811 Transaction Set
(X12 Version 004010)

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1 Overview

This Document details Granite's implementation of the Consolidated Service Invoice/Statement Transaction Set (811).

For ease of reference, the implementation guide is broken into several sections. This section gives an overview of this guide and the 811 transaction set. Subsequent sections explain the implementation of the 811. Each section provides a comprehensive discussion of the information provided for in a particular area of the bill, the format of the segments being used to provide information, and a sample mapping.

1.1 Schedule of 811 Versions

This Implementation Guide should be used in conjunction with the ASC X12 Draft Version 4 Release 2 standards, and the 811 Consolidated Service Invoice/Statement Guideline Issue 9 Revision 4. The ATIS 811 Consolidated Service Invoice/Statement Guideline can be found on the World Wide Web within the ATIS site at:

http://www.atis.org/obf/docs/etb/sec10_7811nov07.pdf

1.2 Structure of the 811

The 811 is divided into three areas:

The Heading Area

The heading contains information about the parties exchanging the bill. Some of the common data elements passed in the heading area are:

- Account number
- The billing party (Granite Telecommunications)
- The billed party (Customer)
- Invoice Date Due date for payment

Section 2 of this guide provides further detail on the data provided in the Heading Area.

The Detail Area

The detail area contains service usage and charge information. The detail area provides 9 hierarchical levels for data presentation. Granite provides the consolidated 811 invoice in the summary format using the first four HL1-HL4 levels.

- Level 1, Service Provider level, contains information about the provider of the service. Note that while the information contained in the heading area refers to the provider of the bill (i.e., Granite), information contained in Table 2/Level 1 refers to the actual entity providing the service. It is possible to have charges from several service providers for a given account (e.g., Granite, AT&T, Sprint, and Worldcom charges could all appear on a bill). Aggregate tax information is also provided at this level.
- Level 2, Billing Arrangement level, contains information about the billing arrangement. Granite uses this level to provide Consolidated Billing Account (CBA)

information.
- Level 3, Sub-Billing Arrangement level, can also contain information about the billing arrangement.
- Level 4, Group level, provides summary charge information for services rendered.
- Level 5, Category level, provides segregation of Level 4 charges, and is included in detailed billing.
- Level 6, Sub-Category level, provides further segregation of Level 4 charges and is not included in the Granite EDI.
- Level 7, Type level, is similar to levels 5 and 6 and is not included in the Granite EDI.
- Level 8, Charge Detail level, contains supporting charge detail for charges at level 4. Level 8 information is included in the detailed Granite EDI for service charge detail.
- Level 9, Line Detail level, contains supporting usage and charge detail for charges at either Level 4 or Level 8. Level 9 is only included in detailed EDI for call detail information.

Section 3 of this implementation guide provides further detail on the data provided in the Detail Area.

The Summary Area

The summary area contains summary information about the 811. The summary area contains several key amounts that can be used to validate the 811. Individual service provider adjustments will also be shown in this area of the 811.

- The TDS segment contains the charges for the current bill period.
- A BAL segment with a value of "PB" in BAL02 contains the previous balance amount on the account (i.e., the amount that was billed in the previous month).
- A BAL segment with a value of "NA" in BAL02 contains the sum of the net adjustment amount and applied payments for the entire bill.
- A BAL segment with a value of "BT" in BAL02 contains the dishonored check (bank reject) total amount.
- A BAL segment with a value of "TT" in BAL02 contains the Granite Telecommunications calculated amount due on the account. In the subordinate, or memo invoices for the child accounts the BAL03 field will be 0.

Below is the equation that can be used to calculate the amount due for the responsible party (Consolidated 811 master account)

BAL TT amount (Amount Due to Granite Telecommunications) =
      TDS amount (Current Charges)
   + BAL PB amount (Previous Balance Amount)
   + BAL NA amount (Net Adjustment)
   + BAL BT amount (Dishonored Check Total)

1.3 Format of Guide

Section 2 of this implementation guide will provide a detailed description of the Heading Section within the 811 transaction set.

Section 3 of this implementation guide will provide a detailed description of the Detail Area of the 811 transaction set, and the structure of various billed services.

Section 4 of this implementaton guide will provide a detailed description of the Summary Area of the 811 transaction set.

Section 5 discusses the Consolidated Billing Arrangement, a billing arrangement that consolidates bills into a single payable bill.

Section 6 discusses the Audit Procedures that are used to insure the accuracy of the EDI 811 transaction set.

The ATIS link below provides a comprehensive listing of segments, data elements, and code values utilized by Granite in producing the 811 transaction set.
http://www.atis.org/obf/docs/etb/sec10_7811nov07.pdf

Since the same segment can be used in different sections of the 811 to provide different information, it is important to review the sample mapping associated with each area of the transaction set. An example of different uses of a segment can be demonstrated with the TXI segment. In the heading area, this segment is used to provide information about the tax exempt status of the billed party; while in the detail area at HL 1, the same segment is used to provide a taxable amount to the billed party.

1.4 Bill and Transaction Formats Provided

There are several different 811 formats. Granite provides the 811 in the Consolidated Billing Account, Account Summary format. The account summary formats provide high-level account information. Summary information is provided within HLs 1 - 4.

• Single Account Billing
This billing arrangement produces one bill per telephone number.

• Group Billing Account
This billing arrangement combines several single accounts under one main account number and produces one large bill.

• Consolidated Billing Account (CBA)
Single Accounts and/or Group Billing Accounts are consolidated under a single account number. This produces a special summary 811 of all accounts in the arrangement (see chapter 5), followed by a separate 811 for each subordinate account.

1.5 Referencing Charges When Contacting Granite

The information provided in the 811 is used in conjunction with the traditional bill. Since the information provided may be used to both pay bills and resolve billing discrepancies, key fields and reference numbers from a the 811 document should be passed to the customer's internal applications. The following data elements are required to reference an account:

Bill Date BIG Segment - BIG01
Account Number - REF02 when REF01 = "12" or REF="14"

Bill reference numbers, which can be used to reference charges when making billing inquiries, are provided in each loop where charge information is provided. (The TXI segment does not contain a reference number.)

1.6 Taxes, Surcharges and Fees

Taxes, surcharges and fees which are assessed by Granite on behalf of a third party (e.g., state or local government) may make up a portion of the certain monthly telephone bills. Granite aggregates like amounts and provides them at the service provider level of the 811. If you have any question about whether a charge is a tax, surcharge, or fee, please resolve the issue during the parallel testing phase. Reference the charge on the respective paper bill and discuss the issue with your Granite representative.

1.7 Data Element Separator and Segment Terminator

When displaying mapping examples in this guide, the tilde ("~") is used as the data element separator and the exclamation point (" ! ") is used as the segment terminator. In live production data Granite will use the X12 recommended data element separator of the tilde ("~" HEX 7E), segment terminator of the exclamation point (" ! " HEX 21) and sub-element separator of the double vertical bar (" ¦ " HEX 7C).

1.8 Functional Group Information

All 811 transaction sets provided will be enveloped within a functional group. The purpose of the functional group is to provide control information for the business document being exchanged. The functional group consists of a functional group header (GS segment) and a functional group trailer (GE segment).

GS segment

Example: GS*CI*GRANITEDUN*0140100*20030501*1527*128*X*004010!

D.E. Use	Data Reference	Element #	Valid Values/Description
M	GS01	479	CI - Consolidated Invoice
M	GS02	142	Application Sender's Code
M	GS03	124	Application Receiver's Code
M	GS04	373	Data Interchange Date
M	GS05	337	Data Interchange Time
M	GS06	28	Data Interchange Control Number
M	GS07	455	X - Accredited Standards Committee
M	GS08	480	004010 - Version 4, Release 1

GE segment
Example: GE*337*128!
D.E. Data

Use	Reference	Element #	Valid Values/Description
M	GE01	97	Number of transaction sets
M	E02	28	Data Interchange Control Number

1.9 Understanding Hierarchical Level (HL) Segments

In order to understand the 811, it is important to understand the use of the HL segment. The HL segment indicates the structure of the 811. The HL segment contains the following information:

HL* ID Number* Parent ID Number* Level Code* Child Code!
- HL01 (Hierarchical ID Number) is a unique number assigned by the provider to identify a particular data segment in a hierarchical structure.
- HL02 (Hierarchical Parent ID Number) is the HL01 value of the parent HL loop.
- HL03 (Hierarchical Level Code) identifies the hierarchical level (1 – 9).
- HL04 (Hierarchical Child Code) indicates if there are additional subordinate (or child) HL segments associated with the hierarchical level. Although HL04 is not a mandatory element according to X12 syntax, it is required by TCIF. The value of '1' indicates that the hierarchical level has children (additional subordinate HL data segments in the hierarchical structure). The value of '0' indicates that the hierarchical level has no children (no subordinate HL segment in the hierarchical structure). This provides positive confirmation of subordinate HL loops.

Granite provides summary charges at HL 4. All charges which are standalone (no supporting detail provided) will be grouped together in one HL loop. If any charge has supporting detail (e.g., itemized calls) it will be provided in a separate HL loop. The following are examples that illustrate the use of the HL segment in the 811. The HL01 data element always contains the sequential number of the respective HL loop.

HL~1~~1~1!
HL02 is not provided. This means the information provided does not have a parent HL loop. HL03 signifies HL 1, the service provider level. HL04 indicates that there is supporting detail at a lower level.

HL~2~1~4~0!
HL02 indicates that this information supports and is related to the information provided in HL loop number 1. HL03 signifies HL 4, the group level. HL04 indicates that there is no supporting detail for the charges at this level. Several IT1 loops can appear under the same HL loop when HL04 = "0".

HL~3~1~4~1!
HL02 indicates that this information supports and is related to the information provided in HL loop number 1. HL03 signifies HL 4, the group level. HL04 indicates that there is supporting detail at a lower level. When HL04 = "1", only one IT1 loop will appear within this HL loop.

HL~4~3~5~1!
HL02 indicates that this information supports and is related to the information provided in HL loop number 3. HL03 signifies HL 5, the Category level. HL04 indicates that there is supporting detail at a lower level.

HL~5~4~9~0!
HL02 indicates that this information supports and is related to the information provided in HL loop number 4. HL03 signifies HL 9, the Line Detail level. HL04 indicates that there is no supporting detail for the charges.

2 Heading Area

The purpose of the heading area of the 811 is to provide information about the bill being rendered (i.e., account number, type of bill, due date, and tax status of bill), the entity receiving the bill (the Granite partner), and the entity providing the bill (Granite Telecommunications).

2.1 Structure

Seg	Segment Description	Loop	Max Use	O/M
ST	Transaction Set Header	N/A	1	M
BIG	Beginning Segment for Invoice	N/A	1	M
NTE	Note/Special Instruction	N/A	100	O
REF	Reference Number	N/A	3	M
ITD	Terms of Sale/Due Date	N/A	1	O
DTM	Service From/Through Dates	N/A	2	O
TXI	Tax Information	N/A	3	O
	Loop	N1	2	M
N1	Name and DUNS Number	N1	1	M
N3	Address	N1	2	O
N4	City, State, ZIP	N1	1	O
REF	Reference Number	N1	1	O

2.2 Sample Mapping

ST~811~000000001!	*trx set header*
BIG~20151001~123456~~~~~CD!	*beginning segment*
REF~12~0140101!	*billing account*
DTM~186~20150901!	*service begin date*
DTM~187~20151001!	*service end date*
N1~PE~GRANITETELECOMMUNICATIONS!	*payee*
N3~100 NEWPORT AVE EXT!	*payee address*
N4~QUINCY~MA~02171!	*payee address*
N1~PR~CUSTOMERNAME~91~01401001!	*payer*
N3~PO BOX 2323!	*payer address*
N4~BOSTON~MA~02122!	*payer address*

3 Detail Area

The purpose of the detail area of the 811 is to provide information about the services that are being billed for a given account. The activity reflected is either since the last bill, or over a specified period of time (generally specified in the DTM segments in the heading area of the 811). As previously discussed, Granite provides the 811 in summary format and with supporting detail.

3.1 Summary 811

A summary 811 should not be confused with the summary area of the 811. A summary 811 provides all charges at a summary level only. The summary 811 formats provide high level account information. The advantages of these formats are a less complex programming effort and lower VAN charges.

Summary information is provided within HLs 1 - 4.

3.1.1 Accounts Payable 811

The Accounts Payable 811 provides a single tax amount, and charge amounts for all current charges, and an usage charge. This is the smallest and simplest 811 that Granite provides.

3.1.2 Consolidated Billing Account Summary 811

The Consolidated Billing Account (CBA) Summary 811 provides the bill for the master, consolidated account. 'Memo' bills are provided within the same transaction set for each of the subordinate accounts.

3.1.5 Structure (HL1)

Seg	Segment Description	Loop	Max Use	O/M
	Loop	HL	>1	M
HL	Service Provider - HL 1	HL	1	M
	Loop	HL/LX	1	O
LX	Sequential Designator	HL/LX	1	O
	Loop	HL/N1	1	M
NM1	Service Provider Code	HL/N1	1	M
REF	Service Provider Numbers	HL/N1	2	O
PER	Inquiry Telephone Numbers	HL/N1	2	O
TXI	Aggregate Taxes	HL/N1	10	O
	Loop	HL/ITA	20	O
ITA	Surcharges/Allowances	HL/ITA	1	M

3.1.6 Structure (HL4)

Seg	Segment Description	Loop	Max Use	O/M
	Loop	HL	>1	M
HL	Group - HL4	HL	1	M
	Loop	HL/IT1	>1	M
IT1	Summary Charge	HL/IT1	1	M
PID	Charge Explanation	HL/IT1	1	O
TXI	Taxes	HL/IT1	3	O
DTM	Service Dates	HL/IT1	2	O
	Loop	HL/IT1/QTY	1	O
QTY	Number of Lines In Service	HL/IT1/QTY	1	O
SI	Rate State	HL/IT1/QTY	1	O
	Loop	HL/IT1/ITA	2	O
ITA	Surcharges/Allowances	HL/IT1/ITA	1	M

3.1.7 Structure (HL5)

Seg	Segment Description	Loop	Max Use	O/M
	Loop	HL	>1	O
HL	Group – HL5	HL	1	M
	Loop	HL/LX	>1	O
LX	Sequential Designator	HL/LX	1	M
SI	Service (TN) Identification	HL/LX	1	O

3.1.8 Structure (HL8)

Seg	Segment Description	Loop	Max Use	O/M
	Loop	HL	>1	O
HL	Group – HL8	HL	1	M
	Loop	HL/SLN	>1	O
SLN	Subline Item detail	HL/SLN	1	M
SI	Service (TN) Identification	HL/SLN	1	O
PID	Charge Explanation	HL/SLN	1	O

3.1.8 Structure (HL9)

Seg	Segment Description	Loop	Max Use	O/M
	Loop	HL	>1	O
HL	Group – HL9	HL	1	M
	Loop	HL/TCD	>1	O
TCD	Itemized Call Detail	HL/TCD	1	M
SI	Service (Call) Identification	HL/TCD	1	O

3.1.9 Sample Mappings

Accounts Payable 811

HL~1~~1~1!
LX~1!
NM1~SJ~2~GRANITETELECOMMUNICATIONS!   *service Provider*
PER~BI~~TE~8668471500!   *contact Information*
TXI~TX~5.22~~~~2~A!   *total Tax*
HL~2~1~4~0!
IT1~1~1~M4~67.23~~SV~0110~ZZ~1!   *recurring charges*
IT1~2~1~M4~123.87~~SV~0400~ZZ~2!   *adjustments*
IT1~3~250~M4~34.78~~SV~0700~ZZ~3!   *usage charges (250 m)*

Account Detail 811

HL~1~~1~1!
LX~3!
NM1~SJ~2~GRANITETELECOMMUNICATIONS!
PER~BI~~TE~8668471500!
TXI~TX~192.92~~~~2~A!
HL~2~1~4~1!
IT1~1~1~M4~301.50~~SV~0110~ZZ~1!   *recurring charges*
HL~3~1~4~0!
IT1~2~1~M4~0.00~~SV~0400~ZZ~2!   *adjustments*
IT1~3~22980~M4~1172.99~~SV~0700~ZZ~3!   *usage charges*
HL~4~2~5~1!
LX~4!   *LX/SI once per TN*
SI~TI~TN~6175550000!
HL~5~4~8~0!
SLN~1~~I~1~M4~11.25~~O!   *usoc charge*
SI~TI~SC~USOC1!
PID~F~~~~USOC1 DESCRIPTION!
SLN~2~~I~1~M4~10.50~~O!   *usoc charge*
SI~TI~SC~USOC2!
PID~F~~~~USOC2 DESCRIPTION!
LX~5!   *LX/SI once per TN*
SI~TI~TN~6175550001!
HL~6~4~8~0!
SLN~1~~I~1~M4~11.25~~O!   *usoc charge*
SI~TI~SC~USOC1!
PID~F~~~~USOC1 DESCRIPTION!
SLN~2~~I~1~M4~10.50~~O!   *usoc charge*
SI~TI~SC~USOC2!
PID~F~~~~USOC2 DESCRIPTION!
HL~7~5~9~0!   *Call detail loop*
TCD~4.5~20030725~0835~ZZ~NATL411SVC~~~~~1~~1.5~~~~I! *Call detail*
SI~TI~DA~25~TM~5014110000~FN~6175550000!   *Supporting Info*
TCD~4.6~20030731~0949~ZZ~NATL411SVC~~~~~1~~1.5~~~~I! *Call detail*
SI~TI~DA~25~TM~5014110000~FN~6175550000!   *Supporting Info*

4 Summary Area

The purpose of the summary area of the 811 is to provide a summary of the amount charged for services rendered (TDS segment) and to give an account status (ITA and BAL loops). This area also provides check numbers for the transaction set.

4.1 Structure

Seg	Segment Description	Loop	Max Use	O/M
TDS	Charge for Services Rendered	N/A	1	M
	Loop	ITA	5	O
ITA	Refund and Transfer Amounts	ITA	1	M
	Loop	BAL	6	M
BAL	Account Status	BAL	1	O
	Loop	N1	>1	O
N1	Service Provider	N1	1	M
SE	Transaction Set Trailer	N/A	1	M

4.2 Sample Mapping

TDS~8482!	*current charges*
BAL~P~PB~88.2!	*previous bal amt*
BAL~A~NA~-2.05!	*net adjustment*
BAL~M~TP~-85!	*payments applied*
BAL~A~BT~10!	*dishonored check total*
BAL~M~TT~95.97!	*amount due*
N1~SJ~GRANITE TELECOMMUNICATIONS!	*service provider*
N1~87~ GRANITE TELECOMMUNICATIONS!	*remit to*
SE~37~000000001!	*transaction set trailer*

5 Consolidated 811

The Consolidated 811 is very similar to single account 811. The exceptions are noted below:

- The Consolidated Billing Account (CBA) number (from the consolidated 811) is used for payment. Subordinate account information is provided in a Subordinate 811 Invoice (this is also referred to as a "Memo 811").
- For a Consolidated 811 Invoice, BIG07 may have the value of "CD" (Consolidated Debit Invoice), "CE" (Consolidated Credit Invoice), "FD" (Consolidated Invoice, Final Bill), "CF" (Consolidated Debit Memo) or "CG" (Consolidated Credit Memo).
- For a Subordinate 811 Invoice, BIG07 may have the value of "DR" (Debit Memo), "CR" (Credit Memo), "FE" (Memorandum, Final Bill) or "ME" (Memorandum (indicates a zero balance)).
- The ITD segment (to convey terms of sale and the due date) will be produced as normal for the Consolidated 811 Invoice. It is not provided for the Subordinate 811 invoice.
- DTM segments are not provided for the Consolidated 811 Invoice. The invoice period dates are provided in the Heading Area of each Subordinate 811 Invoice.
- TXI segments depicting the tax exempt status of an account will not be provided in the Heading Area of the Consolidated 811 Invoice. These segments are provided in the Heading Area of each Subordinate 811 Invoice if needed.
- There will be a REF segment in the Heading Area of the Consolidated 811 Invoice with REF01 = "12" to provide the Billing Account Number. This is consistent with all other 811 formats provided by Granite.
- A Consolidated Billing Account Summary is provided at HL2 of the Consolidated 811 Invoice.
- If there is detailed billing information associated with the Consolidated 811 Invoice itself (late payment charges or other charges, credits and information), a REF segment at HL 2 with REF01 = "14" will uniquely indicate the Consolidated Billing Account (CBA) number. Similarly, a REF segment at HL 2 with REF01 = "11" will indicate a Subordinate Account number within the Consolidated 811 Invoice.
- For each Subordinate 811 Invoice, there will be a REF segment in the Heading Area with REF01 = "12" to indicate the Subordinate Account number.
- The Consolidated 811 Invoice will provide summary information for each Subordinate 811 Invoice as shown in the structure table that follows. The only three values provided in IT107 are "0110", "0400", and "0700".

5.1 Structure - Consolidated Account Summary

Seg	Segment Description	Loop	Max Use	O/M
	Loop	HL	>1	M
HL	Billing Arrangement - HL 2	HL	1	M
	Loop	HL/LX	1	M
LX	Sequential Designator	HL/LX	1	M
SI	Site ID	HL/LX	1	O
REF	Account Number	HL/LX	1	M
TXI	Tax Information	HL/LX	2	O
	Loop	HL/LX/ITA	1	O
ITA	Account Adjustment	HL/LX/ITA	1	M
	Loop	HL	1	M
HL	Group - HL 4	HL	1	M
	Loop	HL/IT1	>1	M
IT1	Summarized Charges HL/IT1 1 M			

5.2 Complete Example - Consolidated Account

Interchange Control Header

ISA~00~   ~00~   ~01~107212169 ~01_1234567890123
~030607~1124~U~04010~0000000037~0~P~¦!

Functional Group Heading

GS*CI*GRANITEDUN*0140100*20030501*1527*128*X*004010!

Consolidated Invoice

ST~811~000000001!	*trx set header*
BIG~20151001~123456~~~~~CD!	*begining seg*
REF~12~0140101!	*billing account*
ITD~03~3~~~~20151001!	*terms of sale*
N1~PE~GRANITE TELECOMMUNICATIONS!	*payee*
N3~100 NEWPORT AVE EXT!	*payee address*
N4~QUINCY~MA~02171!	*payee address*
N1~PR~CUSTOMERNAME~91~01401001!	*payer*
N3~PO BOX 2323!	*payer address*
N4~BOSTON~MA~02122!	*payer address*

HL~1~~1~1!	
LX~1!	
NM1~SJ~2~GRANITETELECOMMUNICATIONS!	*service provider*
PER~BI~~TE~8668471500!	*contact into*

Consolidated Billing Account Summary
(Appears if the master account itself has charges, etc independent of subordinate accounts)

HL~2~1~2~1!	
LX~1!	*seq no*
REF~14~0140100!	*account no*
TXI~TX~2.56~~~~~O!	*total tax*
HL~3~2~4~0!	
IT1~~1~M4~50.25~~SV~2050~ZZ~1!	*total amt billed*

Subordinate Account Summaries

HL~4~1~2~1!	
LX~2!	
REF~11~0140101!	*sub acct no*
TXI~TX~5.26~~~~~O!	*sub acct taxes*
HL~5~4~4~0!	
IT1~~1~M4~100.50~~SV~2050~ZZ~1!	*total amt billed*

…
…
… HL2 loops for other subordinate accounts
…

TDS~150.75!	*current charges*
BAL~P~PB~88.2!	*previous bal amt*
BAL~A~NA~-2.05!	*net adjustment*
BAL~M~TP~-85!	*payments applied*
BAL~A~BT~10!	*bad check total*
BAL~M~TT~161.90!	*amount due*
N1~87~ GRANITE TELECOMMUNICATIONS!	*remit to*
SE~37~000000001!	*transaction set trailer*

Subordinate Invoices

ST~811~000000002!	*trx set header*
BIG~20151001~123456~~~~~ME!	*beginning segment*
REF~14~0140100!	*master account*
REF~12~0140101!	*billing account*
DTM~186~20150901!	*service begin date*
DTM~187~20151001!	*service end date*
N1~PE~GRANITE TELECOMMUNICATIONS!	*payee*
N3~100 NEWPORT AVE EXT!	*payee address*
N4~QUINCY~MA~02171!	*payee address*
N1~PR~CUSTOMERNAME~91~01401001!	*payer*
N3~PO BOX 2323!	*payer address*
N4~BOSTON~MA~02122!	*payer address*

HL~1~~1~1!	
LX~1!	*assigned seq. no.*
NM1~SJ~2~GRANITETELECOMMUNICATIONS!	*service Provider*
PER~BI~~TE~8668471500!	*contact Information*
TXI~TX~5.22~~~~2~A!	*total Tax*
HL~2~1~4~0!	
IT1~1~1~M4~67.23~~SV~0110~ZZ~1!	*recurring charges*
IT1~2~1~M4~34.78~~SV~0400~ZZ~2!	*adjustments*
IT1~3~250~M4~123.87~~SV~0700~ZZ~3!	*usage charges (250 m)*

Supporting Charge Detail Information for Detailed EDI

TDS~23110!	*current charges*
BAL~P~PB~0!	*previous bal amt*
BAL~A~NA~-0!	*net adjustment*
BAL~M~TP~-0!	*payments applied*
BAL~A~BT~0!	*bad check total*
BAL~M~TT~0!	*amount due*
N1~SJ~GRANITE TELECOMMUNICATIONS!	*service provider*
SE~37~000000002!	*transaction set trailer*

…
… Other accounts
…

Functional Group Trailer

GE*337*128!

Interchange Control Trailer

IEA~1~0000000037!

6 Auditing the 811

To help ensure that both Granite and the customer are interpreting the charges and credits in a Granite 811 in a consistent manner, Granite audits the 811 that is sent to customers. This section details the audits performed by Granite. Each transaction set is balanced using the rules outlined in this section before it is sent to the customer.

- Please note that the Heading Area does not contain any charge amounts.
- The Detail Area contains the current charges. Note that Granite considers a late payment charge as a current charge, and as such, the late payment charge will appear in the detail area of the 811
- The summary area contains total amounts (i.e., total current charges, total payments, total net adjustment, total payments, and total amount due to Granite Telecommunications).

This section will convey how to "audit" supporting detail charges to the appropriate summary level charge.

6.1 Rules of Extended Pricing

When processing certain segments which contain a quantity and a unit price, the total amount being provided by that segment must be derived. This involves multiplying quantity by unit price to determine the total charge or credit. As is normally the case there is an exception to this rule. If the segment contains a Unit of Measurement Code (DE355) and that data element contains the value "M4" (Monetary Value), then rules of extended pricing do not apply for that segment. This means that when the "M4" value is used, the unit price is the total charge or credit for the segment. Granite uses the "M4" value in the IT1 and SLN segments.

6.2 Determining Segment Amount

For ease of reference the term *segment amount* is used to designate the monetary amount that a segment provides after:
1) Extended pricing rules have been applied.
2) Relational checks have been performed to ensure that the monetary amount is not being supplied for informational purposes only.

Certain segments contain both an amount and a code value identifying whether the amount is a credit or a charge. The 811 Consolidated Service Invoice/Statement Guideline states that within the detail area of the 811, the sign of the amount field will control the monetary value (positive or negative). The code values should be treated as informational only; they have no impact on the sign interpretation. The following pages discuss how to determine the segment amount of each "money" segment.

6.2.1 BAL Segment
The amount in BAL03 is the segment amount.
6.2.2 IT1 Segment
If IT103 = "M4", then the amount in IT104 is the segment amount.
If IT103 ≠ "M4", then the product of IT102 and IT104 is the segment amount.
6.2.3 ITA Segment
The amount in ITA07 is the segment amount.
If ITA16 = "O", then the segment amount is for information purposes only.
6.2.4 SLN Segment
If SLN05 = "M4", then the amount in SLN06 is the segment amount.

If SLN05 ≠ "M4", then the product of SLN04 and SLN06 is the segment amount.
If SLN08 = "O", then the segment amount is for information purposes only.
6.2.5 TXI Segment
The amount in TXI02 is the segment amount.
If TXI07 = "O", then the segment amount is for information purposes only.
The TXI segment can be used in the heading area to show that an account is exempt from certain types of taxes. It can also be also used in the detail area to show that an itemized call is tax exempt. In each of these uses, TXI07 would equal "O".
6.2.6 TDS Segment
The amount in TDS01 is the segment amount.
6.2.7 TCD Segment
The amount in TCD12 is the segment amount.
If TCD16 = "O", then the segment amount is for information purposes only.
6.2.8 USD Segment
If USD08 is populated, then the amount in USD08 is the segment amount.
If USD08 is not populated, then the following determination is made to determine the segment amount:
If USD05 = "M4", then the amount in USD06 is the segment amount.
If USD05 ≠ "M4", then the product of USD03 and USD06 is the segment amount.
If USD01 = "O", then the segment amount is for information purposes only.
The USD segment can be used to provide taper table information for WATS billing. In this use, USD01 would equal "O".
Note 1: When both USD03 and USD08 are populated, the amount in USD08 takes precedence and becomes the segment amount.
Note 2: In order to verify amount in USD08, it is necessary to multiply USD03 * USD06 * USD07 * Percent of Interstate Usage. The Percent of Interstate Usage can be found in an SI pair (DE 1000 = 'PU') within the SLN loop, when it is present.

6.3 Auditing the Detail and Summary Area

The summing rules that can be used to audit the detail and summary areas of the 811 can be found within the 811 Consolidated Service Invoice/Statement Guideline at the following website:

http://www.atis.org/obf/docs/etb/sec10_7811nov07.pdf

7 File Size Estimation

File size is a function of the type of EDI selected, the number of features per line and the volume of traffic, and the number of memo invoices per file.

Though these numbers will vary across customers, the following estimates can be safely made:

- For Summary EDI, estimate 3k per account.
- For extended EDI with just line feature charges estimate 8k per account
- For extended EDI with line feature charges and call detail estimate 250k per account.

As an example, for a billing account with 250 child accounts, estimate 750k for the summary EDI, 2 meg for the extended EDI with just line charges and 62.5 meg for the extended EDI with call detail.

Or, as a further example, for a billing account with 1000 child accounts, estimate 3 meg for the summary EDI, 8 meg for the extended EDI with just line charges and 250 meg for the extended EDI with call detail.