | $\mathbf{2}$ If either PER05 or PER06 is present, then the other is required. |
|  | $\mathbf{3}$ If either PER07 or PER08 is present, then the other is required. |

## Semantic Notes:

Comments:


Segment: $1 \uparrow 1$ Baseline Item Data (Invoice)
Position: 210

Loop: IT1 Optional
Level:
Usage:
Max Use:

## Semantic Notes:

Comments:

Ref. Data

Purpose: To specify the basic and most frequently used line item data for the invoice and related transactions
Syntax Notes: $\mathbf{1}$ 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.
1 IT101 is the purchase order line item identification.
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

Des. Element Name $\underline{\text { Attributes }}$

IT101
350 Assigned Identification
O AN 1/20
Alphanumeric characters assigned for differentiation within a transaction set Sequential number assigned to the IT1 segment
Quantity Invoiced
X R 1/10
Number of units invoiced (supplier units)
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 M4 Monetary Value
212 Unit Price
Price per unit of product, service, commodity, etc.
639 Basis of Unit Price Code
X $\quad$ R 1/17

Detail
Optional
1

Code identifying the type of unit price for an item
Refer to 004010 Data Element Dictionary for acceptable code values.

|  | IT106 | 235 | Product/Service ID Qualifier X | ID 2/2 |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | Code identifying the type/source of the descriptive number used in Product/Service ID (234) |  |
|  |  |  | SV Service Rendered |  |
|  | IT107 | 234 | Product/Service ID X | AN 1/48 |
|  |  |  | Identifying number for a product or service |  |
|  |  |  | 0200 Monthly Service Charge |  |
|  |  |  | 0400 Other Charges \& Credits |  |
|  |  |  | 0500 Itemized Calls |  |
|  |  |  | 0520 Miscellaneous Itemized Charges \& Credits |  |
|  |  |  | 0700 Usage |  |
|  |  |  | 2110 Contracts/Discounts |  |
|  | IT108 | 235 | Product/Service ID Qualifier X | ID 2/2 |
|  |  |  | Code identifying the type/source of the descriptive number used in |  |
|  |  |  | Product/Service ID (234) |  |
|  |  |  | ZZ Mutually Defined |  |
|  | IT109 | 234 | Product/Service ID X | AN 1/48 |
|  |  |  | Identifying number for a product or service |  |
|  |  |  | 1 Recurring Charge |  |
|  |  |  | 2 Other Charges |  |
|  |  |  | 3 Usage |  |
|  |  |  | 4 Summary/Combined Charges |  |
| X | IT110 | 235 | Product/Service ID Qualifier X | ID 2/2 |
|  |  |  | Code identifying the type/source of the descriptive number used in Product/Service ID (234) |  |
|  |  |  | Refer to 004010 Data Element Dictionary for acceptable code value |  |
| X | IT111 | 234 | Product/Service ID X | AN 1/48 |
|  |  |  | Identifying number for a product or service |  |
| X | IT112 | 235 | Product/Service ID Qualifier X | ID 2/2 |
|  |  |  | Code identifying the type/source of the descriptive number used in |  |
|  |  |  | Product/Service ID (234) |  |
|  |  |  | Refer to 004010 Data Element Dictionary for acceptable code value |  |
| X | IT113 | 234 | Product/Service ID X | AN 1/48 |
|  |  |  | Identifying number for a product or service |  |
| X | IT114 | 235 | Product/Service ID Qualifier X | ID 2/2 |
|  |  |  | Code identifying the type/source of the descriptive number used in |  |
|  |  |  | Product/Service ID (234) <br> Refer to 004010 Data Element Dictionary for acceptable code values |  |
| X | IT115 | 234 | Product/Service ID X | AN 1/48 |
|  |  |  | Identifying number for a product or service |  |
| X | IT116 | 235 | Product/Service ID Qualifier X | ID 2/2 |
|  |  |  | Code identifying the type/source of the descriptive number used in Product/Service ID (234) |  |
|  |  |  | Product/Service ID (234) <br> Refer to 004010 Data Element Dictionary for acceptable code value |  |
| X | IT117 | 234 | Product/Service ID X | AN 1/48 |
|  |  |  | Identifying number for a product or service |  |



| Segment: | DTM Date/Time Reference |
| ---: | :--- |
| Position: | 270 |
| Loop: | IT1 Optional |
| Level: | Detail |
| Usage: | Optional |
| Max Use: | 10 |
| Purpose: | To specify pertinent dates and times |
| tax Notes: | $\mathbf{1}$ At least one of DTM02 DTM03 or DTM05 is required. |
|  | $\mathbf{2}$ If DTM04 is present, then DTM03 is required. |
|  | $\mathbf{3}$ If either DTM05 or DTM06 is present, then the other is required. |

## Semantic Notes:

Comments:

DTM02

DTM03

X

X

## Data Element Summary

Ref. Data

Element Name $\quad \underline{\text { Attributes }}$
374 Date/Time Qualifier
M ID 3/3
Code specifying type of date or time, or both date and time
$150 \quad$ Service Period Start

151 Service Period End
373
337
Date
Date expressed as CCYYMMDD
Time $\quad$ X TM 4/8
Time expressed in 24-hour clock time as follows: HHMM, or HHMMSS, or HHMMSSD, or HHMMSSDD, where $\mathrm{H}=$ hours ( $00-23$ ), $\mathrm{M}=$ minutes ( $00-$ 59), $\mathrm{S}=$ integer seconds (00-59) and $\mathrm{DD}=$ decimal seconds; decimal seconds are expressed as follows: $\mathrm{D}=$ tenths (0-9) and $\mathrm{DD}=$ hundredths (00-99)
623 Time Code
Code identifying the time. In accordance with International Standards Organization standard 8601, time can be specified by a + or - and an indication in hours in relation to Universal Time Coordinate (UTC) time; since + is a restricted character, + and - are substituted by P and M in the codes that follow Refer to 004010 Data Element Dictionary for acceptable code values.
1250 Date Time Period Format Qualifier
X ID 2/3
Code indicating the date format, time format, or date and time format Refer to 004010 Data Element Dictionary for acceptable code values.
1251 Date Time Period
X AN 1/35
Expression of a date, a time, or range of dates, times or dates and times

## Semantic Notes:

## Comments:

| Data Element Summary |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| M | Ref. <br> Des. | Data Element | Name | Attributes |
|  | SLN01 | 350 | Assigned Identification | M AN 1/20 |
|  |  |  | Alphanumeric characters assigned for differentiat | transaction set |
|  |  |  | Sequential number assigned to the SLN segment |  |
| X | SLN02 | 350 | Assigned Identification | O AN 1/20 |
|  |  |  | Alphanumeric characters assigned for differentiati | transaction set |
| M | SLN03 | 662 | Relationship Code | M ID 1/1 |
|  |  |  | Code indicating the relationship between entities I Included |  |
|  | SLN04 | 380 | Quantity | X R 1/15 |
|  |  |  | Numeric value of quantity |  |

SLN05
M
C00101
$C 00102$

C00103 C00104

C00105 C00106 C00107

C00108
C00109

C00110

C00111
C00112
C00113

C00114
C00115
SLN06
C 001

Composite Unit of Measure X
To identify a composite unit of measure
355 Unit or Basis for Measurement Code
M ID 2/2
Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken

M4 Monetary Value
1018 Exponent
O R 1/15
Power to which a unit is raised
649 Multiplier
O R 1/10
Value to be used as a multiplier to obtain a new value
355 Unit or Basis for Measurement Code
O ID 2/2
Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken
Refer to 004010 Data Element Dictionary for acceptable code values.
$1018 \begin{aligned} & \text { Exponent } \\ & \text { Power to which a unit is raised }\end{aligned}$ O R 1/15
649 Multiplier
O R 1/10
Value to be used as a multiplier to obtain a new value
355 Unit or Basis for Measurement Code
O ID 2/2
Code specifying the units in which a value is being expressed, or manner in
which a measurement has been taken
Refer to 004010 Data Element Dictionary for acceptable code values.
1018 Exponent O R 1/15
Power to which a unit is raised
649 Multiplier O R 1/10
Value to be used as a multiplier to obtain a new value
355 Unit or Basis for Measurement Code O ID 2/2
Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken
Refer to 004010 Data Element Dictionary for acceptable code values.
1018 Exponent O R 1/15

Power to which a unit is raised
649 Multiplier
O R 1/10
Value to be used as a multiplier to obtain a new value
355 Unit or Basis for Measurement Code
O ID 2/2
Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken
Refer to 004010 Data Element Dictionary for acceptable code values.
1018 Exponent
O R 1/15
Power to which a unit is raised
649 Multiplier
O R 1/10
Value to be used as a multiplier to obtain a new value
212 Unit Price
X R 1/17
Price per unit of product, service, commodity, etc.


| $\mathbf{X}$ | SLN22 | 234 | Product/Service ID <br> Identifying number for a product or service <br> Product/Service ID Qualifier <br> Code identifying the type/source of the descriptive number used in |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $\mathbf{X}$ | SLN23 | 235 | X | AN 1/48 |
| Product/Service ID (234) |  |  |  |  |

Segment: SI Service Characteristic Identification
Position: 400
Loop: SLN Optional
Level: Detail
Usage: Optional
Max Use: 2
Purpose: To specify service characteristic data
Syntax Notes: 1 If either SI04 or SI05 is present, then the other is required.
2 If either SI06 or SI07 is present, then the other is required.
3 If either SI08 or SI09 is present, then the other is required.
4 If either SI10 or SI11 is present, then the other is required.
5 If either SI12 or SI13 is present, then the other is required.
6 If either SI14 or SI15 is present, then the other is required.
7 If either SI16 or SI17 is present, then the other is required.
8 If either SI18 or SI19 is present, then the other is required.
9 If either SI20 or SI21 is present, then the other is required.

## Semantic Notes: <br> Comments: <br> Notes:

1 SI01 defines the source for each of the service characteristics qualifiers.
The SI segment actually contains 21 data elements. SI01 provides an Agency Qualifier Code and the other 20 data elements are matched pairs. The DE1000/DE234 paired information is presented when the associated data is available. The paired information may not be in the same positional placement as noted within the SI segment.

Data Element Summary
Ref.
$\frac{\text { Des. }}{\text { SI01 }}$
Data

Element Name
559 Agency Qualifier Code
Attributes
M ID 2/2

Code identifying the agency assigning the code values
TI Telecommunications Industry

| M | SI02 | 1000 | Service Characteristics Qualifier M AN 2/2 |
| :---: | :---: | :---: | :---: |
|  |  |  | Code from an industry code list qualifying the type of service characteristics |
|  |  |  | One or more of the following DE1000 values and it's associated DE234 value may be present within the SI segment. |
|  |  |  | AB Contract Indicator |
|  |  |  | CL Class of Service Code |
|  |  |  | DA Directory Assistance Code |
|  |  |  | DC Direction Code |
|  |  |  | MC Message/Rate Class |
|  |  |  | MT Message Type |
|  |  |  | OC Other Charges and Credits Category Code |
|  |  |  | RY Local/Toll Indicator |
|  |  |  | SA Service Activity Code |
|  |  |  | SD Settlement Code |
|  |  |  | ST Message Service Type |
| M | SI03 | 234 | Product/Service ID M AN 1/48 |
|  |  |  | Identifying number for a product or service |
|  |  |  | For a list of valid DE234 values associated with the preceding DE1000 values, see 10.4 Additional Code Lists Used by ETB within the ETB Telephone Billing Guideline at the following website: http://www.atis.org/obf/etb home.asp |
|  | SI04 | 1000 | Service Characteristics Qualifier X AN 2/2 |
|  |  |  | Code from an industry code list qualifying the type of service characteristics |
|  |  |  | One or more of the following DE1000 values and it's associated DE234 value may be present within the SI segment. |
|  |  |  | BA Band |
|  |  |  | BT Basic Service Type |
|  |  |  | CN Circuit Number Identification Code |
|  |  |  | OD Other Charges and Credits Description Code |
|  |  |  | SC Service Category Code |
|  |  |  | SS Service Sub-category Code |
|  |  |  | TN Telephone Number |
|  | SI05 | 234 | Product/Service ID $\quad$ X AN 1/48 |
|  |  |  | Identifying number for a product or service |
|  |  |  | This element will contain a locally defined code associated with one of the preceding DE1000 values. Examples of a locally defined value include a circuit number, telephone number, band, etc. |
|  | SI06 | 1000 | Service Characteristics Qualifier X AN 2/2 |
|  |  |  | Code from an industry code list qualifying the type of service characteristics |
|  | SI07 | 234 | Product/Service ID X AN 1/48 |
|  |  |  | Identifying number for a product or service |


| 1000 | Service Characteristics Qualifier X | AN 2/2 |
| :---: | :---: | :---: |
|  | Code from an industry code list qualifying the type of service chara | acteristics |
| 234 | Product/Service ID X | AN 1/48 |
|  | Identifying number for a product or service |  |
| 1000 | Service Characteristics Qualifier X | AN 2/2 |
|  | Code from an industry code list qualifying the type of service chara | acteristics |
| 234 | Product/Service ID X | AN 1/48 |
|  | Identifying number for a product or service |  |
| 1000 | Service Characteristics Qualifier X | AN 2/2 |
|  | Code from an industry code list qualifying the type of service chara | acteristics |
| 234 | Product/Service ID X | AN 1/48 |
|  | Identifying number for a product or service |  |
| 1000 | Service Characteristics Qualifier X | AN 2/2 |
|  | Code from an industry code list qualifying the type of service chara | acteristics |
| 234 | Product/Service ID X | AN 1/48 |
|  | Identifying number for a product or service |  |
| 1000 | Service Characteristics Qualifier X | AN 2/2 |
|  | Code from an industry code list qualifying the type of service chara | acteristics |
| 234 | Product/Service ID X | AN 1/48 |
|  | Identifying number for a product or service |  |
| 1000 | Service Characteristics Qualifier X | AN 2/2 |
|  | Code from an industry code list qualifying the type of service chara | acteristics |
| 234 | Product/Service ID X | AN 1/48 |
|  | Identifying number for a product or service |  |
| 1000 | Service Characteristics Qualifier X | AN 2/2 |
|  | Code from an industry code list qualifying the type of service chara | acteristics |
| 234 | Product/Service ID X | AN 1/48 |
|  | Identifying number for a product or service |  |


| Segment: | PID Product/Item Description |  |
| :---: | :---: | :---: |
| Position: | 410 |  |
| Loop: | SLN | Optional |
| Level: | Detail |  |
| Usage: | Optional |  |
| Max Use: | 200 |  |
| 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 descript |  |
|  |  | 08 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 apply. Any other value is indeterminate. |
|  | 4 PID09 is used to identify the language being used in PID05. |  |
| Comments: | $\begin{array}{ll} 1 & \text { If PI } \\ & \text { PID } \end{array}$ | 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 <br> the | PID06 when necessary to refer to the product surface or layer being described in egment. |
|  | 3 PID07 | 07 specifies the individual code list of the agency specified in PID03. |
|  | Data Element Summary |  |
| Ref. Des. | Data <br> Element |  |
|  |  | Name $\underline{\text { Attributes }}$ |
| PID01 | 349 | Item Description Type $\quad$ M ID 1/1 |
|  |  | Code indicating the format of a description |
| PID02 | 750 | Product/Process Characteristic Code O ID 2/3 |
|  |  | Code identifying the general class of a product or process characteristic |
|  |  | Refer to 004010 Data Element Dictionary for acceptable code values. |
| PID03 | 559 | Agency Qualifier Code X ID 2/2 |
|  |  | Code identifying the agency assigning the code values |
|  |  | Refer to 004010 Data Element Dictionary for acceptable code values. |
| PID04 | 751 | Product Description Code $\quad$ X AN 1/12 |
|  |  | A code from an industry code list which provides specific data about a product characteristic |
| PID05 | 352 | Description X AN 1/80 |
|  |  | A free-form description to clarify the related data elements and their content |
| PID06 | 752 | Surface/Layer/Position Code O ID 2/2 |
|  |  | Code indicating the product surface, layer or position that is being described Refer to 004010 Data Element Dictionary for acceptable code values. |
| PID07 | 822 | Source Subqualifier O AN 1/15 |
|  |  | A reference that indicates the table or text maintained by the Source Qualifier |
| PID08 | 1073 | Yes/No Condition or Response Code O ID 1/1 |
|  |  | Code indicating a Yes or No condition or response |
|  |  | Refer to 004010 Data Element Dictionary for acceptable code values. |
| PID09 | 819 | Language Code O ID 2/3 |
|  |  | Code designating the language used in text, from a standard code list maintained by the International Standards Organization (ISO 639) |

```
Segment: IN C Installment Information
Position: 430
    Loop: SLN Optional
    Level:
    Usage:
Max Use:
Purpose:
    Syntax Notes:
Semantic Notes:
1 INC02 is the installment period (e.g., months).
2 INC03 is the total number of installments.
    3 INC04 is the number of the current installment.
    4 INC05 is the installment balance after the current installment is applied.
```


## Comments:

| Ref. |
| :--- |
| Des. |

INC01
INC02
C00101

C00102

| C00106 | $\mathbf{6 4 9}$ | Multiplier <br> Value to be used as a multiplier to obtain a new value | O | R 1/10 |
| :--- | :---: | :--- | :--- | :--- | :--- |
| C00107 | $\mathbf{3 5 5}$ | Unit or Basis for Measurement Code <br> Code specifying the units in which a value is being expressed, or manner in |  |  |
| C00108 | $\mathbf{1 0 1 8}$ | which a measurement has been taken <br> Refer to 004010 Data Element Dictionary for acceptable code values. <br> Exponent <br> Power to which a unit is raised | O | R 1/15 |

$\left.\begin{array}{llllll} & \text { C00109 } & \mathbf{6 4 9} & \begin{array}{l}\text { Multiplier } \\ \text { Value to be used as a multiplier to obtain a new value }\end{array} & \text { O } & \text { R 1/10 } \\ & \text { C00110 } & \mathbf{3 5 5} & \begin{array}{l}\text { Unit or Basis for Measurement Code } \\ \text { Code specifying the units in which a value is being expressed, or manner in }\end{array} \\ & \text { C00111 } & \mathbf{1 0 1 8} & \begin{array}{l}\text { which a measurement has been taken } \\ \text { Refer to 004010 Data Element Dictionary for acceptable code values. } \\ \text { Exponent } \\ \text { Power to which a unit is raised } \\ \text { Multiplier }\end{array} & \text { O } & \text { R 1/15 }\end{array}\right\}$

| Segment: | TTA Allowance, Charge or Service |  |
| :---: | :---: | :---: |
| Position: | 440 |  |
| Loop: | SLN | Optional |
| Level: | Detail |  |
| Usage: | Optional |  |
| Max Use: | 10 |  |
| Purpose: | To specify allowances, charges, or services |  |
| Syntax Notes: | 1 If ITA02 is present, then at least one of ITA03 ITA13 or ITA14 is required. |  |
|  | 2 If ITA08 is present, then ITA09 is required. |  |
|  | 3 If either ITA10 or ITA11 is present, then the other is required. |  |
|  | 4 If ITA15 is present, then ITA02 is required. |  |
|  | 5 If ITA17 is present, then ITA12 is required. |  |
| Semantic Notes: | 1 ITA09 is the allowance or charge percent. |  |
|  |  | 10 is the quantity basis when the allowance or charge quantity is different from purchase order or invoice quantity. |
|  | 3 ITA1 | 12 is the quantity of free goods. |
| Comments: | $1 \begin{array}{ll} 1 & \text { If IT } \\ & \text { or I } \end{array}$ | A01 equals "A" - allowance or "C" - charge, then at least one of ITA06, ITA07, A08 must be present. |
|  | 2 ITA02 | 02 identifies the source of the code value in ITA03 or ITA15. |
|  | $3 \text { If IT }$ | A07 is present with either ITA06 or ITA08, then ITA07 takes precedence. |
|  | 4 ITA13 | 13 is used to clarify the allowance, charge, or service. |
|  | 5 ITA | 15 specifies the individual code list of the agency specified in ITA02. |
|  |  | 16 describes the relationship of ITA06, ITA07 or ITA09 to an associated nent. |
| Ref. <br> Des. | Data Element Summary |  |
|  | Data <br> Element |  |
|  |  | Name Attributes |
| ITA01 | 248 | Allowance or Charge Indicator $\quad$ M ID 1/1 |
|  |  | Code which indicates an allowance or charge for the service specified |
|  |  | C <br> Charge |
| ITA02 | 559 | Agency Qualifier Code X ID 2/2 |
|  |  | Code identifying the agency assigning the code values |
|  |  | TI Telecommunications Industry |
| ITA03 | 560 | Special Services Code $\quad$ X ID 2/10 |
|  |  | Code identifying the special service |
| ITA04 | 331 | Allowance or Charge Method of Handling Code $\quad$ M ID 2/2 |
|  |  | Code indicating method of handling for an allowance or charge ZZ Mutually Defined |
| ITA05 | 341 | Allowance or Charge Number O AN 1/16 |
|  |  | The number assigned by a vendor referencing an allowance, promotion, deal or charge |
| ITA06 | 359 | Allowance or Charge Rate $\quad$ O R 1/15 |
|  |  | Allowance or Charge Rate per Unit |


|  | ITA07 | 360 | Allowance or Charge Total Amount | 0 | N2 1/15 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Total dollar amount for the allowance or charge |  |  |
| X | ITA08 | 378 | Allowance/Charge Percent Qualifier | 0 | ID 1/1 |
|  |  |  | Code indicating on what basis allowance or charge percent is | calc | lated |
|  |  |  | Refer to 004010 Data Element Dictionary for acceptable code | val |  |
|  | ITA09 | 332 | Percent | X | R 1/6 |
|  |  |  | Percent expressed as a percent |  |  |
| X | ITA10 | 380 | Quantity | X | R 1/15 |
|  |  |  | Numeric value of quantity |  |  |
| X | ITA11 | 355 | Unit or Basis for Measurement Code | X | ID 2/2 |
|  |  |  | Code specifying the units in which a value is being expressed which a measurement has been taken |  | manner in |
|  |  |  | Refer to 004010 Data Element Dictionary for acceptable code |  |  |
| X | ITA12 | 380 | Quantity | X | R 1/15 |
|  |  |  | Numeric value of quantity |  |  |
| X | ITA13 | 352 | Description | X | AN 1/80 |
|  |  |  | A free-form description to clarify the related data elements an | dt | ir content |
|  | ITA14 | 150 | Special Charge or Allowance Code | X | ID 3/3 |
|  |  |  | Code identifying type of special charge or allowance |  |  |
|  |  |  | DSC Discount |  |  |
|  |  |  | PSP Payphone Service Provider Surcharge |  |  |
|  |  |  | SUR Surcharge |  |  |
| X | ITA15 | 822 | Source Subqualifier | 0 | AN 1/15 |
|  |  |  | A reference that indicates the table or text maintained by the | our | Qualifier |
|  | ITA16 | 662 | Relationship Code | 0 | ID 1/1 |
|  |  |  | Code indicating the relationship between entities |  |  |
|  |  |  | A Add |  |  |
| X | ITA17 | 355 | Unit or Basis for Measurement Code | 0 | ID 2/2 |
|  |  |  | Code specifying the units in which a value is being expressed which a measurement has been taken |  | manner in |
|  |  |  | Refer to 004010 Data Element Dictionary for acceptable code | val |  |

Segment: REF Reference Identification
Position:
Loop: SLN Optional
Level:
Usage:
Max Use:
Purpose:
Syntax Notes:

Semantic Notes: Comments:

## Data Element Summary

M


Segment:
Position:
Loop:
Level:
Usage:
Max Use:
Purpose:
Syntax Notes:

## Semantic Notes:

Comments:

## Data Element Summary

Ref. Data

Des. DTM01

Element Name 374 Date/Time Qualifier

Code specifying type of date or time, or both date and time
007 Effective

150 Service Period Start
151 Service Period End
DTM02

DTM04

DTM05

DTM06

Date
Date expressed as CCYYMMDD
Time
X TM 4/8
Time expressed in 24-hour clock time as follows: HHMM, or HHMMSS, or HHMMSSD, or HHMMSSDD, where $\mathrm{H}=$ hours ( $00-23$ ), $\mathrm{M}=$ minutes ( $00-$ 59), $\mathrm{S}=$ integer seconds (00-59) and $\mathrm{DD}=$ decimal seconds; decimal seconds are expressed as follows: $\mathrm{D}=$ tenths ( $0-9$ ) and $\mathrm{DD}=$ hundredths (00-99)
623 Time Code O ID 2/2
Code identifying the time. In accordance with International Standards Organization standard 8601, time can be specified by a + or - and an indication in hours in relation to Universal Time Coordinate (UTC) time; since + is a restricted character, + and - are substituted by P and M in the codes that follow Refer to 004010 Data Element Dictionary for acceptable code values.
1250 Date Time Period Format Qualifier $\quad \mathrm{X} \quad$ ID 2/3
Code indicating the date format, time format, or date and time format Refer to 004010 Data Element Dictionary for acceptable code values.
1251 Date Time Period
Expression of a date, a time, or range of dates, times or dates and times

## DTM Date/Time Reference

480
SLN Optional
Detail
Optional
10
To specify pertinent dates and times
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.

| Segment: | QTY Quantity |
| ---: | :--- |
| Position: | 510 |
| Loop: | QTY Optional |
| Level: | Detail |
| Usage: | Optional |
| Max Use: | 1 |
| Purpose: | To specify quantity information |
| ntax Notes: | $\mathbf{1}$ At least one of QTY02 or QTY04 is required. |
|  | $\mathbf{2}$ |
| Only one of QTY02 or QTY04 may be present. |  |
| Comments: | $\mathbf{1}$ QTY04 is used when the quantity is non-numeric. |



| C00108 | 1018 | Exponent | O R 1/15 |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Power to which a unit is raised |  |  |
| C00109 | 649 | Multiplier | 0 | R 1/10 |
|  |  | Value to be used as a multiplier to obtain a new value |  |  |
| C00110 | 355 | Unit or Basis for Measurement Code | 0 | ID 2/2 |
|  |  | Code specifying the units in which a value is being exp which a measurement has been taken |  | anner in |
|  |  | Refer to 004010 Data Element Dictionary for acceptab |  |  |
| C00111 | 1018 | Exponent | 0 | R 1/15 |
|  |  | Power to which a unit is raised |  |  |
| C00112 | 649 | Multiplier | 0 | R 1/10 |
|  |  | Value to be used as a multiplier to obtain a new value |  |  |
| C00113 | 355 | Unit or Basis for Measurement Code | 0 | ID 2/2 |
|  |  | Code specifying the units in which a value is being exp which a measurement has been taken |  | anner in |
|  |  | Refer to 004010 Data Element Dictionary for acceptab |  |  |
| C00114 | 1018 | Exponent | 0 | R 1/15 |
|  |  | Power to which a unit is raised |  |  |
| C00115 | 649 | Multiplier | 0 | R 1/10 |
|  |  | Value to be used as a multiplier to obtain a new value |  |  |
| QTY04 | 61 | Free-Form Message | X | AN 1/30 |
|  |  | Free-form information |  |  |


| Segment: | TCD Itemized Call Detail |
| :---: | :---: |
| Position: | 590 |
| Loop: | TCD Optional |
| Level: | Detail |
| Usage: | Optional |
| Max Use: | 1 |
| Purpose: | To specify detail information for itemized calls |
| Syntax Notes: | 1 If either TCD04 or TCD05 is present, then the other is required. |
|  | 2 If either TCD07 or TCD08 is present, then the other is required. |
| Semantic Notes: | 1 TCD12 is an undiscounted amount. |
|  | 2 TCD13 is a net amount after the discount has been applied to the amount in TCD12. |
|  | 3 TCD14 is an undiscounted amount. |
|  | 4 TCD15 is a net amount after the discount has been applied to the amount in TCD14. |
|  | 5 TCD16 is a code indicating the relationship of the price or amount to the associated segment. |
| Comments: | 1 TCD01 is the detail information. |
|  | 2 TCD02 is the date of the call. |
|  | 3 TCD03 is the connect time of the call. |
|  | 4 TCD04, TCD05, and TCD06 are the 'to' location of the call. |
|  | 5 TCD07, TCD08, and TCD09 are the 'from' location of the call. |
|  | 6 TCD10 and TCD11 are the total duration of the call. TCD10 is the time measured in minutes or minutes and tenths of minutes. TCD11 is time measured in seconds or seconds and tenths of seconds. |

## Data Element Summary




Segment: SI Service Characteristic Identification
Position: 600
Loop: TCD Optional
Level: Detail
Usage: Optional
Max Use: 2
Purpose: To specify service characteristic data
Syntax Notes: 1 If either SI04 or SI05 is present, then the other is required.
2 If either SI06 or SI07 is present, then the other is required.
3 If either SI08 or SI09 is present, then the other is required.
4 If either SI10 or SI11 is present, then the other is required.
5 If either SI12 or SI13 is present, then the other is required.
6 If either SI14 or SI15 is present, then the other is required.
7 If either SI16 or SI17 is present, then the other is required.
8 If either SI18 or SI19 is present, then the other is required.
9 If either SI20 or SI21 is present, then the other is required.

## Semantic Notes: <br> Comments: <br> Notes:

1 SI01 defines the source for each of the service characteristics qualifiers.
The SI segment actually contains 21 data elements. SI01 provides an Agency Qualifier Code and the other 20 data elements are matched pairs. The DE1000/DE234 paired information is presented when the associated data is available. The paired information may not be in the same positional placement as noted within the SI segment.

M
M SI02

M

Data Element Summary
Ref. Data

Element Name
Attributes
559 Agency Qualifier Code
M ID 2/2
Code identifying the agency assigning the code values TI Telecommunications Industry
1000 Service Characteristics Qualifier
M AN 2/2
Code from an industry code list qualifying the type of service characteristics One or more of the following DE1000 values and it's associated DE234 value may be present within the SI segment.

| DA | Directory Assistance Category Code |  |
| :--- | :--- | :--- |
| DC | Direction Code |  |
| MT | Message Type |  |
| RP | Rate Period Code |  |
| ST | Message Service Type | M |
| Product/Service ID | AN 1/48 |  |
| Identifying number for a product or service |  |  |
| For a list of valid DE234 values associated with the preceding DE1000 values, |  |  |
| see 10.4 Additional Code Lists Used by ETB within the ETB Telephone <br> Billing Guideline at the following website: <br> http://www.atis.org/obf/etb home.asp |  |  |

1000
Service Characteristics Qualifier
X AN 2/2
Code from an industry code list qualifying the type of service characteristics One or more of the following DE1000 values and it's associated DE234 value may be present within the SI segment.

| FN | From/Originating Station Telephone Number |
| :--- | :--- |
| RZ | EMI Record Identification |
| SC | Service Category Code |
| TM | To/Terminating Station Telephone Number |

X AN 1/48
Identifying number for a product or service
This element will contain a locally defined code associated with one of the preceding DE1000 values. Examples of a locally defined value include a circuit number, telephone number, etc.
1000 Service Characteristics Qualifier
X AN 2/2
Code from an industry code list qualifying the type of service characteristics
234 Product/Service ID
X AN 1/48
Identifying number for a product or service
1000 Service Characteristics Qualifier
X AN 2/2
Code from an industry code list qualifying the type of service characteristics
234 Product/Service ID
$X \quad$ AN 1/48
Identifying number for a product or service
1000 Service Characteristics Qualifier
X AN 2/2
Code from an industry code list qualifying the type of service characteristics
234 Product/Service ID
X AN 1/48
Identifying number for a product or service
1000 Service Characteristics Qualifier
X AN 2/2
Code from an industry code list qualifying the type of service characteristics
234 Product/Service ID
X AN 1/48
Identifying number for a product or service
1000 Service Characteristics Qualifier
X AN 2/2
Code from an industry code list qualifying the type of service characteristics
234 Product/Service ID
X AN 1/48
Identifying number for a product or service
1000 Service Characteristics Qualifier
X AN 2/2
Code from an industry code list qualifying the type of service characteristics
234 Product/Service ID
X AN 1/48
Identifying number for a product or service
1000 Service Characteristics Qualifier X AN 2/2
Code from an industry code list qualifying the type of service characteristics
234 Product/Service ID
X AN 1/48
Identifying number for a product or service
1000 Service Characteristics Qualifier
X AN 2/2
Code from an industry code list qualifying the type of service characteristics
234 Product/Service ID
X AN 1/48
Identifying number for a product or service

| Segment: ITA Allowance, Charge or Service |  |  |
| :---: | :---: | :---: |
| Position: | 615 |  |
| Loop: | TCD | Optional |
| Level: | Detail |  |
| Usage: | Optional |  |
| Max Use: | >1 |  |
| Purpose: | To specify allowances, charges, or services |  |
| Syntax Notes: | 1 If ITA02 is present, then at least one of ITA03 ITA13 or ITA14 is required. |  |
|  | 2 If ITA08 is present, then ITA09 is required. |  |
|  | 3 If either ITA10 or ITA11 is present, then the other is required. |  |
|  | 4 If ITA15 is present, then ITA02 is required. |  |
|  | 5 If ITA17 is present, then ITA12 is required. |  |
| Semantic Notes: | 1 ITA09 is the allowance or charge percent. |  |
|  |  | 10 is the quantity basis when the allowance or charge quantity is different from urchase order or invoice quantity. |
|  | 3 ITA1 | 2 is the quantity of free goods. |
| Comments: | $\begin{array}{ll} 1 & \begin{array}{ll} \text { If IT } \\ \text { or I } \end{array} \end{array}$ | A01 equals "A" - allowance or "C" - charge, then at least one of ITA06, ITA07, A08 must be present. |
|  | 2 ITA02 | 22 identifies the source of the code value in ITA03 or ITA15. |
|  | $3 \text { If IT }$ | A07 is present with either ITA06 or ITA08, then ITA07 takes precedence. |
|  | 4 ITA1 | 3 is used to clarify the allowance, charge, or service. |
|  | 5 ITA | 5 specifies the individual code list of the agency specified in ITA02. |
|  | 6 ITA1 segm | 16 describes the relationship of ITA06, ITA07 or ITA09 to an associated ent. |
| Ref. | Data Element Summary |  |
|  | Data |  |
| Des. | Element | Name $\underline{\text { Attributes }}$ |
| ITA01 | 248 | Allowance or Charge Indicator $\quad$ M ID 1/1 |
|  |  | Code which indicates an allowance or charge for the service specified C Charge |
| ITA02 | 559 | Agency Qualifier Code X ID 2/2 |
|  |  | Code identifying the agency assigning the code values TI Telecommunications Industry |
| ITA03 | 560 | Special Services Code $\quad$ X ID 2/10 |
|  |  | Code identifying the special service |
|  |  | Refer to 004010 Data Element Dictionary for acceptable code values. |
| ITA04 | 331 | Allowance or Charge Method of Handling Code $\quad$ M ID 2/2 |
|  |  | Code indicating method of handling for an allowance or charge ZZ Mutually Defined |
| ITA05 | 341 | Allowance or Charge Number O AN 1/16 |
|  |  | The number assigned by a vendor referencing an allowance, promotion, deal or charge |
| ITA06 | 359 | Allowance or Charge Rate O R 1/15 |
|  |  | Allowance or Charge Rate per Unit |


| X | ITA07 | 360 | Allowance or Charge Total Amount $\quad$ O $\quad$ N2 1/15 |
| :---: | :---: | :---: | :---: |
|  |  |  | Total dollar amount for the allowance or charge |
|  | ITA08 | 378 | Allowance/Charge Percent Qualifier O ID 1/1 |
|  |  |  | Code indicating on what basis allowance or charge percent is calculated |
|  |  |  | Refer to 004010 Data Element Dictionary for acceptable code values. |
| X | ITA09 | 332 | Percent $\quad$ X R 1/6 |
|  |  |  | Percent expressed as a percent |
| X | ITA10 | 380 | Quantity $\quad$ X R 1/15 |
|  |  |  | Numeric value of quantity |
| X | ITA11 | 355 | Unit or Basis for Measurement Code $\quad$ X ID 2/2 |
|  |  |  | Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken |
|  |  |  | Refer to 004010 Data Element Dictionary for acceptable code values. |
| X | ITA12 | 380 | Quantity $\quad$ X R 1/15 |
|  |  |  | Numeric value of quantity |
| X | ITA13 | 352 | Description $\quad$ X AN 1/80 |
|  |  |  | A free-form description to clarify the related data elements and their content |
|  | ITA14 | 150 | Special Charge or Allowance Code $\quad$ X ID 3/3 |
|  |  |  | Code identifying type of special charge or allowance PSP Payphone Service Provider Surcharge |
| X | ITA15 | 822 | Source Subqualifier $\quad$ O AN 1/15 |
|  |  |  | A reference that indicates the table or text maintained by the Source Qualifier |
|  | ITA16 | 662 | Relationship Code O O ID 1/1 |
|  |  |  | Code indicating the relationship between entities |
|  |  |  | $0 \quad$ Information Only |
|  |  |  | Charges which relate to but may not be included in or added to the unit price of the SLN. (i.e., compute WATS |
| X | ITA17 | 355 | Unit or Basis for Measurement Code $\quad$ O ID 2/2 |
|  |  |  | Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken |
|  |  |  | Refer to 004010 Data Element Dictionary for acceptable code values. |

Segment:
Position: Loop: Level: Usage: Max Use: Purpose: Syntax Notes: Semantic Notes:

Comments:

TDS Total Monetary Value Summary
010
Summary
Mandatory
1
To specify the total invoice discounts and amounts
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.
1 TDS02 is required if the dollar value subject to discount is not equal to the dollar value of TDS01.

Ref. Data
Des.
TDS01
TDS02

TDS03
TDS04

## Data Element Summary

Element
610 Amount
Attributes
Monetary amount
610 Amount
Monetary amount
610 Amount
Monetary amount
610 Amount
Monetary amount

| Segment: ITA Allowance, Charge or Service |  |  |
| :---: | :---: | :---: |
| Position: | 020 |  |
| Loop: | ITA | Optional |
| Level: | Summary |  |
| Usage: | Optional |  |
| Max Use: | 1 |  |
| Purpose: | To specify allowances, charges, or services |  |
| Syntax Notes: | 1 If ITA02 is present, then at least one of ITA03 ITA13 or ITA14 is required. |  |
|  | 2 If ITA08 is present, then ITA09 is required. |  |
|  | 3 If either ITA10 or ITA11 is present, then the other is required. |  |
|  | 4 If ITA15 is present, then ITA02 is required. |  |
|  | 5 If ITA17 is present, then ITA12 is required. |  |
| Semantic Notes: | 1 ITA09 is the allowance or charge percent. |  |
|  | 2 ITA1 the pu | 10 is the quantity basis when the allowance or charge quantity is different from purchase order or invoice quantity. |
|  | 3 ITA12 | 12 is the quantity of free goods. |
| Comments: | $1 \begin{aligned} & \text { If ITA } \\ & \text { or ITA } \end{aligned}$ | A01 equals "A" - allowance or "C" - charge, then at least one of ITA06, ITA07, A08 must be present. |
|  | 2 ITA02 | 02 identifies the source of the code value in ITA03 or ITA15. |
|  | 3 If ITA | A07 is present with either ITA06 or ITA08, then ITA07 takes precedence. |
|  | 4 ITA13 | 13 is used to clarify the allowance, charge, or service. |
|  | 5 ITA1 | 15 specifies the individual code list of the agency specified in ITA02. |
|  | 6 ITA1 <br> segm | 16 describes the relationship of ITA06, ITA07 or ITA09 to an associated ent. |
| Ref. <br> Des. | Data Element Summary |  |
|  | Data |  |
|  | Element | Name $\underline{\text { Attributes }}$ |
|  | 248 | Allowance or Charge Indicator $\quad$ M ID 1/1 |
|  |  | Code which indicates an allowance or charge for the service specified |
| ITA02 | 559 | Agency Qualifier Code X ID 2/2 |
|  |  | Code identifying the agency assigning the code values TI Telecommunications Industry |
| ITA03 | 560 | Special Services Code $\quad$ X ID 2/10 |
|  |  | Code identifying the special service |
|  |  | Refer to 004010 Data Element Dictionary for acceptable code values. |
| ITA04 | 331 | Allowance or Charge Method of Handling Code $\quad$ M ID 2/2 |
|  |  | Code indicating method of handling for an allowance or charge 06 Charge to be Paid by Customer |
| ITA05 | 341 | Allowance or Charge Number O AN 1/16 |
|  |  | The number assigned by a vendor referencing an allowance, promotion, deal or charge |
| ITA06 | 359 | Allowance or Charge Rate $\quad$ O R 1/15 |
|  |  | Allowance or Charge Rate per Unit |



## Segment: BAL Balance Detail

Position:
040
Loop: BAL Optional
Level: Summary
Usage: Optional
Max Use:
Purpose:
Syntax Notes:
Semantic Notes:
Comments:

BAL02

M
M

1
To identify the specific monetary balances associated with a particular account

## Data Element Summary

Ref. Des. BAL01

Segment:
Position:
Loop:
Level:
Usage:
Max Use: Purpose: Syntax Notes:

## Semantic Notes:

Comments:
Ref. Data

Des. DTM01

DTM02
DTM03

X

X
DTM05

X

DTM06

## DTM Date/Time Reference

050
BAL Optional
Summary
Optional
1
To specify pertinent dates and times
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.

## Data Element Summary

$\begin{array}{cl}\text { Element } & \text { Name } \\ \text { Date/Time Qualifier }\end{array}$
Code specifying type of date or time, or both date and time 050 Received
373 Date $\quad$ X DT 8/8
Date expressed as CCYYMMDD
337 Time
Time expressed in 24-hour clock time as follows: HHMM, or HHMMSS, or HHMMSSD, or HHMMSSDD, where $\mathrm{H}=$ hours ( $00-23$ ), $\mathrm{M}=$ minutes ( $00-$ 59), $\mathrm{S}=$ integer seconds (00-59) and $\mathrm{DD}=$ decimal seconds; decimal seconds are expressed as follows: $\mathrm{D}=$ tenths ( $0-9$ ) and $\mathrm{DD}=$ hundredths (00-99)
623 Time Code
O ID 2/2
Code identifying the time. In accordance with International Standards Organization standard 8601, time can be specified by a + or - and an indication in hours in relation to Universal Time Coordinate (UTC) time; since + is a restricted character, + and - are substituted by P and M in the codes that follow Refer to 004010 Data Element Dictionary for acceptable code values.
1250 Date Time Period Format Qualifier $\quad X \quad$ ID 2/3
Code indicating the date format, time format, or date and time format Refer to 004010 Data Element Dictionary for acceptable code values.
1251 Date Time Period
Expression of a date, a time, or range of dates, times or dates and times

Segment: N1 Name
Position: 060
Loop: N1 Optional
Level: Summary
Usage: Optional
Max Use: 1
Purpose: To identify a party by type of organization, name, and code
Syntax Notes:
Semantic Notes:
Comments:


| Segment: ITA Allowance, Charge or Service |  |  |
| :---: | :---: | :---: |
| Position: | 090 |  |
| Loop: | ITA | Optional |
| Level: | Summary |  |
| Usage: | Optional |  |
| Max Use: | 1 |  |
| Purpose: | To specify allowances, charges, or services |  |
| Syntax Notes: | 1 If ITA02 is present, then at least one of ITA03 ITA13 or ITA14 is required. |  |
|  | 2 If ITA08 is present, then ITA09 is required. |  |
|  | 3 If either ITA10 or ITA11 is present, then the other is required. |  |
|  | 4 If ITA15 is present, then ITA02 is required. |  |
|  | 5 If ITA17 is present, then ITA12 is required. |  |
| Semantic Notes: | 1 ITA09 is the allowance or charge percen |  |
|  | 2 ITA10 the pu | 10 is the quantity basis when the allowance or charge quantity is different from purchase order or invoice quantity. |
|  | 3 ITA12 is the quantity of free goods. |  |
| Comments: | $1 \begin{aligned} & \text { If IT } \\ & \text { or IT } \end{aligned}$ | A01 equals "A" - allowance or "C" - charge, then at least one of ITA06, ITA07, A08 must be present. |
|  | $2 \text { ITAC }$ | 02 identifies the source of the code value in ITA03 or ITA15. |
|  | $3 \text { If IT }$ | A07 is present with either ITA06 or ITA08, then ITA07 takes precedence. |
|  | 4 ITA1 | 13 is used to clarify the allowance, charge, or service. |
|  | $5 \text { ITA1 }$ | 15 specifies the individual code list of the agency specified in ITA02. |
|  | 6 ITA segm | 16 describes the relationship of ITA06, ITA07 or ITA09 to an associated ent. |
| Ref. <br> Des. | Data Element Summary |  |
|  | Data <br> Element |  |
|  |  | Name Attributes |
| ITA01 | 248 | Allowance or Charge Indicator M ID 1/1 |
|  |  | Code which indicates an allowance or charge for the service specified N No Allowance or Charge |
| ITA02 | 559 | Agency Qualifier Code X ID 2/2 |
|  |  | Code identifying the agency assigning the code values |
| ITA03 | 560 | Special Services Code $\quad$ X ID 2/10 |
|  |  | Code identifying the special service |
|  |  | Refer to 004010 Data Element Dictionary for acceptable code values. |
| ITA04 | 331 | Allowance or Charge Method of Handling Code M ID 2/2 |
|  |  | Code indicating method of handling for an allowance or charge |
| ITA05 | 341 | Allowance or Charge Number O AN 1/16 |
|  |  | The number assigned by a vendor referencing an allowance, promotion, deal or charge |
| ITA06 | 359 | Allowance or Charge Rate $\quad$ O R 1/15 |
|  |  | Allowance or Charge Rate per Unit |
| ITA07 | 360 | Allowance or Charge Total Amount O $\quad$ N2 1/15 |
|  |  | Total dollar amount for the allowance or charge |
| ITA08 | 378 | Allowance/Charge Percent Qualifier O ID 1/1 |
|  |  | Code indicating on what basis allowance or charge percent is calculated |
|  |  | Refer to 004010 Data Element Dictionary for acceptable code values. |
| ITA09 | 332 | Percent X R 1/6 |
|  |  | Percent expressed as a percent |
| ITA10 | 380 | Quantity X R 1/15 |
|  |  | Numeric value of quantity |
| ITA11 | 355 | Unit or Basis for Measurement Code $\quad$ X ID 2/2 |



| Segment: | $\mathbf{D T M}$ Date/Time Reference |
| ---: | :--- |
| Position: | 100 |
| Loop: | ITA Optional |
| Level: | Summary |
| Usage: | Optional |
| Max Use: | 2 |
| Purpose: | To specify pertinent dates and times |
| tax Notes: | $\mathbf{1}$ At least one of DTM02 DTM03 or DTM05 is required. |
|  | $\mathbf{2}$ If DTM04 is present, then DTM03 is required. |
|  | $\mathbf{3}$ If either DTM05 or DTM06 is present, then the other is required. |

## Semantic Notes:

Comments:

## Data Element Summary

| Data Element Summary |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| M | Ref. <br> Des. | Data Element | Name | Attributes |
|  | DTM01 | 374 | Date/Time Qualifier | M ID 3/3 |
|  |  |  | Code specifying type of date or time, or both date and time 007 Effective |  |
|  | DTM02 | 373 | Date | X DT 8/8 |
|  |  |  | Date expressed as CCYYMMDD |  |
| X | DTM03 | 337 | Time | X TM 4/8 |
|  |  |  | Time expressed in 24-hour clock time as follows: HHMM, HHMMSSD, or HHMMSSDD, where $\mathrm{H}=$ hours (00-23), M 59), $\mathrm{S}=$ integer seconds (00-59) and $\mathrm{DD}=$ decimal seconds; are expressed as follows: $\mathrm{D}=$ tenths $(0-9)$ and $\mathrm{DD}=$ hundre | HHMMSS, or $=$ minutes (00decimal seconds hs (00-99) |
| X | DTM04 | 623 | Time Code | O ID 2/2 |
|  |  |  | Code identifying the time. In accordance with International Standards |  |
|  |  |  | Organization standard 8601, time can be specified by a + or - and an indication in hours in relation to Universal Time Coordinate (UTC) time; since + is a restricted character, + and - are substituted by P and M in the codes that follow |  |
|  |  |  | Refer to 004010 Data Element Dictionary for acceptable code values. |  |
| X | DTM05 | 1250 | Date Time Period Format Qualifier X ID 2/3 <br> Code indicating the date format, time format, or date and time format Refer to 004010 Data Element Dictionary for acceptable code values. |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| X | DTM06 | 1251 | Date Time Period | X AN 1/35and times |
|  |  |  | Expression of a date, a time, or range of dates, times or dat |  |

## Segment: <br> CTT Transaction Totals

Position:
115
Loop:
Level:
Usage:
Max Use:
Purpose:
Syntax Notes:
Semantic Notes:
Comments:
Summary
Optional
1
To transmit a hash total for a specific element in the transaction set
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.
1 This segment is intended to provide hash totals to validate transaction completeness and correctness.

## Data Element Summary

Number of Line Items
Total number of line items in the transaction set
Number of IT1 segments within this transaction set.

Hash Total O R 1/10
Sum of values of the specified data element. All values in the data element will be summed without regard to decimal points (explicit or implicit) or signs. Truncation will occur on the left most digits if the sum is greater than the maximum size of the hash total of the data element. Example: -. 0018 First occurrence of value being hashed. 18 Second occurrence of value being hashed. 1.8 Third occurrence of value being hashed. 18.01 Fourth occurrence of value being hashed. $\qquad$ 1855 Hash total prior to truncation. 855 Hash total after truncation to three-digit field.
81 Weight X R 1/10 Numeric value of weight
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
Refer to 004010 Data Element Dictionary for acceptable code values.
183 Volume X R 1/8 Value of volumetric measure
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
Refer to 004010 Data Element Dictionary for acceptable code values.
352 Description O AN 1/80
A free-form description to clarify the related data elements and their content

| Segment: | SE Transaction Set Trailer |
| ---: | :--- |
| Position: | 120 |
| 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) |
| ntax Notes: |  |
| Comments: | $\mathbf{1} \quad$ SE is the last segment of each transaction set. |



