BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF MISSOURI

In the Matter of a Possible Amendment) To Section 4 CSR 240-29.040.) Case No. TX-2006-0444

AFFIDAVIT OF CHRIS READ

STATE OF TEXAS)	
)	SS
COUNTY OF DALLAS)	

I, Chris Read, being of lawful age and duly sworn upon my oath, do hereby depose and state as follows:

1. My name is Chris Read. My business address is Two AT&T Plaza, Floor 11, Dallas, Texas 75202. I am employed by AT&T Services, Inc., and my current position is Senior Business Manager, within the Information Technology organization. Attached as Read-Schedule 1 is an exhibit providing information regarding my employment, educational background and appearances before the Missouri Public Service Commission ("Commission") and in other state regulatory proceedings.

Executive Summary

- My affidavit is intended to provide information responsive to questions four, five and six from the Commission's <u>Notice Opening New Case</u>, <u>Inviting Comments and Issuing</u> <u>Protective Order</u> in Case No. TX-2006-0444 issued May 24, 2006:
 - 4. Why are wireless calls treated differently from wireline calls in relation to CPN in the Category 11 records?
 - 5. What is the estimated cost to the transiting carrier to reconfigure its equipment to capture a wireless CPN for the Category 11 records?
 - 6. What is the estimated time frame within which such reconfiguration is practicable?

Wireless calls are treated differently from wireline calls in relation to Calling Party Number ("CPN") in Category 11 records because different information is needed to bill these two different types of calls. In <u>wireline</u> billing, geographic location is critical for determining jurisdiction and distance billing and CPN can be used to determine the precise geographic location of the party originating a <u>wireline</u> call. But in <u>wireless</u> billing, geographic location cannot be obtained from CPN due to the mobile nature of the wireless end of the call, making CPN unreliable in this setting. Since it is not used in billing for the calls wireless carriers terminate to the LEC network, industry standards do not require the Category 11 records for these types of calls to contain CPN. Rather, the standards require Category 11 records for these calls to contain the Operating Company Number ("OCN") of the wireless carrier that terminated the call to the LEC network. Instead of CPN, LECs determine the

correct jurisdictional rate to apply to terminating wireless calls by using negotiated "factors" (<u>i.e.</u>, percentages) contained in interconnection agreements.

AT&T Missouri's internal information processing systems used to generate Category 11 EMI billing records currently do not have the capability to include CPN in a Category 11 record generated for calls terminating to the LEC network from wireless carriers. It will likely cost in excess of \$100,000 in internal personnel costs to change AT&T's billing systems to be able to include CPN in this type of record. The billing system changes would likely take a total of eight months to complete. The tasks to be performed in the first two of these eight months could be performed concurrent with Lucent's software development work. The tasks to be performed in the last six months would be performed after the new Lucent software is developed, installed, tested and producing AMA recordings with wireless CPN.

Background

- 3. Commission Rule 29.020(5) defines a "Category 11-01-XX Record" as "a mechanized individual call detail record developed in compliance with the Ordering and Billing Forum (OBF) exchange message interface (EMI) industry guidelines. . . ."
- 4. At AT&T Missouri, Category 11 EMI records are created utilizing the network recordings made in Automatic Message Accounting ("AMA") format as the primary source. Some fields are populated or derived from tables within the application billing system. The following is a simple depiction of the process. The Category 11 record is an example of an EMI record.

AMA Recordings→ Message Processing System→ Call Detail Records (EMI format)

5. As AT&T network witness Jason Constable explains in a separate affidavit, AT&T Missouri's Lucent switches do not have the technical capability to record CPN in the AMA switch recordings for calls terminated to the LEC network over wireless carrier trunk groups, and its Nortel switches are not configured to do so. Therefore, as far as the downstream billing system is concerned, the information does not exist as an input to the process of creating the EMI record and is not available to populate Category 11 records. Even if its switches could capture and generate such AMA recordings on these types of calls, AT&T Missouri's billing systems do not have the technical capability to populate CPN in the Category 11-01-XX billing record for calls wireless carriers terminated to the LEC network.

<u>The Content of Category 11 Records Will Vary Depending</u> <u>On the Type of Call for which the Record Was Created</u>

6. Under applicable industry standards, the content of Category 11 records will vary depending on the type of call because the industry recognizes that different information is needed to bill different types of calls. While industry standards require the "from number" field in the Category 11 record to be populated for calls terminated by both IXCs and wireless carriers, the content of the field varies because the information to bill these two types of calls are different. For example, if the service being billed was a LEC-to-LEC intraLATA toll call or a call terminated by an IXC, the use of CPN in the "from number" field is critical to proper jurisdiction and rating of that call because the geographic location of the calling party can be determined from CPN. For this reason, it is appropriate under industry standards to populate the "from number" field with CPN on wireline calls. But if the call is terminated to the LEC network by a wireless carrier, the geographic location of the calling party cannot be obtained from CPN due to the mobile nature of the wireless end of the call. On these types of calls, inclusion of CPN in the "from number" field would lead to inaccurate billing as it is unreliable for use in determining proper jurisdiction.

- 7 An example of why roaming makes wireless CPN unreliable for use in jurisdictionalizing such a call is as follows: when a wireless subscriber with a Kansas City, Missouri wireless number travels to Chicago, Illinois and places a wireless call to a landline customer back in Kansas City, that call would be an interstate-interMTA call, for which interstate, interMTA rates (typically interstate access charges) would apply. But if the CPN (the calling party number) and the called number were used to jurisdictionalize the call, it would be incorrectly billed because the call would appear to be a local call, for which lower intraMTA charges would be charged.
- 8. The industry, through the Ordering and Billing Forum ("OBF") of the Alliance for Telecommunications Industry Solutions ("ATIS") addressed the question of what information was needed to bill intercompany compensation on calls wireless carriers terminate to the LEC network. These discussions were documented in issues 2308 which was titled: "<u>Need for Accurate Jurisdictional Information for Accurate Billing</u>" and issue 2349 which was titled: <u>"Impact of Wireless Number Portability on Wireline Service Providers</u>." At no place in this documentation is it even suggested that CPN is needed for these wireless calls. Instead, the documentation reflects industry consensus that the OCN, which identifies the proper carrier to bill, should be provided. While CPN serves a purpose for landline-originated calls (e.g., IXC calls, LEC-carried local/toll calls), the industry recognizes that it has little or no value for billing purposes for calls wireless carriers terminate to the LEC network.
- 9. Because of the unreliability of determining jurisdiction of calls wireless carriers terminate to the LEC network, LECs do not use CPN for intercompany billing on these calls. Instead, LECs determine the correct jurisdictional rate to apply to wireless terminating calls by using "factors" (i.e., percentages) that are usually agreed-upon between a LEC and a wireless carrier and are contained in interconnection agreements. These factors represent the parties' estimation of the amount of traffic exchanged between them that is intraMTA, intrastate-interMTA, and interstate-interMTA. If the parties cannot agree on factors, the parties can ask the state commission to set the factors in an arbitration under the federal Telecommunications Act.

Internal AT&T Data Processing System Changes that would be Required to Include CPN in Wireless Category 11-01-XX Records

10. In his separate affidavit, Mr. Constable discusses the cost of and time to implement the network upgrades needed to capture CPN in Missouri AMA records on wireless calls. After CPN is recorded in the AMA recordings for calls wireless carriers terminate to the LEC network, AT&T'S Information Technology ("IT") organization would also have to change

its Usage Processing System ("UPS") as well as its Carrier Access Billing System to include CPN in the Category 11 record. In UPS, AT&T's system would first have to identify the calls as terminating to an ILEC in Missouri so they could be segregated for special handling. The Missouri-only ILEC terminating records would then be populated according to Commission order.

- 11. The cost to change the billing system would likely be over \$100,000 in internal personnel costs. The greater cost, that is difficult to measure, is the cost of IT maintaining unique coding for Missouri to handle the segregated process. This will require additional testing in every subsequent programming release. There is also the concern, since UPS handles all usage, not just ILEC records, that a special handling process would put all records at risk.
- 12. The IT work would require a project implementation. AT&T's IT organization has a very intense Software Development Life Cycle ("SDLC"), to ensure billing accuracy. Projects are scheduled based on priority and efficiencies. After they are scheduled, the SDLC process takes about eight months.
- 13. Even though the SDLC process is a lengthy process, it must be followed to ensure that these changes are very structured, which is necessary to ensure the integrity of these critical systems. This process is very labor intensive due to the many work groups that must work interdependently throughout the process.
- 14. The SDLC process would commence soon after AT&T Missouri received an order from the Commission requiring the change. A copy of the Commission's order would then be provided to the Wholesale Marketing organization, which has the responsibility of determining which organizations within the company will be impacted by the changes that are contained in the mandate¹. When the Wholesale Marketing organization determines that a mandate will impact AT&T's billing system, it contacts the IT organization for placement of the mandate on IT's Retail Major Billing Release Calendar. When the estimated hours associated with a mandate are less than 5,000 (as in this case), AT&T's standard Services' Software Development Lifecycle ("SDLC") process is utilized. This process generally takes about 8 months to complete and results in six Retail Major Billing Releases per year. The SDLC process involves four phases: (1) Consultation and Assessment (C&A), (2) Definition and Funding (D&F), (3) Developing and Testing (D&T), and (4) Deployment. The billing system change here would likely take a total of eight months to complete. While the tasks to be performed in the first two of these eight months could be performed at the same time Lucent develops new software to capture wireless CPN in the wireless AMA records, the tasks to be performed in the next six months could not be started until after the new software is developed, loaded into AT&T Missouri's switches and AMA recordings are actually being produced with wireless CPN.

¹ The mandate approval process is an effort to more closely manage which projects are given mandate status. This review process ensures that all projects submitted to IT as mandated projects are, in fact, mandated by a regulatory or legislative action. By adding a review process that ensures that a mandate is truly a regulatory or legislative requirement and that the scope of the project aligns with the specific provisions contained in the mandate, AT&T has been able to use its IT resources more effectively in responding to qualified mandates.

Each phase contains multiple steps or milestones. Some of the most significant milestones within this process includes the following components:

(1) The Work Request;

The Work Request, as part of the C&A phase, is a document stating a need for potential changes to be made by the IT department. The purpose of the C&A phase is to consult with and clarify the needs of the client, provide an initial IT impact assessment, and determine if the initiative has the necessary priority and resources to proceed to the next phase. During this step a project manager will be assigned to assist the client in gathering all necessary work groups to discuss the potential change. The initial meeting will have the client explaining what they want done. This meeting will also help identify additional work areas that need to be involved. Work areas take action items to assess their impacts. Additional meetings must be held to coordinate all the groups and help create a High Level Estimate of work. This will also help in getting a first assessment at the complexity of the potential project. Even though the Work Request process is time consuming, each section is critical to ensuring that the outcome of the project is exactly as the client desires.

(2) Resource Commitment for Design and Funding;

This step, as part of the C&A phase, is to ensure that resources from the impacted IT work groups are available to assist with the design of the project. Funding for the work must be determined, but does not cause a delay once the project is deemed mandated. The impacted work groups that have been identified thus far for this project are UPS, Reference Tables, BSD- Common Rating and CABS. These groups are some of the core billing applications that are involved with the creation and maintenance of all customer billing and detailed usage exchange. Therefore, the impact is a risk to millions of Missouri customer bills and the associated usage. Billions of usage records each month flow through these impacted systems.

(3) Baselined Business Requirements;

In this step of the D&F phase, a document is coordinated with all identified areas of the business to ensure that the needs of the requesting client do not negatively impact other areas of the business. If impacts exists, plans must be made to either change the other areas of business or notify customers of impending, non-negotiable change. For example, analysis must be done to determine if Competitive Local Exchange Companies (CLECs) will be impacted by this requested change. If so, what are the appropriate steps necessary to notify CLECs and possibly the industry of the upcoming change. This step will include the Client, technical requirements people, Methods and Procedure groups, Electronic Data Storage representatives, as well as other identified groups. The goal is to create a document that works for the entire business while meeting the client's requirement. Multiple meetings must be

coordinated by the project manager so that each area of the business understands and has an opportunity to analyze impacts to their organization and/or products.

(4) Baselined Technical Requirements;

To complete this milestone, a document is created that defines the technical functionality that must exist to satisfy the Business Requirements. It describes what the software must do and its operational constraints. The Technical Requirements will be created through multiple meetings with experts from each of the application groups (as defined above in the C&A phase). Just as in the Business Requirements, each of the predetermined impacted areas will need to complete their section of this document. When completed, this document will further explain what the client has requested, but this time in technical terms that can be understood by developers.

(5) Baselined High Level Design;

This step (HLD) identifies and describes the new, modified, and/or deleted components needed to support the business requirements for a functional area. This document will identify each impacted functional area and describe impacts to data models, functionality changes, and/or file layouts that affect multiple system applications. HLD can be system design, application design or both. Research will be required as if both are needed. Questions will be answered such as: Is a new system needed to handle the increased volume of work or can the existing systems handle the additional work? Will a new application be needed to handle the new or changed product/service or can the existing application be modified to accommodate the change? Dedicated Systems and Application Leads will coordinate with all the applications identified previously. They will work with the client, project manager, and Technical Requirements documents to create a design document. This document will be a pictorial view or road map of necessary changes to be followed by the developers. This will involve multiple meetings with committed personnel from previous steps as well as informal communication with developers.

(6) Project Release Commitment;

In this step all definition documents are reviewed to ensure there is no contradiction with other projects in the targeted release.

(7) Baselined Detail Design;

This step in the D&T phase begins by determining which components will require a Detailed Design by referring to the Baselined HLD document. Designers will identify any opportunity to reuse existing coding therefore saving development time and resources. Also, the designers will review the HLD and further decompose each of the key components into modules and sub-processes. The resultant document will demonstrate the processing logic, data structures, data definitions, modules and sub-processes created in enough detail for a programmer to develop the code. The Designer(s) will take the HLD created previously and create a step by step process (design) so that each application developer is working to the same goal, even though they work independently.

(8) Software Products Approved for System Test;

In this step, the software is changed and/or created, including appropriate reuse of existing code. Once the coding and/or new systems and applications are complete, they are approved for testing. Most software is developed in modules, units of code. Developers must continually coordinate to ensure compliance with the Detailed Design. This step handled by the programmers (developers) from all development groups working with Design Leads.

(9) System Test Complete;

System testing consists of many steps that frequently result in necessary code modifications created in the previous step. After a test plan is developed, testing begins with a Unit Test. This is testing the new code within the containing module. Integration Testing is often next and this includes the identified impacted modules within the application leg. Success brings the next series of tests including System Tests, Performance Tests, and End-to-End Tests. These are tests to ensure no negative impacts to the system, CPU efficiency, or other products or services. Tests are also conducted to verify/validate impacts or no impacts to External/CLEC customers.

(10) Software Deployed.

After all testing is complete, the new code is prepared for production release. This include coordination between the software developers and the regional data centers. The new code is installed and validated.

15. This concludes my affidavit.

The information contained in this affidavit is true and correct to the best of my knowledge and belief.

Executed on July 6, 2006:

This Roll

Chris Read Senior Business Manager-Information Technologies AT&T Services, Inc.

STATE OF TEXAS

COUNTY OF DALLAS

Subscribed and sworn to before me this 6th day of July, 2006.

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Notar

My Commission Expires: October 5, 200



SUMMARY OF EDUCATION AND WORK EXPERIENCE

Q. WHAT IS YOUR EDUCATIONAL BACKGROUND?

 A. I received my Bachelor of Business Administration in Personnel Management from East Texas State University in 1981.

Q. PLEASE OUTLINE YOUR WORK EXPERIENCE.

A. I began employment with AT&T in 1981 in Information Services. My responsibilities included data center operations cycle processing for Payroll, Toll, Customer Records Information System ("CRIS"), Customer Access Billing System ("CABS") and related online systems. I spent three years in systems development at Corporate Headquarters. I then worked for four years in Mid-Range Computer operations with duties which included toll data collection. Since 1997, I have been a part of the IT Billing Project Management support team. My responsibilities include support for all of AT&T Illinois with respect to Industry Markets Product and Account Management, primarily in the area of Daily Usage File ("DUF"). I also serve as an AT&T representative to OBF and currently hold the title of Co-Chair of the OBF Strategic Advisory Group.

Q. HAVE YOU PREVIOUSLY TESTIFIED IN REGULATORY PROCEEDINGS?

A. Yes. I testified in May 2005 before the Missouri Public Service Commission in Case No. TO-2005-0336, which was the consolidated arbitration between AT&T Missouri (doing business then as SBC Missouri) and numerous CLECs for a replacement interconnection agreement for the Missouri 271 Agreement ("M2A"). I also testified in April, 2006 before the Missouri Commission in the AT&T Missouri CPN waiver proceeding, Case No. TE-2006-0053.

I have testified before the Illinois Commerce Commission in conjunction with interconnection arbitrations with MCI and AT&T as well as the Public Utility Commission of Texas ("Texas PUC") in Docket No. 28209 and Docket No. 30368 in cases with Premiere and CyTel regarding disputed bills and message exchange.

I have testified in interconnection arbitrations with Level 3 in Illinois, Wisconsin, Kansas, California, and Arkansas, in addition to filing written testimony for Level 3 arbitration hearings in Connecticut, Michigan, and Indiana. I have also testified in interconnection arbitrations with multiple CLECs in Kansas (K2A), Oklahoma (O2A), Texas (T2A), and Arkansas (A2A).