Exhibit No..:_____
Issue: Network Business Relationships
Witness: Robert C. Schoonmaker
Type of Exhibit: Rebuttal Testimony
Sponsoring Party: Small Telephone Company Group
Case No.: TO-99-593
Date: December 20, 2000

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

In the Matter of the Investigation into Signaling Protocols, Call Records, Trunking Arrangements, And Traffic Measurement.	)))	Case No. TO-99-593

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 a Vice President.

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

Exhibit No. 2
Subscribed and sworn to before me this 20th day of December, 2000. 1-24-01 Case No. TO-99-593
Reporter TC

Sharon L. McDonald Notary Public

My Commission expires: 8-28-2002

REBUTTAL TESTIMONY OF ROBERT C. SCHOONMAKER

Q. Would you please state your name and address?

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

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

A. I am a Vice President of GVNW Consulting, Inc., a consulting firm specializing in working with small telephone companies.

Q. Are you the same Robert C. Schoonmaker who filed direct testimony in this case?

A. Yes, I am.

Q. What is the purpose of your rebuttal testimony?

A. I will respond to the testimony of SWBT witnesses Scharfenberg and Dunlap and the testimony of Sprint witness Cowdrey. Specific issues that I will discuss include the network test that was conducted; trunking alternatives for MCA service, the party responsible for terminating traffic, and the reliability of the current originating recording system.

Q. Sprint witness Cowdrey and SWBT witness Dunlap both criticize the use of terminating records for access billing because they don't identify the originating party that they say is "responsible" for paying that termination. Is this consistent with the access billing environment for IXCs?

A. No, it is not. In the access environment for IXCs, the IXC responsible for paying for terminating traffic is the IXC that terminates the traffic, not the IXC, or other carrier, that originated the traffic. In the IXC terminating environment the traffic is measured as it leaves a terminating trunk group and enters the terminating LECs network. The IXC is responsible for all traffic terminated over that trunk group regardless of the carrier that originated the traffic. The traffic is measured by the LEC who receives this traffic and identifies the carrier responsible for paying terminating access based on the trunk group and the carrier responsible for the trunk group. The terminating LEC can identify the responsible party based on the identification of the trunk group.

Q. If the Commission approved the business arrangement you and Mr. Jones have proposed would the terminating company be able to identify the party responsible for the traffic?

A. Yes. Under the arrangement that we have proposed, the party delivering the traffic to the terminating LEC, the tandem company, would be responsible for the terminating traffic. The terminating LEC could identify that party by the trunk group over which the terminating traffic is delivered and the total traffic for which that party is responsible would be measured at the terminating switch. Under our proposal, subtractions would be made for certain types of traffic pursuant to FCC or state regulatory requirements. The remainder of the traffic would be the responsibility of the tandem company, the party delivering the traffic to the terminating LEC.

Q. On Page 3 of his testimony, Mr. Cowdrey describes the complexity of the Sprint systems and the difficulties encountered in generating the originating records for the network test. What observations do have of his descriptions?

A. They confirm our concerns about the reliability of the originating recording systems and the number of places where errors could be introduced in the originating recording process. Mr. Cowdrey describes the various places across the network, the complex billing processes, and the numerous systems and files that are involved in this process. It is exactly this complexity that leads to the likelihood of errors creeping into the system, that makes such systems difficult to review and audit, and that makes it difficult to find errors when they occur. In the terminating recording system, all the measurements are taken at one location, at the location where the trunk group enters the terminating switch and the records are accumulated in total. It is a much simpler system.

Q. Mr. Cowdrey indicates on page 3 of his testimony that "Very little information can be identified on the terminating recordings except for the terminating phone number, time of call and duration of call." What is your response to this criticism?

A. It is an overstatement of the "problems" that exist with the terminating data. In order to bill access on a terminating call, one needs to know the duration of the call, the jurisdiction of the call, and the party to whom it should be billed. The terminating recording includes, as does the originating recording, the duration of

the call. In regard to the jurisdiction of the terminating call, the terminating record does include both the originating and terminating number for a large portion of the calls, and could be used to determine jurisdiction for many of the calls. The terminating record provides better capabilities for determining jurisdiction of wireless calls since the CTUSR reports provide no indication of jurisdiction. Either type of record has similar capabilities to be used in the typical process for determining jurisdiction on terminating calls, a percent of usage factor applied to total traffic for a carrier. The terminating record can provide the identity of the billing party, if the responsible party is the party for delivering the traffic to the terminating LEC, as is the case with IXC calls delivered to a tandem.

Q. Mr. Cowdrey discusses the difficulty of the reconciliation process in the network test. Why can't the terminating companies make such a reconciliation on a regular basis?

A. Because the records they receive under the current system lack sufficient detail to make such a reconciliation. The category 11 records received under the current system for IXC traffic and for LEC originated intraLATA traffic provide individual call detail records that could be used for a regular reconciliation. However, reports on Feature Group A traffic, interstate intraLATA traffic, and wireless traffic are only made monthly on a summary basis and do not include individual record detail. Without this detail, regular comparisons between the terminating recordings and the originating recordings cannot be made.

Q. Can you comment on the results of the records test for Sprint presented by Mr. Cowdrey?

A. Yes. Two companies in the network test have end offices behind a Sprint tandem, Rock Port and, for two exchanges, Kingdom Telephone Company. Based on the data available from the initial test results, Rock Port Telephone Company had matching originating records for its recorded terminating records of 56.4% for the 48-hour period and 64.4% for the one-hour test period. For Kingdom Telephone Company in the two exchanges that connect to the Sprint tandem, Mokane and Tebbetts, the results were 52.0% and 73.3% for the 48-hour period and 50.0% and 71.9% respectively for the one-hour test period. In these exchanges the results are apparently different than in the Mid-Missouri exchanges and the results need to be reconciled.

Q. On page 5 of his testimony Mr. Cowdrey notes that in some cases during the network test there were situations where there was an originating record generated, but there was no matching terminating record. Can you comment on this situation?

A. Yes, these situations did occur and have not been totally explained at this point in time. The number of occurrences of this were relatively small in most of the companies, although in Kingdom Telephone Company there were over 17% of the originating records that did not have a terminating record match. In reviewing these records, the majority of these records are for wireless calls terminating from the Sprint tandem, primarily to Kingdom's two exchanges that home on the Sprint

tandem. We are still investigating how these calls are being terminated by Sprint to try to identify why they were not recorded at the terminating end of the Sprint common trunk group.

Q. SWBT witness Dunlap referred on Page 8 of her testimony to the record test conducted with Citizens Telephone Company based on one-hour of data recorded in May, 1999 and concluded that the investigation was satisfied. Could you comment on your perception of this test?

A. Yes. The test was useful in identifying some of the issues that were causing a lack of reconciliation between Citizens' recordings and SWBT's. The fact that SWBT had to spend hundreds of hours to reconcile to less than four hundred records demonstrates the difficulty that SWBT has in conducting such a test and reconciling problems. When the test was concluded there were a number of calls for which there were no reconciling explanations. My records showed a number over twice the 7 calls Ms. Dunlap referred to. That specific number is not critical. What continues to be a concern, as demonstrated in Schedule RCS-6 (HC), is that Citizens still has a significant proportion of terminating calls it is recording that are not being recorded by SWBT, and the unreconciled amounts on that schedule take into account the interstate intraLATA calling which Citizens is receiving and recording, but which SWBT is still not recording and for which SWBT is not providing compensation.

Q. In the one-hour test that Ms. Dunlap referred to were interstate intraLATA calls one of the reconciling items?

A. Yes, there were twenty-one of those calls, identified only by Citizens' recordings and the originating number on those recordings. Citizens has continued to record those calls, and since the termination of the PTC plan, has billed SWBT for the interstate intraLATA traffic terminating from the 913 area code based on its recordings. Citizens has, at this point in time, received no payment from SWBT, though there have been discussions going on between the companies.

Q. On Page 10 of her testimony, SWBT witness Dunlap indicates that the Local Plus recording problem occurred in a switch in Linn, Missouri. In your direct testimony you discussed the Local Plus recording problem but did not mention the Linn switch. Why was that?

A. Because I had not been made aware that the problem occurred in the Linn switch until about the time Ms. Dunlap's direct testimony was filed.

Q. Does Ms. Dunlap's testimony indicate that the problem in the Linn switch has been corrected?

A. No, it does not. On page 11 of her testimony she states that the problems in switches in the Kansas City LATA were corrected in August and the translation for the Ericsson switch in the St. Louis LATA was corrected on September 1, 2000. The Linn switch is located in the Westphalia LATA, so she has given no specific indication if, or when, the problem in the Linn switch was corrected.

Q. Do you agree with SWBT witness Dunlap's assertion that the Local Plus recording problem demonstrates that the originating record process works as designed?

A. Absolutely not. I find the statement shocking. The Local Plus recording problem clearly demonstrates that the originating records process does not work. An error of substantial proportions was made. Appropriate records were not recorded for a period of many months and severely impacted one company and moderately impacted another. In spite of the problem being pointed out to SWBT in clear terms, and in spite of the action taken by Mid-Missouri to totally disconnect SWBT's terminating trunks, SWBT was not able to identify and correct the problem. The identification of the problem only occurred as the result of the fortunate coincidence that the network test was being conducted at that time.

Q. On Page 13 of her testimony SWBT witness Dunlap criticizes the terminating recordings because they would be recorded using a call code 119 AMA record and would not be Category 11 or Category 92 records. Is this a valid criticism?

A. No, it is not. The call code 119 AMA record is a record format used at the switch to record calls terminating to the LEC network. SWBT witness Scharfenberg, on page 17 of his testimony, indicates that such records are used to record calls terminating from an IXC network. Category 11 and Category 92 records are record types used in billing systems for the transfer of information and are billing records, not switch records. Telephone company billing systems typically read switch records such as the call code 119 records and convert them into records for

billing use such as Category 11 records. In fact, traffic terminating from IXCs are recorded at the switch as call code 119 records by SWBT and are converted into Category 11 records for distribution to end offices and for internal use in their billing systems.

Q. SWBT witnesses Dunlap and Scharfenberg and Sprint witness Cowdrey criticize the records recorded at the terminating end of the call as being incomplete because they cannot identify the originating carrier. What is your response to this criticism?

A. If the business relationship is changed as we propose, this is not a problem. The terminating company can determine the trunk group over which the traffic arrives, can identify the traffic to that trunk group, and can thus identify the responsible party under that business relationship. In the IXC environment, the traffic terminated by AT&T or Worldcom or Sprint Long Distance on an IXC trunk does not include just traffic originated by those carriers. It may include traffic originated by dozens, even hundreds of IXCs; it may include traffic originated by wireless carriers both from within and from outside the Major Trading Area (MTA); it may include traffic originated by CLEC customers both from within and outside the LATA. It is only the business relationship currently being used for intraLATA LEC-to-LEC traffic that requires the identification of the originating carrier. We believe that the LEC-to-LEC business relationship should be changed to resemble the IXC business relationship.

Q. On page 20 of her testimony, SWBT witness Dunlap opines that facility-based IXCs have "voluntarily chosen to engage in..." wholesale business arrangements. Is this an accurate portrayal of how these arrangements were initiated?

A. No it is not. When competition was being introduced in interexchange markets, AT&T resisted allowing new competitors the use of their network. The FCC imposed resale requirements on the existing carrier to foster competition and required that these business arrangements be established. While IXCs initially resisted the establishment of these business arrangements, they actively compete for this traffic today.

Q. Do you agree with SWBT's assessment that this case is not supposed to deal with the business relationships related to call recording, traffic measurement, and signaling protocols?

A. I do not. The business relationship proposals we have made relate directly to these issues. Much of the testimony in the previous case addressed the business relationships related to signaling protocols and call recording. The major discussion in the case prior to this one regarding FGC and FGD signaling related significantly to the business relationships associated with FGD in comparison with those associated with FGC. These business issues are a focal point of the issues the Commission delegated to be addressed in this case.

Q. On page 19 of her testimony, SWBT witness Dunlap states that the LEC access tariffs, pursuant to meet point billing provisions, require the LEC terminating the call to bill the originating carrier. Is this a correct statement?

A. No. It is true that the STCG member companies' access tariffs do contain provisions regarding meet point billing. However, these provisions only indicate that the company ordering the service will be billed for the service. There is nothing in those provisions, at least in the Oregon Farmers' access tariff, to indicate that terminating service will be billed to the party originating the call. As described earlier in my testimony, terminating access is billed to the carrier terminating the call which frequently is not the originating carrier under the provisions of the access tariffs. Under standard industry practice this traffic for IXC provided service is identified based on the party who orders the trunk over which the traffic is terminated.

Q. SWBT witness Scharfenberg indicates that he does not recommend separating MCA traffic onto separate trunk groups. What is your reaction to his testimony?

A. Mr. Scharfenberg seems to indicate his opposition stems from concerns about network efficiency. I recognize that issues of network efficiency should be considered in decisions regarding the establishment of trunk groups. However, billing issues are also significant and, in normal industry practice, have also played a role in the establishment of trunk groups. For example, I have identified two STCG companies who have five different EAS routes with SWBT. All of this EAS traffic is already carried on separate trunk groups. In the case of four of

the five routes the traffic is carried on two separate trunk groups, one in each direction. In addition, MCA traffic between SWBT and some of the six small companies participating in MCA is already carried on separate trunk groups. SWBT and Sprint reported in the Technical Committee meetings held during 1998 that all of the MCA traffic they interchange in the Kansas City area was carried on separate trunk groups. Thus, the alternative that we proposed to implement separate trunk groups in a few additional situations where such trunks have not yet been implemented is not at all out of line with current industry practices and will not cause any significant change in overall network efficiency.

Q. Are Mr. Scharfenberg's examples of the impact of creating separate trunk groups illustrative of the impact of creating separate trunk groups for MCA and other non-chargeable traffic?

A. No, they tend to exaggerate the impact. Mr. Scharfenberg used two examples of splitting an existing trunk group into ten or four separate trunk groups to illustrate his point. However, the STCG's proposal to create separate trunk groups would only split the trunk group into two separate trunk groups, not ten or four, and the impact would be relatively minor. Using Mr. Scharfenberg's example of 100 trunks and similar trunk capacity tables, the 100 trunks required to handle this traffic on one trunk group would only increase to 110 if it were divided into two equal trunk groups, an increased requirement of only 10% in the number of trunks or circuits. Since most interoffice trunks are currently carried using digital technology (T1) where trunks are provisioned in groups of 24 trunks, there would

be no additional cost to adding these 10 trunks since there would need to be five T1 groups in use whether there were 100 or 110 trunks in service.

Q. Do you agree with Mr. Scharfenberg's assertion on page 26 of his testimony that use of the "non-standard" terminating recordings would be unreliable?

A. No, I do not. The network test has demonstrated that terminating recordings are accurate and reliable and that the originating record system in use was and continues to be unreliable. Specifically, the network test has clearly shown that the originating record system does not provide terminating companies records for all of the traffic that they are terminating.

Q. Does this conclude your testimony?

A. Yes, it does.