## Billing Concepts

## Overview

The following document provides a high level overview of the billing concepts associated with the various CLEC bills. The concepts contained in this document apply to the following bills:

- CLUB ® Bill - Customer Records Information System(CRIS) billed services include:
o Resale
o Unbundled Network Elements(UNE) - Charges for ADUF/ODUF only.
o Local Number Portability Charges - Charges directory listing only.
o Interim Number Portability
- CABS Bill - The Carrier Access Billing System is used to bill customers for accessing the BST network.
- UNE/ WLP J Bill - The UNE J Bill is a particular type of bill format that is primarily used for customers that use specific products such as UNE ports and Port/Loop combos and as a result will only contain local usage.
- UNE/ WLP N Bill - This is a type of bill format that is used for stand alone non design loops


## Detail or Summary Usage

Detail or Summary Usage is a CABS bill specific concept. On Switched Access accounts, usage is normally recorded at the tandem or end office. Depending on which company performs billing and which company's facilities are recording messages, exchange of usage between companies is required.

Detail: Individual AMA usage recordings from the tandem or end offices that contain actual conversation minutes of use and other information that is used for customer billing.
Summary: Usage records originally recorded by AT\&T and sent to the carrier for initial customer billing that have been summarized to a higher level and sent back to AT\&T for subsequent customer billing.

## Fractionalization

Fractionalization is the process of prorating a recurring charge over time. If charges for a particular service are $\$ x$ per month, and the customer has the service for only part of the month, the charges must be fractionalized.

## CABS Fractional Calculation

The first step of calculating the fractional charge is to determine the number of days by counting sequentially from the day after the complete or effective bill date to the day before the billing date. The number of days is then divided by 30 and rounded to 4 decimal places. The final calculation is to multiply this percentage by the rate. If for example, assuming the bill period date is $5 / 25 / 00$, the date range on Other Charges and Credits (OC\&C) is 5/9/00 to 5/24/00, and the USOC rate is 22.49 , then the fractional charge would be calculated as follows:
$5 / 9 / 00$ to $5 / 24 / 00=15$ days
15 days/ 30 days in a month $=50 \%$
Rate $\times$ percentage $=22.49 \times .5=11.245$
Fractional charge $=\$ 11.25$
If period spans over 30 days, then the fractional amount must be added to the 30 day rate. If for example, the date range is $5 / 9 / 00$ to $6 / 24 / 00$, and the USOC rate is 22.49 then the fractional charge would be calculated as follows:
Separate dates into 5/9/00 to 5/24/00 and 5/25/00 to 6/24/00
Rate for 30 days is equal to 22.49
Rate for 15 days as shown above as 11.25
Total charge $=22.49+11.25=\$ 33.74$

## CLUB ${ }^{\circledR}$ Fractional of Recurring Charges Calculation

Fractional charges apply when the customer establishes or changes existing service before their bill period date. The customer is billed for a partial month's use of the service. Likewise, a fractional credit is due the customer when service is disconnected on a date other than the billing period. The fractional or prorated charges are calculated to bill customers from the date of the service order through the bill date for added or deleted services.

Computing OC\&C fractional charges:
To determine fractional charges or credits, divide the monthly rate by 30 and multiply the result by the actual days in service. For example:

AT\&T Billing Southeast, Inc.
Issue Date: July 28, 2000
Revision Date: July 17, 2007

Scenario:
-Customer adds call waiting on June 10, 2000
-Call Waiting recurring charge is $3.50 / \mathrm{mo}$
-Customer bills in 17th bill period
Calculation:

- (3.50/30) x 6 days *
*Number of actual days included in fractional is service order complete date +1 day thru bill period date minus 1 day. Charge for service from June 11th thru June 16th.

Exception: FEBRUARY disconnects only
The ONLY exception is for February disconnects. Disconnect service orders (D order), are handled differently when a fractional month's billing involves February. Otherwise, the D order is handled as stated above. The fractional credits are computed on a thirty day month without regard to the D order date. The logic is such that the customer was billed for thirty days in February and is due a credit based on thirty days. For example:

## Scenario:

-Customer disconnects service 2/22/00
-Recurring charge is $\$ 20.00 / \mathrm{mo}$
-Customer bills in 10th bill period
Calculation:
(\$20.00/30) x 17 days*

* Number of actual days 2/23 thru 2/29

8 days +1 (to bring to 30) 3/1 thru 3/9 9 days
Total Credit 17 days
See definition below for further information on recurring and nonrecurring charges.

## I BS/ Tapestry Fractionalization

( UNE/ WLP J/ N structure bills only for IBS sites, see letter SN9108263.)

IBS/Tapestry calculates fractional charges/credits by using the exact number of days between billing periods. This means that fractionalization will occur based on 30, 31, 28, or 29 days.

AT\&T Billing Southeast, Inc.
Issue Date: July 28, 2000
Revision Date: July 17, 2007

For example, if a customer is billed on the 4th billing period and service order activity occurred on $3 / 26$, fractionalization will occur from 3/27 thru 4/3 for 8 days of service.

Scenario:
-Monthly rate of $\$ 2.50$
-Billing period is the 4th
Fractionalization for months having 31 days:
$-\$ 2.50$ divided by $31=.0806$
$-.0806 \times 8$ days $=.645$ rounded to .65 for 8 days
Fractionalization for months having 30 days:

- $\$ 2.50$ divided by $30=.0833$
$-.0833 \times 8$ days $=.665$ rounded to .66 for 8 days
Fractionalization for months having 29 days:
- $\$ 2.50$ divided by $29=.0862$
- $.0862 \times 8$ days $=.6896$ rounded to .69 for 8 days

Fractionalization for months having 28 days:

- $\$ 2.50$ divided by $28=.0892$
$-.0892 \times 8$ days $=.7136$ rounded to .72 for 8 days


## I nvoice Billing

Invoice Billing is a concept specific to CABS bills. This allows invoices produced each billing period to be assigned the five digit Julian date denoting the calendar day for the billing period. This allows all moneys, adjustments, payments etc. to be tied to a specific invoice. For example, the seventh billing period of July 2000 would be assigned the Julian date of 00189

## J urisdiction

The concept of jurisdiction is CABS specific. This term is used to designate whether interstate, intrastate, or local rules apply. Access is rated, billed, and journalized according to jurisdiction by interstate, intrastate, or local. Tariff or contract rates and rate application must be used dependent on the jurisdiction of the circuit or usage.

AT\&T Billing Southeast, Inc.
Issue Date: July 28, 2000
Revision Date: July 17, 2007

## Late Payment Charges

The following describes the application of Late Payment Charges:

## CABS Late Payment Charge

This is a penalty due when the balance is not paid in full by the "Payment Due Date" on the bill, thirty-one (31) days after the bill date or the next bill date whichever is earlier. The charge is mechanically calculated (by bill calculate) and is based on the amount owed and the number of days it is late.

## CRIS and UNE/ WLP J \& N Late Payment Charge

This represents the state specific percentage rate applied to the unpaid balance from the previous bill. This varies from $1 \%$ to $5 \%$. In addition, there is a flat rate charge that exists in some states and is often referred to as a Late Payment Fee. For example, in Florida there is a $\$ 1.50$ flat rate on late payments of residences in addition to the interest applied on the unpaid balance. Refer to the tariff for further details.

## Meet Point Billing

Sometimes access service is provided by more than one company, or the service provided involves more than one state. Meet Point Billing (MPB) occurs when access or local interconnection charges are levied by two or more Local Exchange Companies (LECs) for the processing of a telephone call. Generally, this occurs for a Bell Operating Company (BOC) at a state boundary, between a Bell company and a CLEC or Independent Company (ICO). The process of billing this service, meet point billing, affects the billing process and the bill format. Where one company's responsibility ends and another begins is the "meet point."

## Mileage Calculation

Mileage is CABS and UNE/WLP J Bill specific, and can be found on USOCs and on usage. Sometimes rate elements are distance sensitive and require mileage calculation. Examples of these are mileage USOCs for Special Access Service and determination of mileage transport charges. Mileage calculation determines the airline distance, in miles, between two points. Calculation is based on the Vertical (V) and Horizontal (H) coordinates of the two points. These V \& H coordinates are found in the National Exchange Carrier Association (NECA) \#4 tariff. The formula used is the following:

AT\&T Billing Southeast, Inc.
Issue Date: July 28, 2000
Revision Date: July 17, 2007
A. Compute difference between the V coordinates.
B. Compute difference between the H coordinates.
C. Square the differences.
D. Add the squares of the two differences.
E. Divide the sum of squares by 10 .
F. Take the square root of the result obtained in E .
G. Round up to the next full mile. This is the airline mileage.

Note: Mileage on recurring USOCS on facilities (N account types), service order entries provide mileage from the ordering process.

## Minimum Period

Certain types of service are costly to provide because the nonrecurring charge does not satisfy all non-recoverable costs of providing service. Customers must subscribe to the services for a certain length of time before provisioning costs are recovered. The concept of minimum period ensures cost recovery if service is disconnected early. According to the tariff, certain services have a stipulated minimum period. Charges for the minimum period are due even, if the provided services is not still in effect.

## Ratcheting

Ratcheting is a concept specific to CABS Bills. This is the process by which AT\&T will true up the billing for shared use facilities. Shared use facilities are facilities that bill for either 1) special access and switched access or 2) switched access common transport and switched access dedicated transport.

Process: Information from the lower level facility is reflected on the higher level facility on which it rides. This information is shown on the UDP USOCs that represent each lower level and is used to determine the percentages of special, switched and common transport on a shared use facility. The type of information carried on the UDP is specific to the type and level of the facility and the active channels.

FID Information: There are several FIDs used by the ratcheting process to connect the levels of service in the billing system and to accurately reflect what is active on each facility. These FIDs will direct the ratcheting process to determine ratchet factors and add/delete USOCs as necessary.

AT\&T Billing Southeast, Inc.
Issue Date: July 28, 2000
Revision Date: July 17, 2007

SCID FID: The SCID FID floats on the UDP USOC line. The SCID data indicates what is riding the facility. The SCID data can represent one of the following: TSC, CLT, CLS, or CLF.

CFA FI D: Connecting Facility Arrangement (CFA) represents the circuit identification of the higher level facility on which a lower level line/trunk/facility 'rides'.
The CFA FID can appear in two places:

1) Floated on the TPP USOC line for a switched access line/trunk.
2) Floated on the CKL-1 FID line for a switched/special facility.

SBAN/ HBAN FID: The SBAN data will indicate the switched billing account number where the information indicated by the SCID data is located. SBAN floats on the UDP USOC line.

HBAN data indicates the facility account number (BAN) for the circuit identified by the CFA. HBAN is not necessary when the lower and higher level circuits are located on the same account. The HBAN FID can appear in three places: Floated on the UDP USOC line. Floated on the TPP USOC line. Floated on the CKL-1 FID line for a switched/special facility.

RAF1 FID: RAF1 data indicates the capacity of a facility, the number of switched channels activated on that facility, and the number of those switched channels that are billed as common transport.

The RAF1 FID and data can appear in two places:

1) Floated on the UDP USOC line.
2) Floated on the CLF FID line.

## Specific Ratcheting Considerations:

ZRAT FID: The ZRAT FID indicates a special ratcheting instruction. When ZRAT is present on a circuit, UDP USOCs are added and the RAF1 information is updated by the ratcheting percents are not applied to the USOCs nor are comparable USOCs added. The updated RAF1 information is carried to a higher level circuit if FID CFA is present. Currently, ZRAT is applied only to UNE services (BSC = USL and UE3).

ZNHC FI D: The ZNHC FID represents non-high capacity billing and indicates that the facility provided in CFA is BOC-owned. When ZNHC is present on a circuit, the ratcheting process is not invoked. ZNHC is not valid on BCS OH1 (SW DS1) or OH3 (SW DS3).

UDP Processing: The UDP information consists of the following FID information: SCID FID and data; SBAN/HBAN FID and data; and RAF1 FID and data.

AT\&T Billing Southeast, Inc.
Issue Date: July 28, 2000
Revision Date: July 17, 2007

Adding UDPs: The ratcheting process is invoked to add a UDP to the higher level facility when a service order is written to add service for a switched access line/trunk riding a customer purchased facility or to add service for a switched/special access facility that is riding a customer purchased facility or to add service for a switched/special access facility that is riding a customer purchased facility. UDP USOCs will be added/ recorded to accurately reflect the number and service of the active channels on that facility.

Deleting UDPs: The ratcheting process is invoked to delete a UDP at the higher level facility when a service order is written to remove service for a switched access line/trunk riding a customer purchased facility or to remove service for a switched/special access facility that is riding a customer purchased facility. UDP USOCs will be deleted/reconciled to accurately reflect the number and service of the active channels on the facility.

Once the UDP information has been reconciled, the facility itself will be reconciled for proper billing.

## Rate Category or Element

Rate categories are specific to the CABS and UNE/WLP J Bill. Usage Sensitive Charges are separated into six categories. Usage sensitive charges are rates applied to a group of messages or minutes in order to recover a distinct function that is being performed in the network for the processing of an Access or Local Interconnections call. Categories are: Carrier Common Line, Local Switching, Local Transport, Miscellaneous, SS7 Miscellaneous and Local Interconnection. The definition of these categories is as follows:

Carrier Common Line: The charge for carrying the call from the End User to the LEC End Office. There are separate charges applied for originating and terminating usage.

Local Switching: The charge for switching the call from the end user's loop to the IXC dedicated trunk or LEC common trunk. There are several types of Local Switching charges that are applied based on Feature Group and charges ordered.

Local Transport: The series of charges for the use of LEC Trunks and switches for purposes of moving the call from the LEC End Office to the LEC Serving Wire Center.

AT\&T Billing Southeast, Inc.
Issue Date: July 28, 2000
Revision Date: July 17, 2007

Miscellaneous: Charges such as Directory Assistance, LIDB, IOS, etc. that do not fall into the prior three categories.

SS7 Miscellaneous: Single Switching Charges
Local I nterconnection: The Operator Services charges for CLEC End Offices that are considered query like, i.e., per attempts, operator work time.

## Recurring and Nonrecurring

These terms refer to a type of charge. Recurring charges are those that repeat on a regular basis, daily, monthly, etc., as long as the service is in effect. Nonrecurring charges are one-time-only charges, usually applied when service is installed.

## Resale Discount

A resale discount is applied to applicable tariff rates for CLECs with a valid resale contract.

## I BS/ Tapestry Fractionalization of charges where a resale discount is applied

The calculation occurs in three steps. The first step calculates the fractional charge/credit based on the fractional charge/credit calculation from above, the second step calculates the discount for the fractional rate, and the third step determines the total fractional charge/credit.

For example, if a customer is billed on the 29th billing period and service order activity occurred on 4/11, fractionalization will occur from 4/12 thru 4/28 for 17 days of service.

Scenario:
-Monthly rate of $\$ 1.45$-Billing period is the 29th
-Resale discount 21.83\%
Fractionalization for months having 31 days:
First step:

- $\$ 1.45$ divided by 31 days times 17 fractional days $=.7951$
-. 7951 rounds to 80

AT\&T Billing Southeast, Inc.
Issue Date: July 28, 2000
Revision Date: July 17, 2007

Second step:
-Results of step 1 - $\$ .80$ times discount percentage of $21.83 \%=$ . 17464 .-. 17464 rounds to .17

Third step:
-Total fractional $=.80$ minus total discount $.17=.63$ total charge/credit

I BS/ Tapestry monthly resale discount calculation
Scenario:
-Monthly rate of \$1.45
-Resale discount 21.83\%

- $\$ 1.45$ times $21.83 \%=.3165$
-. 3165 rounds to . 32
$-\$ 1.45$ minus $.32=\$ 1.13$
or
- $\$ 1.45$ times .7817 ( 1 minus .2183 ) $=1.133465$
-\$1.133465 rounds to \$1.13


## I BS/ Tapestry monthly resale discount calculation with USOC quantities greater than 1

Scenario:
-Monthly rate of $\$ 1.45$
-Resale discount 21.83\%
-Quantity equals 3
$-\$ 1.45$ times 3 times ( 1 minus .2183 ) $=\$ 3.4003$

- $\$ 3.4003$ rounds to $\$ 3.40$

