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Exhibit No.:
Issue: *Provision of CPN in
wireless records*
Witness: *Robert C.
Schoonmaker*
Type of Exhibit: *Rebuttal Testimony*
Sponsoring Parties: *Small Telephone
Company Group;
Missouri Independent
Telephone Group*
Case No.: *TE-2006-0053*
Date: *April 7, 2006*

**SMALL TELEPHONE COMPANY GROUP AND
MISSOURI INDEPENDENT TELEPHONE GROUP**

CASE NO. TE-2006-0053

FILED²

MAY 16 2006

REBUTTAL TESTIMONY

OF

Missouri Public
Service Commission

ROBERT C. SCHOONMAKER

Exhibit no. 100P
Date 4-18-06 Case No. TE-2006-0053
Reporter PF

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**BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI**

In the Matter of the Request of Southwestern)
Bell Telephone, L.P. for a Waiver,) Case No. TE-2006-0053
Of Certain Requirements of 4 CSR 240-29.040(4))

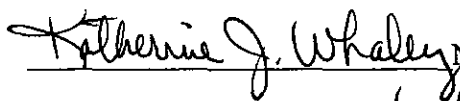
AFFIDAVIT OF ROBERT C. SCHOONMAKER

Robert C. Schoonmaker, of lawful age, being duly sworn, deposes and states as follows:

1. My name is Robert C. Schoonmaker. I am employed by GVNW Consulting, Inc. as President and Chief Executive Officer.
2. Attached hereto and made a part hereof for all purposes is my rebuttal testimony with accompanying schedules.
3. I hereby affirm that my answers contained in the attached testimony to the questions therein propounded are true and correct to the best of my knowledge and belief and that the information contained in the attached schedules is also true and correct to the best of my knowledge and belief.


Robert C. Schoonmaker

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

 Notary Public
My Commission expires: 04/02/08

Katherine J. Whaley
Notary Public - Notary Seal
State of Missouri
Cass County
My Commission Expires: April 2, 2008

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5 **REBUTTAL TESTIMONY OF ROBERT C. SCHOONMAKER**
6

7
8 **BACKGROUND OF WITNESS**
9

10 Q. Please state your name and address.

11 A. My name is Robert C. Schoonmaker. My business address is 2270 La Montana
12 Way, Colorado Springs, Colorado 80918.
13

14 Q. By whom are you employed and in what capacity?

15 A. I am President and CEO of GVNW Consulting, Inc., a consulting firm
16 specializing in working with small telephone companies.
17

18 Q. Are you the same Robert C. Schoonmaker that previously filed direct testimony in
19 this case?

20 A. Yes.
21

22 Q. What is the purpose of your rebuttal testimony?

23 A. I will respond to the testimony of AT&T-Missouri (AT&T) witnesses Mr. Read
24 and Mr. Constable regarding the industry standards established for wireless
25 originated billing records. I will challenge their assertions as to these industry
26 standards as they relate to the rule adopted by the Commission. I will respond to
27 the testimony of Staff Witness Mr. Voight. Finally, I will present testimony

1 responding to the evidence presented by Mr. Read and Mr. Constable that is more
2 appropriate to the second phase of this proceeding, should one be necessary.

3

4 **REQUIREMENTS OF THE COMMISSION'S RULE**

5 Q. Is there any disagreement among the various parties' witnesses as to whether the
6 Commission rule requires the provision of Category 11-01-XX records?

7 A. There is not. Each of the witnesses acknowledges that 4 CSR 29.040(4) requires
8 AT&T Missouri to provide Category 11-01-XX records.

9

10 Q. Is there disagreement between AT&T Missouri and the STCG/MITG regarding
11 the document that establishes the industry standard for the Category 11-01-XX
12 records?

13 A. There is not. We both agree that the Ordering and Billing Forum's (OBF)
14 Enhanced Message Interface (EMI) document is the appropriate document
15 establishing the standards for the Category 11-01-XX records. Both Mr. Read
16 and I provided the same pages from the same version of this document as
17 Schedules or Attachments to our testimony showing the description of the
18 Category 11-01-01 record.

19

20 Q. Does this record have a field in it for the From Number?

21 A. It does. It is shown in Positions 15-24 of the Category 11-01-01 record as shown
22 in HC Schedule RCS-2, page 1, and Read Schedule 6(P). I provided as HC
23 Schedule RCS-3 the definition from the EMI manual of the From Number. I

1 believe this is the same number that is described in the Commission's Rule as the
2 Calling Party Number (CPN). It is the number of the party originating the call.

3

4 Q. Is this field in the Category 11-01-01 record a required field?

5 A. Based on my review of the EMI documentation it clearly is. In the opening
6 section of the EMI document giving General Description items, Section 1.4
7 describes Shading Requirements. As can be seen from HC Schedule RCS-5
8 attached to this testimony which is Page 1-1 of the EMI document, the document
9 states, "Shaded fields are not required..." and that "Unshaded fields are required
10 and therefore will contain information based on the field definition." Therefore, I
11 conclude that since the From Number field is unshaded in the Category 11-01-01
12 record, it is a required field.

13

14 Q. Where does the information regarding the shading of fields appear for the
15 Category 11-01-01 record?

16 A. While for many of the records the shading appears on the face of the record
17 format, for the Category 11-01-01 record the "shading" is documented by a
18 matrix at the bottom of the previous page as shown on Page 1 of HC Schedule
19 RCS-2 and on Read Schedule 7(P). The sentence before the matrix states, "The
20 matrix below lists what fields are shaded on the 11-01-01 based on Feature
21 Group. A value of X in a given column means that the field is shaded for that
22 Feature Group." In the matrix immediately below that, the From Number field

1 (Positions 15-24) is not listed. This indicates that the From Number field is a
2 required field for all Feature Groups and uses of the record.

3

4 Q. Does the EMI documentation support the assertion stated by the AT&T witnesses
5 that the Category 11-01-01 record that AT&T Missouri produces is an industry
6 standard record when it does not contain the From Number for wireless calls?

7 A. It does not. The EMI documentation clearly illustrates that the From Number
8 field is a required field in the Category 11-01-01 record.

9

10 Q. Does this contradict the assertion of Mr. Read on Page 20, Lines 21-23, that CPN
11 is not a required field in the Category 11-01-01 record?

12 A. It does, unless Mr. Read is relying on terminology differences. Technically the
13 Category 11-10-01 record requires the From Number not CPN. But AT&T
14 Missouri is not providing the From Number in that field in their wireless records,
15 so AT&T's records are deficient in this regard.

16

17 Q. Do the AT&T witnesses make any comment related to 4 CSR 29.040(6) which
18 specifically prohibits replacing the originating telephone number of the end user
19 with any other number?

20 A. They do not. This section of the Rule specifically prohibits replacing the end
21 user's originating number with some other number including in the Category 11-
22 01-XX records referenced in 4 CSR 29.040(4)(a) as AT&T Missouri is currently
23 doing in the non-standard Category 11-01-XX records they provide.

1 **INDUSTRY STANDARD FOR AMA RECORDING**

2 Q. One of the arguments that Mr. Read and Mr. Constable put forward is that the
3 industry standard AMA record for wireless calls does not contain the From
4 Number and therefore it is not available to AT&T Missouri to put in the Category
5 11-01-01 record. Do you see flaws in this argument?

6 A. I do. On Page 10 of his direct testimony Mr. Constable quotes from the Telcordia
7 GR 1504 document that the Originating Number field "...shall contain the per-
8 trunk-group billing number of the WSP". He apparently concludes that the AMA
9 record will not contain the actual originating number, and it is therefore
10 unavailable to be used in the Category 11-01-01 record. However, Mr. Constable
11 ignores other parts of that document which show that the AMA is required to
12 contain that information in other parts of the record.

13

14 Q. Do you have any disagreement with Mr. Constable that the Telcordia GR 1504
15 document is an industry standard document for the AMA recording of wireless
16 calls?

17 A. I do not, but I do have disagreements with Mr. Constable's conclusions based on
18 this one requirement (R3-85) of the document. There are other parts of that
19 document which are relevant to what is required in an AMA record.

20

21 Q. Does the Telcordia GR 1504 document describe the differences between
22 requirements, conditional requirements, and other categories in the AMA record?

1 A. It does. Referring to Constable Schedule 2(P) which is the Telcordia GR 1504
2 document, at the top of page 16 of 62, or page 1-4 of the document, there is a
3 description of five different categories of "requirements": (1) requirements, (2)
4 conditional requirements, (3) objectives, (4) conditional objectives, and (5)
5 conditions. Each of these categories has a different lead-in letter or letters to
6 denote which category it falls into. In regard to requirements the document states:

7 "Requirement – Feature or function that, in the Telcordia view, is
8 necessary to satisfy the needs of a typical facilities-based Local Exchange
9 Carrier (LEC). Failure to meet a requirement may cause application
10 restrictions, result in improper functioning of the product, or hinder
11 operations. A requirement contains the words *shall* or *must* and is flagged
12 by the letter "R". [emphasis in original]
13

14 Therefore, if a requirement is identified by the letter "R", it is in fact a
15 required part of the record.
16

17 Q. You mentioned that there were other parts of the Telecordia GR 1504 document
18 that relate to the capture of CPN information within the AMA record for wireless
19 carriers. Can you expand on this?

20 A. Yes. Mr. Constable quoted part of requirement **R3-85** in regard to the Originating
21 Number field in the AMA record, but that is not the only part of the wireless
22 record that refers to CPN information. At the top of the page that Mr. Constable
23 was quoting from (Page 44 of 62 of Constable Schedule 2(P)) and the bottom of
24 the prior page are listed requirements **R3-79** and **R3-80**. These two requirements
25 specifically require Module 164 to be appended to the AMA record and that it be
26 populated with the appropriate data described in requirement **R3-59, Table 3-2**.

1 The wording of these requirements are "shall append" and "shall populate"
2 respectively. They are requirements.

3

4 Turning now to Pages 39 and 40 of Constable Schedule2(P), the requirements of
5 **R3-59 including Table 3-2** require that the system "shall populate" Module Code
6 164 of the AMA record " with the numbers contained in the parameter(s) of the
7 Initial Address Message for SS7 signaling or the ANI for MF signaling..." as
8 described in Table 3-2. In viewing Table 3-2, one can see that if the CPN is
9 included in the SS7 signaling, it is to be recorded in Module Code 164.

10

11 Q. Does Mr. Constable acknowledge that AT&T Missouri receives the CPN in calls
12 for which SS7 signaling is provided?

13 A. Mr. Constable acknowledges that is the case for the majority of the calls they
14 receive and indicates AT&T Missouri's compliance with 4 CSR 29.040(1) and (2)
15 which require originators to provide CPN and transiting carriers to transmit it
16 along the network. Thus, AT&T Missouri acknowledges that CPN is available (at
17 least for the vast majority of calls) in their network so that it could be recorded.
18 The AMA recording requirements as evidenced by Constable Schedule 2(P)
19 require this information to be recorded in the AMA record. Thus, under the
20 standards documents it should be available to AT&T Missouri's billing system to
21 include in the Category 11-01-01 records required by 4 CSR 29.040(4).

22

1 Q. Do the requirements in **R3-85**, **R3-79**, and **R3-80** all apply to calls terminating
2 from a wireless service provider (WSP) to a tandem switch?

3 A. Yes. These requirements all fall in Section 3.8.2 of the document (see Page 43 of
4 62, Constable Schedule 2(P)) which describes these records as records generated
5 at a tandem switch from Type 2A connections terminating to the LEC from a
6 WSP (wireless service provider).

7

8 **THE COMMISSION'S INTENT AT THE TIME THE RULES WERE ISSUED**

9 Q. In addition to the specific requirements in the Commission Rules and standards
10 documents for Category 11-01-XX records, did the Commission indicate its intent
11 that the originating CPN be provided in addition to the identification of the
12 carrier?

13 A. Yes. Mr. Read attempts to argue that the AT&T Missouri record (which does not
14 contain the originating telephone number of the end user) complies with the
15 "intent" of the Commission Rule (Read direct, p. 20, lines 17-19). Mr. Read
16 argues this is the case because the Title of 4 CSR 29.040 and the Purpose of the
17 rule only refer to the identification of a carrier. I do not agree that the Title and
18 Purpose of the rules are the only part of the rule that indicates the Commission's
19 intent. 4 CSR 29.040(1) and (2) specifically require the provision of "originating
20 caller information" and 4 CSR 29.040(6) requires the provision of the "originating
21 telephone number" of the end user originating the call. These rules make clear
22 the Commission's intent that more than the identification of the originating carrier
23 is to be provided. Furthermore, this Chapter of the Commission's Rules is

1 entitled the "Enhanced" Record Exchange Rule. Presumably, the Rule was
2 intended to enhance the records the small rural ILECs were receiving prior to the
3 rule. Without inclusion of CPN or the From Number in the billing records for
4 wireless calls, the rule would provide little or no enhancement in the record.

5
6 Q. At the time the Commission issued its Final Order of Rulemaking did the
7 Commission further make clear its intent that the Category 11-01-XX records for
8 wireless calls should contain the same information?

9 A. Yes. Mr. Voight in his testimony (p. 12) quotes two paragraphs from the
10 Commission's Final Order of Rulemaking that clearly state the Commission's
11 intent that CPN be provided in the records related to wireless calls. Further, Mr.
12 Voight states that the Staff agreed with that determination at the time that the
13 Order was issued. It was only several months later, in October, 2005 that Staff
14 came to a different opinion. It is clear from both the Order itself and from Mr.
15 Voight's testimony that at the time the Order was issued, it was the intent of the
16 Commission in implementing the rule that CPN be provided in the wireless
17 records. As I have further shown, these statements simply confirm the
18 requirements of the EMI document that establishes the industry standard for the
19 Category 11-01-XX record which is also required by the Commission Rules.

1 **THE IMPORTANCE OF CPN**

2 Q. In his Direct Testimony (pp. 24, Lines 24-25), Mr. Constable states that "CPN is
3 valuable for providing Caller ID services as well as assisting in lawful intercepts
4 and 911 services." Do you agree that CPN is only valuable for those purposes?

5
6 A. No. CPN is valuable for other purposes as well. Indeed, as explained by Staff
7 witness Voight, the ability to identify end users permits terminating carriers to
8 determine the originator of the calls and to verify the end users' wireless carriers.

9 He further states:

10
11 "In many instances (but not all instances), knowing the CPN will
12 assist the terminating carrier in verifying the proper jurisdiction of
13 wireless-originated telephone calls. Billing records that contain CPN
14 of wireless-originated calls can aid terminating carriers in
15 establishing practices which reveal network usage. In my opinion,
16 the lack of CPN within the billing record restricts, perhaps severely,
17 the ability of terminating carriers to insitute general network auditing
18 guidelines." (Voight Direct Testimony, page 6, lines 10-16)
19

20 Q. Has AT&T Missouri recognized the usefulness of CPN in wireless records in
21 other venues?

22 A. Yes. In other cases where AT&T Missouri is the terminating carrier it has
23 forcefully argued that the information required by this rule is necessary in order to
24 bill for wireless traffic. On August 11, 2005, SBC filed a Notice of Ex Parte in
25 Federal Communications Commission ("FCC") Docket No. 01-92 in which it
26 discussed SBC's position on phantom traffic and a proposed solution. I have
27 attached this filing as Schedule RCS-6 of my testimony. In this filing, SBC urged
28 the FCC to establish rules requiring adequate and appropriate call signaling. SBC

1 further stated that carriers require call detail information to bill usage-based
2 charges to other carriers and that to bill the correct rate a carrier must know the
3 jurisdiction of the call derived from the calling and called party numbers. SBC
4 suggested that the proposed rule include a provision requiring that, where
5 technically feasible, originating carriers *shall transmit* calling party number and
6 transmitting carriers *shall transmit* calling party number information as received.¹
7 Thus, in this context, AT&T Missouri argued that CPN should be required to
8 assist in determining call jurisdiction.

9
10 In another FCC case, AT&T Missouri has filed public pleadings in which it stated
11 that it was entitled to rely upon the information CPN provides for purposes of
12 billing for wireless traffic.² In that case, AT&T Missouri characterized the
13 provision of ANI (recognized by the ERE rule as another term for CPN) in order
14 to determine call jurisdiction as a "standard industry practice" for years:
15

¹*SBC Notice of Ex Parte, Developing a Unified Inter-carrier Compensation Regime*, CC Docket No. 01-92, August 11, 2005 (emphasis added), p. 13.

²*In the Matter of SBC Communications Inc. Petition for Declaratory Ruling Concerning Terminating Switched Access Charges for Wireless-Originated Calls*, FCC WCB Docket No. 04-424, filed November 12, 2004. SBC filed a petition for declaratory judgment with the FCC in which it relied upon the inclusion of CPN. The FCC request was the result of a referral from the United States District Court of the Eastern District of Missouri. There was litigation in the Eastern District between SBC and Global Crossings. The issue at the heart of the litigation was whether interexchange carriers delivering wireless traffic to SBC were obliged to provide the originating telephone number of the calling party. The originating telephone number is referred to as ANI (automatic number identification), or as CPN (calling party number). SBC asked the FCC to declare that, in the absence of accurate and reliable information as to originating caller location, SBC's access tariffs permitted SBC to use the telephone number of the calling party to ascertain the jurisdiction of the call.

1 Because long distance carriers provide no other information to local
2 carriers as to the geographic location of wireless subscribers who
3 place or receive telephone calls, **it has been standard industry**
4 **practice for years to use calling and called party telephone**
5 **numbers to determine the jurisdiction of, and thus appropriate**
6 **access charges for, wireless originated calls.”³**
7

8 Thus, AT&T Missouri’s position in this case is in direct contradiction to its
9 position before the FCC in a case where it believed that CPN was necessary for its
10 own use.
11

12 Q. In his testimony Mr. Voight states that CPN is not a reliable jurisdictional
13 indicator for wireless calls in all instances (p. 8, lines 7-8). Do you agree with
14 that statement?

15 A. Yes, I agree that CPN is not always a reliable jurisdictional indicator for wireless
16 calls because of the mobility of the wireless customer. However, it is better than
17 any other information that is currently available. Mr. Voight states that CPN
18 should only be used in establishing general auditing guidelines, such as using
19 CPN to monitor billing records to determine if there are excessive amounts of
20 interstate, interMTA wireless-originated calls being terminated over local
21 interconnection trunks instead of access trunks. Calling party number information
22 was used by Mark Twain Rural Telephone Company (“Mark Twain”) in
23 performing a traffic study to determine that 70% of the traffic from T-Mobile

³*SBC’s Petition for Declaratory Ruling*, Docket No. WCB 04-424, p. iv (emphasis added).

1 callers that terminated to the Mark Twain exchanges was interMTA.⁴ In a
2 subsequent arbitration case involving Alma Telephone Company ("Alma") the
3 Commission accepted the validity of this method of determining the jurisdiction
4 of wireless traffic terminated to the companies. The Commission stated,

5 "The BPS decision is guidance for the Commission's accepting the
6 validity of the studies that Chariton Valley, Mid-Missouri, and
7 Northeast submitted. The Commission accepted the methodology of
8 an NPA-NXX study to ascertain traffic jurisdiction."⁵
9

10 As was aptly stated by Mr. Voight:

11 "...knowledge of who is using the telephone network is simply a good
12 business practice. Moreover, *omission* of CPN in billing records
13 restricts the ability of terminating carriers to employ reasonable
14 practices designed to obtain such knowledge." (Voight Direct
15 Testimony, page 8-9)
16

17 Q. In Staff witness Mr. Voight's testimony (p. 6, lines 14-18) he states that the "only
18 potential ramification" of not including CPN in the Category 11-01-XX billing
19 records is the possible loss of the ability to "...institute general network auditing
20 guidelines." Do you agree that this is the only ability that is lost without CPN in
21 the Category 11-01-XX billing records?

22 A. No. I believe the ramifications are greater than that. One of the lessons learned
23 from the network test that was conducted by the industry and described in the
24 testimony in Case No TO-99-593 was that human errors in instructing switches to

⁴*BPS Telephone Company, et al. v. Voicestream Wireless Corporation et al.*, TC-2002-1077, Report and Order issued January 27, 2005, pp. 25, 29.

⁵*In the Matter of the Petition of Alma Telephone Company for Arbitration of Unresolved Issues Pertaining to a Section 251(b)(5) Agreement with T-Mobile USA, Inc.*, Case No. IO-2005-0468, Arbitration Report issued October 6, 2005, page 10.

1 record traffic can cause serious "phantom traffic" problems. It was during that
2 test that the error that AT&T Missouri (then SWBT) made in programming its
3 Ericcson switches was revealed. In that test there was also a single trunk group in
4 the SWBT switch in Sikeston that was identified as not generating billing records.
5 A key element in identifying these problems was making "record-by-record"
6 comparisons of records recorded at the terminating switch with the billing records
7 received from the tandem switch. Having the originating number (CPN or From
8 Number) in both of these records facilitates making these comparisons so that the
9 source of missing billing records can be identified. A lack of the CPN in the
10 wireless Category 11-01-XX records makes a valid comparison of those records
11 to records recorded at the end office more difficult.

12
13 Q. At the top of Page 7 of his testimony, Mr. Voight discusses how the fictitious
14 number that AT&T Missouri places in the From Number field can be used to
15 identify the originating wireless carrier. Is it necessary to have this fictitious
16 number in the From Number field to identify that carrier?

17 A. No. Both the EMI documentation (Read, Schedule 6(P)) and the SBC Accessible
18 Letters (Read, Schedules 2, 3, and 4) identify that the Originating Carrier can be
19 identified by the Originating OCN number in Positions 167-170 of the Category
20 11-01-XX records. There is no need to have a fictitious number in the From
21 Number field in order to identify the responsible carrier.

1 Q. In his Direct Testimony, Mr. Read states that "no party's written comments in the
2 rulemaking indicated an understanding that the rule included such a [CPN]
3 requirement." Do you agree with this statement?

4
5 A. No. On October 29, 2004, Mr. Johnson wrote to Leo Bub, counsel for AT&T, to
6 express the small companies' concerns with the new wireless records. One of the
7 concerns raised by Mr. Johnson was that the records did not comply with the
8 proposed ERE Rule. Among the specific concerns raised by Mr. Johnson was the
9 fact that the wireless records did not contain CPN:

10 Consistent with Category 11 record formats, the small companies
11 expected the new record would provide the originating caller's
12 number. The failure to provide the calling party number
13 contradicts the current draft of the Enhanced Record Exchange
14 Rule.¹

15
16 A copy of this correspondence is included as Schedule RCS-7, and it
17 demonstrates the small companies' understanding that the ERE Rule would
18 require CPN for wireless calls.

19 Later, in the Supporting Comments of the Missouri Independent
20 Telephone Company Group, the MITG expressed its support for the ERE rule and
21 explained why it was necessary. The MITG stated at page 12 of its Comments
22 that despite being promised an "IXC-type" record in place of the CTUSR, the
23 companies found that, "Instead of providing the caller's number [as had been
24 promised], the new record simply puts in an assigned number representing the
25 CMRS provider." The MITG further stated, "Thus when the new 'IXC' record is
26 retrieved and assimilated, it provides no more information with respect to traffic

¹ See Schedule RCS-6, E-mail correspondence from Craig Johnson to Leo Bub dated Oct. 29, 2004.

1 jurisdiction than did the CTUSR. This record deficiency means the terminating
2 LEC cannot reconcile traffic, and therefore cannot identify what carriers are
3 failing to record and pay for traffic.”

4 At the hearing in Case No. TX-2003-0301, Mr. Johnson again explained
5 the problem with what the companies thought was going to be an “IXC-type”
6 wireless record from AT&T Missouri. He stated:

7
8 [W]e realized that that record was not providing us with the calling party
9 number either. In lieu of that calling party number, it was giving us a single
10 phone number associated with a particular wireless carrier, so that as a result
11 of the new records, we still have basically the same information that we
12 were receiving under the CTUSR, which was a total number of minutes that
13 was terminating from a particular wireless carrier.

14
15 Because of the absence of the CPN, we did not get the information that
16 would have helped us jurisdictionalize the traffic. (Transcript, pp. 77-78)
17

18 These correspondence, comments, and statements clearly show that the
19 terminating companies did address the issue of CPN in the wireless billing records
20 during the rulemaking proceeding and clearly believed that the rule required its
21 inclusion, since the “IXC-type” records being provided by AT&T Missouri had
22 failed to provide that information.
23

24 Q. Mr. Read provided Read Schedules 2-4 as attachments to his testimony showing
25 the correspondence AT&T Missouri (then SBC) provided regarding the
26 replacement of the CTUSR records with the Category 11-01-XX records. Did
27 this correspondence give any indication that the From Number in these records
28 was not the actual originating number of the party making the call?

1 A. They do not. There is no mention that the From Number would contain a
2 fictitious number identifying a carrier rather than the end user originating the call.
3 In fact, the April 22, 2004 letter (Read Schedule 3) implies that the record format
4 would be the same as the IXC records that were implemented in 2002, records
5 which do contain the actual From Number of the originating end user.²
6

7 **ISSUES RELATED TO PHASE II OF THIS PROCEEDING**

8 Q. Has the STCG/MITG filed a motion to strike portions of the testimony of Staff
9 Witness Voight and the AT&T witnesses?

10 A. Yes. The motion has been filed because some portions of the testimony of those
11 witnesses do not, in the opinion of the STCG/MITG, address the issue of whether
12 the current Commission Rule requires the provision of CPN, but rather address
13 the issue of whether AT&T Missouri should be granted a waiver of the rule if it
14 does, in fact, require CPN to be provided in the Category 11-01-XX records.
15

16 Q. Have you prepared rebuttal testimony to some of the testimony that the
17 STCG/MITG proposes be stricken?

18 A. Yes. The motion was only filed recently and has not been acted upon by the
19 Commission. The testimony following is offered as rebuttal testimony to the
20 testimony that the STCG/MITG proposes be stricken. Should the Commission
21 rule in favor of the STCG/MITG motion, the following testimony will be
22 withdrawn by the STCG/MITG.

² See Read Schedule 3, Second Paragraph – “The format for these records will be the standard ATIS/OBF EMI Category 11-01-XX mechanized detail call record that was implemented on IXC traffic beginning August 2002.”

1 Q. Mr. Read argues that AT&T Missouri should be allowed to continue to provide
2 the records they do currently because other carriers provide them that way around
3 the country. Specifically, he indicates on page 20, line 11, that Sprint Missouri
4 provides records in the same manner as AT&T does. Do you have information to
5 challenge that characterization?

6 A. Yes. While Sprint Missouri may have done that in the past, Sprint has modified
7 its systems to produce the appropriate records in compliance with the
8 Commission's rules. In an e-mail dated March 14, 2006 to Mr. Randy Boyd of
9 Kingdom Telephone Company, Gary Manderfeld of Sprint stated the following:

10

11 Sprint Nextel implemented a process on 3/3 where the trunk groups on
12 both the CLEC and Wireless trunks are recording the module 164,
13 which provides the charge or calling party number. Kingdom will see
14 the originating number populated with the true calling party/charge
15 party number and the originating OCN will also be populated on the
16 next set of files they receive 3/31.
17

18 Q. Do you draw any inferences from Sprint Missouri's ability to comply with the
19 Commission's Rule in relationship to AT&T Missouri's testimony about the
20 burden they will have to bear to accomplish the same task?

21 A. Yes. I would note that Sprint ILEC operations are substantially smaller than
22 AT&T's. If Sprint can accomplish this change and absorb it within their much
23 smaller operation, it raises questions in my mind as to how significant it would be
24 for AT&T to achieve the same objective in its much larger operation, particularly
25 when it would appear to put AT&T in compliance with the industry standard EMI
26 requirements and the AMA requirements as shown in Constable Schedule 2(P).

1 Q. On Page 22 of AT&T Witness Read's testimony he indicates that AT&T is
2 opposed to being required to provide CPN because that requirement is not an
3 industry standard and because AT&T would be required to pay a substantial
4 amount of money to provide that capability in its switches and billing processes.
5 What are your comments in regard to these concerns?

6 A. While both Mr. Read and Mr. Constable state several times that the current
7 records they provide are in compliance with industry standards and that changing
8 them would make the records non-standard, the standard industry documentation
9 shows just the opposite. My direct testimony and this rebuttal testimony
10 demonstrate that the From Number is a required field in the Category 11-01-XX
11 billing record. I have also demonstrated that the requirements of the Telcordia
12 GR-1504 AMA standard for wireless records require the CPN information to be
13 recorded by the switch, contrary to Mr. Cosntable's assertions. Thus, complying
14 with the Commission's rule to include the From Number or CPN in the Category
15 11-01-XX record will cause AT&T-Missouri to come into compliance with the
16 industry standard rules for both billing and AMA records. It is something they
17 should be doing even if the Commission Rule did not require it.

18 Secondly, while the \$1 million that Mr. Read indicates AT&T would have
19 to pay Lucent Technologies is not an insubstantial amount of money in many
20 contexts, in the context of AT&T's total operations, it is a relatively small figure.
21 For example, the 2005 AT&T Inc. annual report indicates that AT&T had total
22 operating expenses of \$37.7 billion. An expenditure of \$1 million thus equates to
23 approximately 3 thousandths of one percent (.003%) of AT&T's operating

1 expenses. In order to put this expense into perspective, Citizens Telephone
2 Company of Higginsville, Missouri reported total operating expenses of
3 \$3,669,606 in its 2005 Annual Report. Applying the same .003% to Citizens
4 Telephone Company's total operating expenses results in \$110. Thus, for AT&T
5 to incur an expense of \$1 million is roughly equivalent to Citizens Telephone
6 Company expending \$110. From this perspective, the amount AT&T would be
7 required to expend is not so substantial or burdensome. One also needs to keep in
8 mind that this would allow AT&T in all of its states to come into compliance with
9 the Telcordia GR-1504 AMA standard for wireless records.

10

11 Q. Mr. Constable suggests on Page 15 of his testimony that by the time that AT&T
12 Missouri could meet the requirement to include the From Number in its records,
13 the FCC might change the rules for intercarrier compensation and make those
14 records obsolete. What is your response?

15 A. I acknowledge that the FCC is closer now to taking some action on intercarrier
16 compensation than it was when its proceeding started nearly five years ago, but it
17 is still very uncertain when any changed requirements might be implemented and
18 what they might entail. I am aware that one of the proposals currently being
19 discussed in the industry contemplates that rural ILECs would continue to bill
20 wireless providers under reciprocal compensation requirements that are similar to
21 today's requirements for several more years. Thus, bringing AT&T Missouri's
22 records into compliance with the Commission's rules and industry standards as I

1 have discussed would probably be able to be completed and in place for several
2 years before FCC compensation rules might make them less necessary.

3

4 Q. Does this conclude your rebuttal testimony in this phase of this proceeding?

5 A. Yes, it does.

SCHEDULE RCS-5

HIGH CONFIDENTIAL



Eric Einhorn
Executive Director -
Federal Regulatory

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Phone 202 326-8822
Fax 202 408-4802

August 11, 2005

VIA ELECTRONIC SUBMISSION

Ms. Marlene H. Dortch
Secretary
Federal Communications Commission
445 12th Street, SW - Lobby Level
Washington, D.C. 20554

Re: Notice of Ex Parte
Developing a Unified Inter-carrier Compensation Regime, CC Docket No. 01-92

Dear Ms. Dortch:

On behalf of SBC Communications, Inc., David Hostetter, Philip Bowie, John Nolan, Michelle Sclater, and I met with Tamara Priess, Steve Morris, Jay Atkinson, Christopher Barnekov and Randy Clarke of the Pricing Policy Division, Wireline Competition Bureau, and Ian Dillner of the Wireline Competition Bureau Front Office on August 10, 2005. Consistent with the attached presentation, we discussed SBC's position on phantom traffic and a proposed solution to the problem pending broader Inter-carrier compensation reform.

Pursuant to section 1.1206(b)(2) of the Commission's Rules, this letter being filed electronically with the Commission.

Sincerely,

/s/ Eric N. Einhorn

Eric N. Einhorn

CC: Tamara Priess
Steve Morris
Jay Atkinson
Christopher Barnekov
Randy Clarke
Ian Dillner

Schedule RCS-6



Phantom Traffic

August 10, 2005

Ex parte meeting with the FCC Wireline
Competition Bureau

Overview



- Some carriers deliver calls without the correct signaling information (intentionally and unintentionally) to other carriers
- Current intercarrier compensation regime creates bad incentives and opportunities for mischief exist
- Phantom traffic affects all carriers, including SBC
- Pending reform of the intercarrier compensation system to address the root causes of the problem, the FCC should:
 - Establish rules requiring adequate and appropriate call signaling
 - Establish a process for distinguishing intentional and unintentional unidentifiable traffic
 - Establish a process for challenging traffic received with intentionally altered signaling information and remedies to address

Phantom Traffic



What is phantom traffic?

- When a carrier is unable to determine via call signaling information or call detail records:
 - The carrier responsible for payment of functions performed, and/or
 - The appropriate jurisdiction of the call

What phantom traffic is not?

- Traffic containing correct signaling information yet carriers dispute appropriate rate based on differing interpretations of existing FCC rules
- Traffic without correct signaling information due to technical limitation

Phantom Traffic Impacts SBC



- SBC receives phantom traffic which results in:
 - Revenue shortfall of switched access
 - Transport facilities
 - Usage-based charges
 - Increased expenses caused by:
 - Investigating traffic
 - Pursuing recovery
- What is SBC doing about it?
 - SBC formed revenue assurance and fraud detection team
 - Collaborates with other carriers in identifying phantom traffic and responsible carriers
 - Participates in industry billing forums, e.g., OBF
 - State arbitrations
 - Litigation
 - Advocates appropriate state legislation, e.g., Arkansas

Carrier Billing Background



- Carriers require call detail information to bill *usage-based charges* to other carriers
- Accurate call detail information is needed to bill the:
 - Correct carrier – requires identification of the carrier responsible for payment
 - Correct rate – requires determination of call jurisdiction
 - Correct charge – requires call duration
- Billing systems extract information from automatic message accounting (AMA) recordings, derive additional information from these recordings and format the *finished* call detail information onto call detail records
 - AMA recordings can be made by tandem switches and end office switches
 - AMA recordings contain data known to the switch and capture SS7 and MF signaling information

Identifying the Correct Carrier



- To bill the correct carrier, a carrier must know whether the traffic is local, intraLATA toll (non-IXC) or IXC access so the applicable carrier compensation regime can be determined
- The originating carrier identified by the Operating Company Number (OCN) is the responsible carrier for local or intraLATA toll traffic and can be determined from information on AMA recordings
 - Incoming trunk group number when directly interconnected
 - SS7 calling party number (CPN) field or charge number (CN) fields
 - MF automatic number identification (ANI) parameter
 - OCN is derived from either the trunk group number or the CPN or CN information contained in the AMA recording
- The IXC is the responsible carrier for IXC access traffic and can be derived from information on AMA recordings
 - For terminating IXC traffic, the Carrier Identification Code (CIC) is contained on AMA recordings when directly interconnected with the IXC and is derived from the trunk group between the LEC and the IXC
 - For originating IXC traffic, the CIC is contained in AMA recordings and is derived from switch memory
 - The responsible carrier *cannot* be identified from the SS7 signaling information that is contained in AMA recordings

Billing the Correct Rate



- To bill the correct rate, a carrier must know the jurisdiction of the call and derives it from:
 - the calling and called telephone numbers
 - negotiated factors for wireless traffic delivered over local interconnection
- The calling telephone number is transmitted in the SS7 calling party number (CPN) or charge number (CN) fields, or the MF automatic number identification (ANI) parameter
- Jurisdictional Information Parameter (JIP) is not useful since it provides the NPA/NXX of the originating switch which may serve end users located in multiple rate centers, LATAs, MTAs, and states

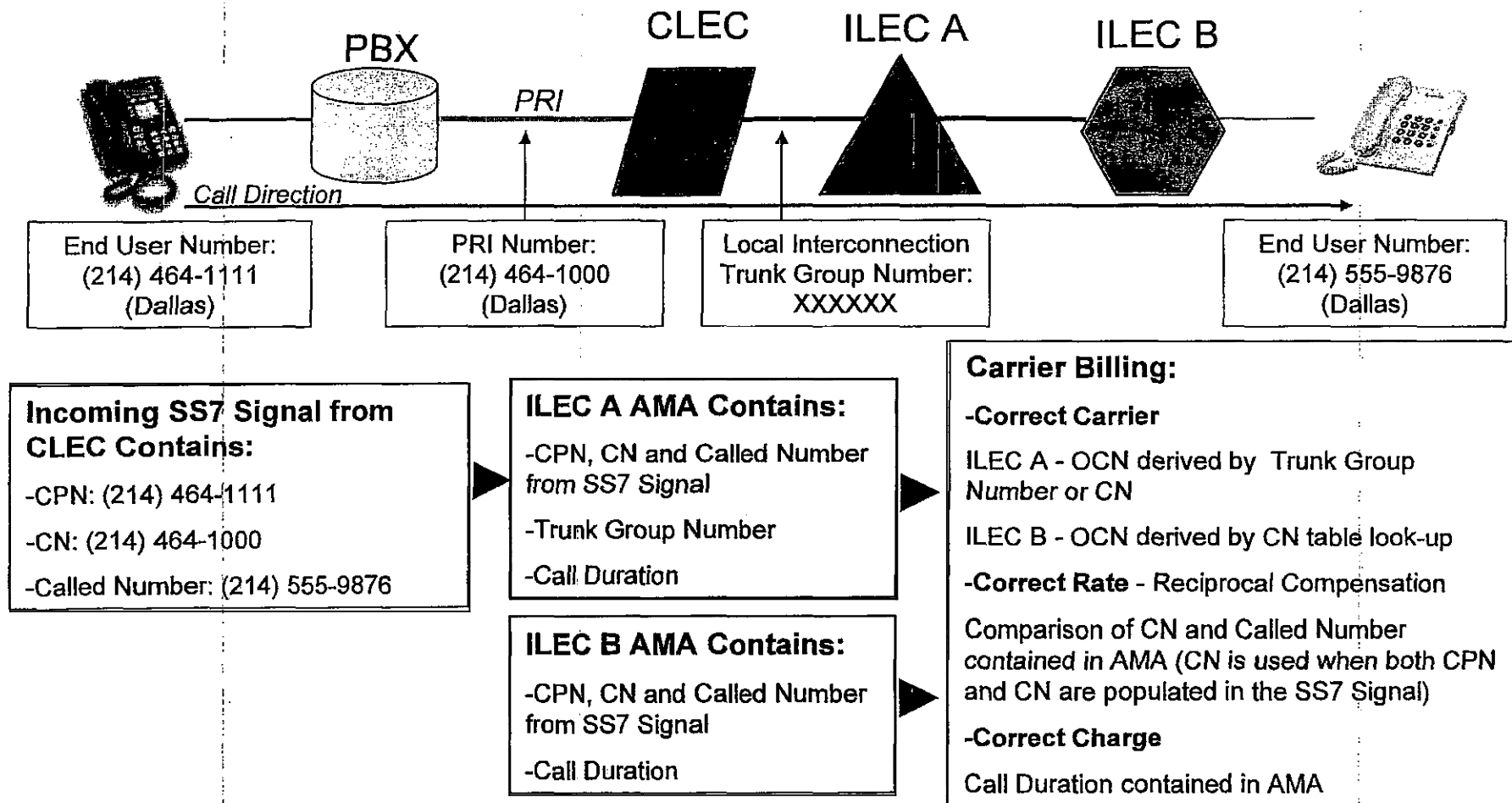
Billing the Correct Charge



- To bill the correct charge, a carrier must know the duration of a call which is captured on AMA recordings
- The switch performing the AMA recording calculates call duration based on customer connect and disconnect signaling information
- Call duration and rate are used by the billing system to calculate the charge that appears on the bill

Carrier Billing Example: Not Phantom Traffic

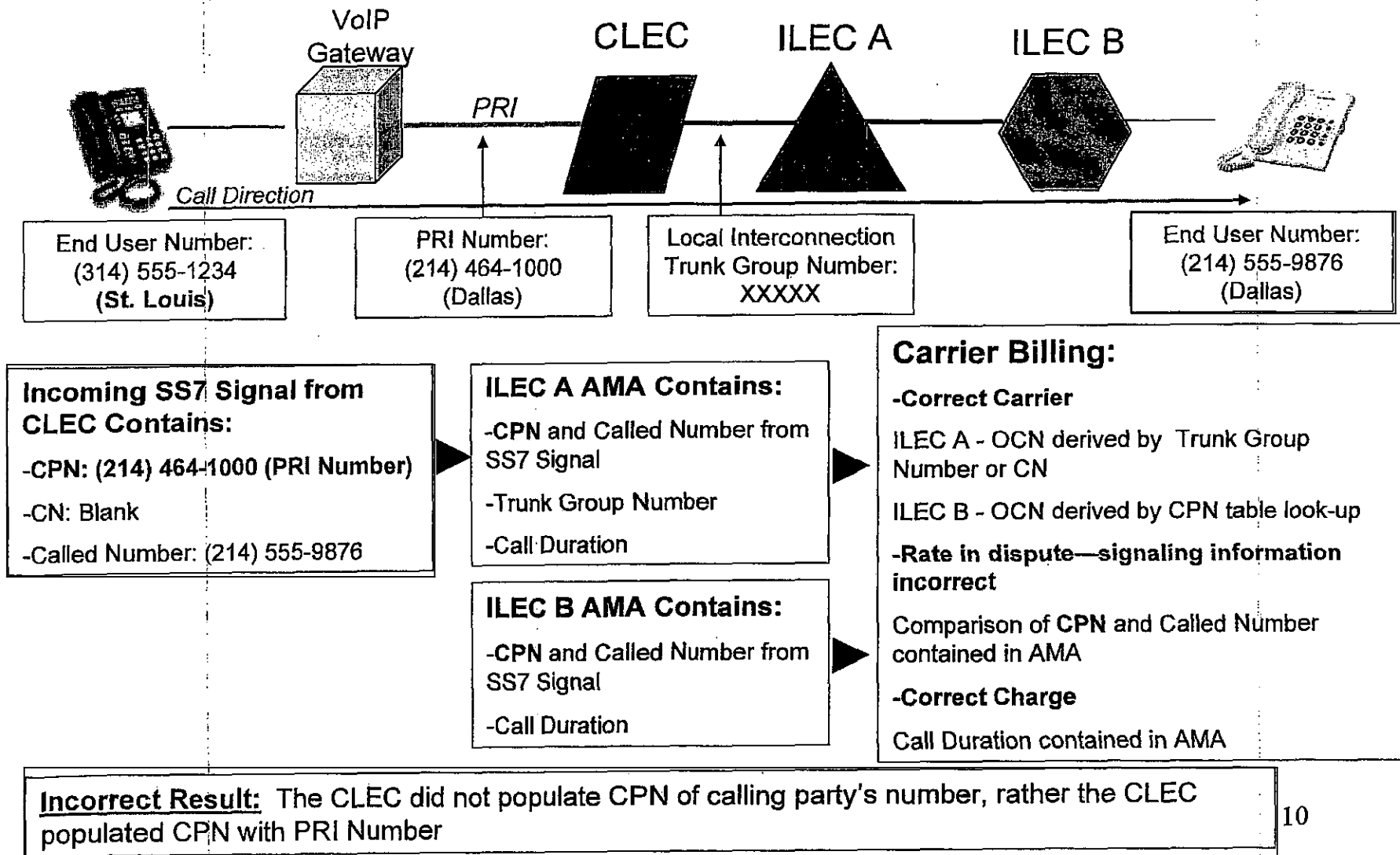
Local call billed as a local call:



Correct Result: SS7 signal information was correctly populated and call was billed as local subject to transiting (ILEC A) and reciprocal compensation (ILEC B) rates

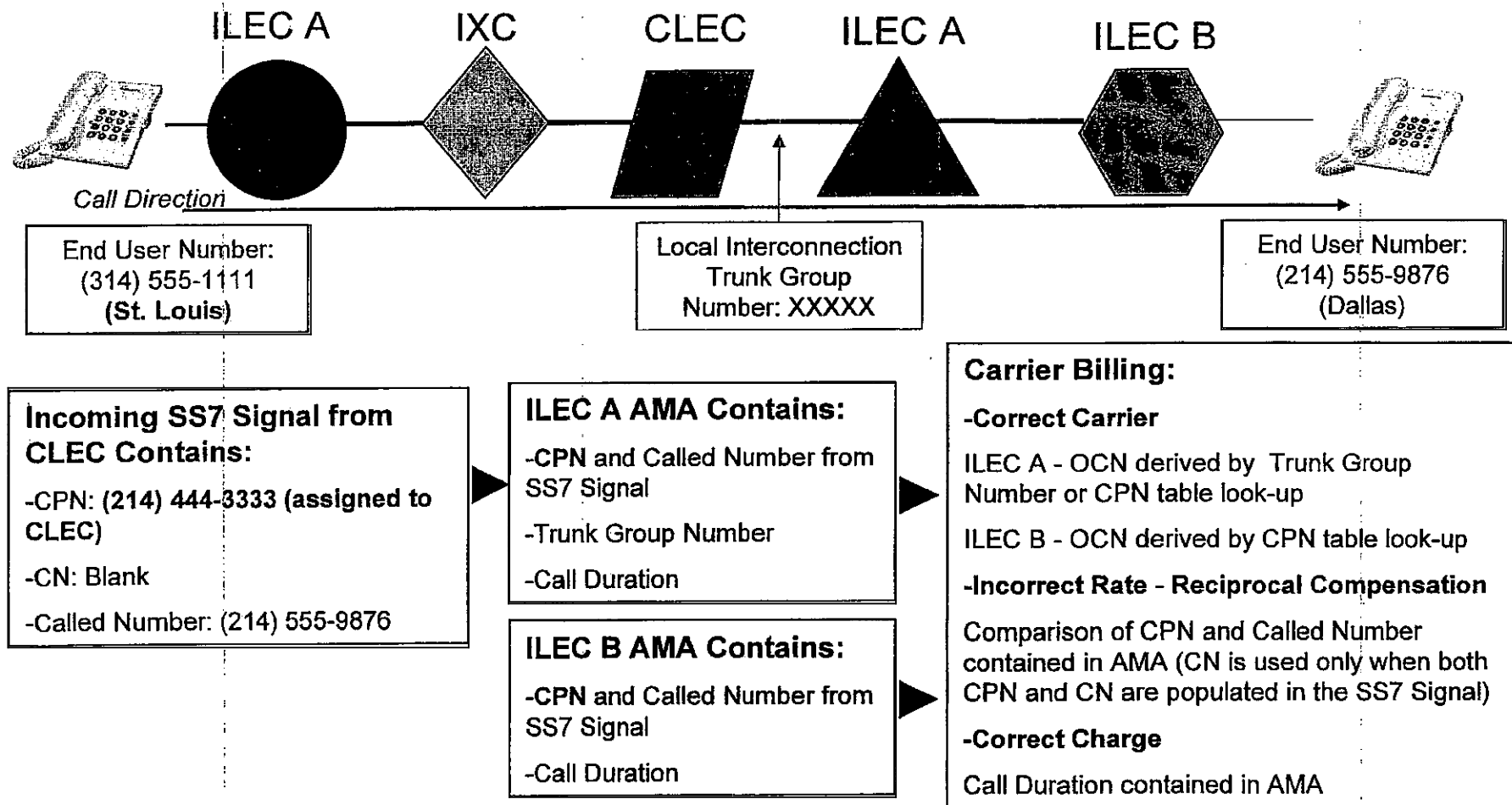
Carrier Billing Example: Phantom Traffic

Interstate call billed as a local call:



Carrier Billing Example: Phantom Traffic

Interstate call billed as a local call:



Incorrect Result: SS7 signal information contained manipulated CPN which caused call to appear to be local and billed at transit (ILEC A) and reciprocal compensation (ILEC B) rates instead of jointly provided interstate switched access

Solution



“With respect to intercarrier compensation, the Commission must adopt a rational and unified approach that replaces the current patchwork of rules. Any new framework must remove the opportunities for regulatory arbitrage and provide incentives for efficient investment decisions.” — *Chairman Kevin Martin, July 26, 2005 NARUC Summer Meeting, Austin, TX*

Inter-carrier compensation reform is necessary to address the root cause of phantom traffic – bad incentives for carriers to manipulate call signaling information – and to foreclose opportunities for mischief.

Solution



Pending intercarrier compensation reform, the FCC should establish signaling rules that apply to all carriers for all types of traffic utilizing the PSTN

Proposed rule:

- Where technically feasible, originating carriers shall transmit calling party telephone number on all calls originated by their end users or the end users of information service providers they serve and shall not alter this information
 - For SS7 trunk groups, calling party telephone number should be transmitted in the: (1) CPN field; *or* (2) CN field when it is not the same number as the caller ID telephone number or CPN is not required under 47 C.F.R. § 64.1601
 - For MF trunk groups, calling party telephone number should be sent in the ANI field
- Where technically feasible, intermediate carriers (neither the originating nor terminating carrier) shall transmit calling party telephone number information as received

Solution



Process and remedy:

- Establish a process for carriers to demonstrate technical infeasibility
- Establish a process with specific timeframes for challenging suspect traffic
- Establish remedies applicable to repeat offenders of call signaling rules

Potential Alternatives

- Non-compliant carrier shall establish direct interconnection with the billing carrier
- Non-compliant traffic billed at highest rate for functions performed
- Transit provider could terminate its transit arrangement with non-compliant carrier

Doris Adams

From: "Craig Johnson" <cjohnson@aempb.com>
To: "Leo Bub" <lb7809@sbc.com>
Cc: "Bob Schoonmaker" <bschoonmaker@gvnw.com>; "Phyllis Callahan" <pcallahan@wgacpa.com>;
"Trip England" <trip@brydonlaw.com>; "John Van Eschen" <john.vaneschen@psc.mo.gov>; "Bill
Voight" <william.voight@psc.mo.gov>; "Connie Murray" <connie.murray@psc.mo.gov>; "Robert
Clayton" <robert.clayton@psc.mo.gov>; "Jeff Davis" <jeff.davis@psc.mo.gov>; "Lin Appling"
<lin.appling@psc.mo.gov>; "Steve Gaw" <steve.gaw@psc.mo.gov>
Sent: Friday, October 29, 2004 10:41 AM
Attach: sceftpwr2.doc
Subject: SBC wireless terminating traffic records

Leo:

At the September 2 agenda session discussion of the Enhanced Record Exchange Rule, the Commissioners expressed interest in the small company's experience with SBC's new wireless terminating records replacing the CTUSR.

I attach a summary of that experience, which is being provided to Staff and the Commissioners as well. As you can see, we have some items for which we need more information from SBC. We would like a meeting between representatives of SBC and the small companies in the next few weeks to pursue these items further.

Can you provide us with some available dates in November?

Thank you.

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Schedule RCS-7

10/29/2004

SUMMARY of Small Rural ILEC experience with SBC's conversion of CTUSR terminating wireless traffic summary report to a File Transfer Protocol (FTP) consisting of IXC type electronic call detail records.

October 28, 2004

Trip England, Craig Johnson

1. New FTP mechanized wireless records

On March 18, 2004, SBC announced that new wireless to landline mechanized call records would replace the CTUSR (Cellular Terminating Usage Summary Report) throughout SBC's 5 state region. This announcement was updated on April 23, 2004. SBC's announcement indicated the final CTUSR would cover June 6 to July 4, that SBC would only retain the new records 90 days, that SBC reserved the right to change this new record format, and that SBC will incur no liability, even if it canceled or modified the new record.

As SBC planned the implementation of this new record format without consulting with the small companies regarding the new format, we requested and obtained a May 5, 2004 conference call with SBC to discuss this further. According to SBC then, the new record format was a standard ATIS/OBF EMI Category 11-01-XX record for wireless to landline traffic. The records would be provided with a CIC of "0000" in positions 46-69, the position 91 indicator 10 would be populated with an "8" indicating the call is "cellular terminated", the position 146 BSA/Feature Group ID Code field would be populated with a blank " " indicating the CIC is equal to 0000, position 167-170 is the "originating OCN" field that would be populated with the state specific OCN of the wireless carrier that sent the call to the LEC to LEC network.

Consistent with Category 11 record formats, the small companies expected the new record would provide the originating caller's number. It did not. The failure to provide the calling party number contradicts the current draft of the Enhanced Record Exchange Rule. The lack of a true originating calling number will preclude the development of sufficient information to evaluate or further refine interMTA, intraMTA, interstate, and intrastate traffic factors in the future. It would also preclude any attempt to determine the feasibility of relying upon actual call detail instead of factors.

The small companies revisited the content of SBC's new record when it was discovered the record did not provide the caller's phone number, as does a true Category 11 record. According to SBC's September 30, 2004 email to Renee' Reeter, a Telcordia document entitled "Generic Requirements for Wireless Service Provider (WSP) Automatic Message Accounting (AMA) number "GR-1504-CORE, Issue 4, May 2003" addresses numerous wireless record and recording issues. Section 3.8 of this document purportedly provides:

- a. when generated for a terminating Type 1 interconnection the originating number fields shall contain the billing directory number of the line-side interface directly connected to the WSP, as assigned by the LEC;
- b. for terminating Type 2A interconnection the originating number fields shall contain the per trunk group billing number of the WSP, as assigned by the LEC, to the interface directly connected to the WSP;
- c. when generated for a terminating Type 2B interconnection, the originating number fields shall contain the per trunk group billing number of the WSP, as assigned by the LEC, to the interface directly connected to the WSP;
- d. for terminating Type 1 and Type 2B interconnections, the terminating number fields shall contain the called party number;
- e. for terminating Type 2A interconnections, the terminating number fields shall contain the called party number.

The small companies are in the process of studying this new information, and will be studying its consistency with other "industry standards". In the meantime, the following will provide some observations regarding the new record format.

2. Format Report Period Overlap:

- a. Last paper CTUSR covered June 5, 2004 to July 4, 2004.
- b. First FTP call detail records covered different periods of time for different small ILECs
- c. Therefore there is some overlap between last CTUSR period and first FTP period, but the precise overlap period will be different for different small ILECs.

3. Potential Volume Discrepancies:

- a. Small companies believed FTP volumes would not be subject to CTUSR volume variances. Apparently this is not true. SBC will continue to provide batches of records that, due to "backlog", can contain more or less than 30 days worth of records. Given this, it is difficult to accurately rely upon the FTP records to see traffic trends.
- b. Mid-Missouri reports the FTP volumes have been less than previous CTUSR volumes by 20%, suggesting possible FTP under-reporting.
- c. Green Hills reported FTP volumes exceeded CTUSR volumes by 9 to 11 %, suggesting possible previous CTUSR under-reporting.

4. Lack of originating caller number:

See # 1 above. The FTP call detail did not contain originating caller NPA/NXX information. The FTP call detail lists individual carriers by operating company number (OCN). Instead of the originating caller's NPA/NXX, the FTP indicates all call originated with a number or numbers that appear to be assigned to SBC trunks.

The FTP records from SBC reflect the following carriers, assigned OCNs, and telephone numbers assigned to all calls supposedly originated by, and the financial responsibility of, the corresponding wireless carrier:

Carrier	OCN	Telephone Numbers
AT&T Wireless	6010	913-362-7026
SWB Mobile Sys-MO	6029	816-225-0006
United States Cellular	6275	660-651-9999
Alltel Comm Wireless-MO	6295	816-233-0109
T-Mobile USA	6529	816-221-5558
Southwestern Wireless TX	6671	913-677-4860
"	"	913-831-7693
"	"	913-831-7750
Sprint Spectrum	8454	660-826-7966
"	"	816-210-9512
"	"	816-294-0000
"	"	913-963-0000
Verizon Wireless	5814	816-591-0066

5. Southwestern Wireless Texas:

Southwest Wireless Texas is a carrier that was not identified in several years of use of the CTUSR format. SBC's initial FTP directed that all of this carrier's traffic was "interstate".

Further LERG research suggested Southwestern Wireless Texas was a Cingular affiliate that MITG companies' approved Traffic Termination Agreements applied to. These MITG companies will be billing this traffic with other Cingular traffic as the approved TTA factors specify.

6. US Cellular Traffic:

a. Mid-Missouri reported that the FPT information for July 19 to August 19 reflected that US Cellular traffic dropped from an average of 24,000 MOU per month to zero reported MOU. Mid-Missouri initiated contact with SBC Rene Barientos, who required Mid-Mo to fill out a trouble report, and then assigned the matter to Susan Murphy of SBC. Ms. Murphy's Sept 28 response suggested perhaps US Cellular (OCN

6275) had sold off its Missouri properties. She also indicated the volumes could fluctuate because of "backlog". The MITG companies are not aware that US Cellular has sold its Missouri operations, or stopped delivering traffic to SBC for termination.

As of October 28 this has not been resolved.

7. Alltel Wireless Traffic:

In response to invoices sent by some MITG companies to Alltel Wireless, which were based on SBC traffic reports of Alltel Wireless traffic terminating on SBC trunks, Alltel's Jan Stoiber responded indicating the billing end offices "has not been migrated" on the Alltel network, and should be billed to MCI WorldCom.

Mid-Missouri contacted Shawn Conway of MCI, who indicated Alltel's response was in error. He indicated MCI is the underlying carrier for Alltel CIC 5253 in the Pilot grove PLGVMOX10T area, but not for traffic terminating on SBC trunks. He informed Mid-Missouri that MCI would not be responsible for the Alltel traffic as Alltel had claimed. MCI's Conway also indicated he contacted Alltel's Jana Stoiber and informed her that Alltel's invoice response was in error. To date Alltel has not retracted its response to Mid-Missouri invoices. Instead Alltel has directed some companies to provide their invoices to a third party vendor selected by Alltel for review.

Green Hills was told by Alltel that Alltel's invoice dispute was a mistake, and Alltel was looking into either making payment or sending a new dispute letter.

As of October 28 this has not been resolved.

8. New wireless carrier traffic. One small company reported that the FTP records indicate traffic that is attributed to Verizon Wireless and Nextel, whereas no such traffic was attributed by the CTUSR to those carriers.

(end of document, 10-28-04)