

Software Solutions for Billed Revenues Enhancement FOR THE TELECOMMUNICATIONS INDUSTRY

Are you getting the access revenue you earned?

By: Charles G. Hinders
July, 2007

Reported Inter-exchange Carrier Access Minutes of Use (MOU) decline is accelerating, either through billing anomalies or by design. The local telephone company has no safe harbor to rely on, either from Inter-exchange Carrier or Access Tandem reports. The root cause of Access MOU decline might be “network arbitrage”, which is the means to obscure billing information to avoid paying access charges generated by Inter-exchange Carriers for service provided by the local telephone company. Our products provide alternative resources to challenge reported volumes where Inter-exchange Carrier data is the basis that access charges are computed on. We believe that each local telephone company must decide to:

- Stay the course and remain using Inter-exchange Carrier recorded monthly volumes **or**
- Become proactive and ensure end office toll volumes are being properly recorded to produce accurate Inter-exchange Carrier access minute volume billing.

We believe that accurate Inter-exchange Carrier access MOU volumes should be billed.

Following is a challenge before the Alaska Exchange Carrier Association (AECA). It is typical of issues facing the local telephone company network nationally.

The AECA has determined that rural Incumbent Local Exchange Carriers (ILECs) who participate in the Alaska access pool shall review and determine where inconsistencies exist that have an impact on the billing or reporting of Access Minute volumes. Correspondingly, Alaska’s rural ILECs are familiar with current and ongoing challenges that confront them, such as:

- Declining State and Interstate access minutes.
- Suspicion that monthly distribution reports provided by Inter-exchange carriers to the ILEC for access billing may be incomplete or omit call information required to complete message processing.
- A need to determine if access minute loss is to competitive service providers or internal billing or reporting processing errors.
- A need to find alternative methods to measure or record company Message Telephone Service (MTS) data as opposed to relying on Inter-exchange Carriers to provide recording function on all Toll Traffic.

The MPI traffic measurement group can resolve these issues.

Why measure your Network Traffic?

- 1). Traffic is more than collecting Peg Count and Usage of Inter-exchange facility statistical information. Proactive Network Monitoring provides the pulse of the daily “from and to” calling pattern necessary to provide adequate switching equipment to meet or exceed established Grade of Service objectives during the Busy Season period.
- 2). Traffic Separation Factor development is the means of developing mathematical factors to distribute ILEC/CLEC Equipment investment as defined by FCC and State Commission rules for Cost Study and Revenue Requirements Studies.
- 3). CABS Revenue Assurance is the means to verify that all switched data and Special Access Circuits are being billed in compliance with NECA, Intrastate Access Charge or company specific Local Tariff rate structure:
 - ◆ Facilities are inventoried.
 - ◆ Tariff Rates or PIU factors are representative and applied to specific elements to perform billing and journalized.
 - ◆ NECA #4 Tariff reflects company specific switching office arrangements such as: Host and Remote configurations.
 - ◆ Meet Point Billing percentages or air-miles are accurate based on V & H coordinates.
 - ◆ AMA is properly measured at your end office or by the Access Tandem or Inter-exchange Carrier. AMA is converted into Exchange Message Interface (EMI) record for Message processing.

Addressing the Access Minute Challenge (getting all the minutes) “The Billed Access MOU four key elements Reporting Solution”

Network Monitoring:

- ◆ Review and verify end office traffic data MOU collection and summary procedures to provide comprehensive fact finding lists and recommendations. These lists and recommendations would be applied to revise or implement new procedures or methods.
- ◆ Review and validate annual traffic separation factors to insure that fully distributed cost study development complies with commission rules to optimize investment assignment to categories.
- ◆ Conduct review and validate MOU data comparison with AMA or SS-7 statistics to define and isolate unbilled or over-billed access minutes.
- ◆ View client traffic data—or provide through lease agreement, measurement equipment—to conduct traffic studies, AMA recording or SS-7 call detail recording.

Specifically, we prefer a four-step measurement procedure is performed as follows:

1. Determine how much Originating and Terminating Toll daily Usage is generated at the End Office. This forms the basis for determining where reporting or billing anomalies exist.
2. Next, determine what volume of access minutes is offered to the Access Tandem. Then compare this volume on an hourly basis with the AMA records.

Note: raw AMA volumes can either be recorded from your end offices or imported from the Inter-exchange Carriers for message processing. Filtered AMA can introduce questionable results. Therefore, we recommend that only raw AMA be used.

3. Compare SS-7 call detail (where equipped). SS-7 call detail contains not only MOU, but also network information not contained in the AMA record. This helps with record identity as to:
 - a. Ownership
 - b. Jurisdiction
 - c. Method of call completion
 - d. Billing information
4. Conduct CABS Revenue Assurance review of all end office CABS data and reconcile with Access Tandem or IXC recorded data. Then, provide detailed results with in-depth directives for anomaly resolution.
 - a. We validate that Service Bureau message processing rules are accurately processing AMA and (EMI) traffic for billing of Access Minutes.
 - b. We review AMA or SS-7 recording techniques and CABS Access Minute processing and reporting to National Exchange Carrier Association (NECA) and Exchange Carrier Association pools.
 - c. We conduct trend analysis of top Inter-exchange Carrier data for volume detection and comparison back to end office recordings.

Network Integration and Issue Resolution

Having the correct Access Billing level positions the opportunity to resolve current billing records between the local telephone company and the connecting Inter-exchange carriers. This can be an involved process. To expedite agreement, we interface with all parties to resolve billing related issues based upon our study results by:

- ◆ Conducting on-site meetings with Inter-exchange Carriers' personnel to facilitate Network Monitoring, AMA and SS-7 recording / reporting alternatives and issue resolution.
- ◆ Completing in-depth task assessment and findings, as defined by company management team.
- ◆ Providing the ILEC or Competitive Local Exchange Carrier (CLEC) with the means and support to identify and resolve company specific anomalies.



ILEC and CLEC Training

1. We provide customized in-house training on CABS billing.
2. Training is available regarding traffic monitoring, annual traffic factor development or data trending and analysis.
3. Also, MPi can provide training for CTS-Equipment and applications operation.

Summary

Should your company be interested in pursuing internal evaluation and network review, MPi has the necessary equipment, coupled with experienced manpower, to conduct CABS Revenue Assurance and Network Traffic Studies to achieve results that meet company financial targets or strategic benchmarks. Our review activity can be either high level or granular to meet company-guiding principles to resolve CABS or reporting issues, network monitoring, or conduct internal training presentations as defined by your management team.