

UNITED STATES DISTRICT COURT  
DISTRICT OF SOUTH DAKOTA  
CENTRAL DIVISION

FILED  
APR 23 2005  
SOUTH DAKOTA PUBLIC  
UTILITY COMMISSION

Verizon Wireless (VAW) LLC,  
CommNet Cellular License Holding, LLC,  
Missouri Valley Cellular, Inc.,  
Sanborn Cellular, Inc., and  
Eastern South Dakota Cellular, Inc.,  
d/b/a VERIZON WIRELESS,

Plaintiff,

Vs.

Bob Sahr, Gary Hanson, and Dustin Johnson, in their official capacities as the Commissioners of the South Dakota Public Utilities Commission,

Defendant,

South Dakota Telecommunications Ass'n  
and Venture Communications Cooperative,

Intervenors.

Civil Number 04-3014

DEFENDANT'S AND  
INTERVENORS'  
STATEMENT OF FACTS

1. Studies can be performed to determine the amount of wireless traffic that originates and terminates in different MTAs (interMTA). These studies can be based on originating and terminating traffic records and may estimate the location of the wireless caller using either the calling party NPA-NXX from the SS7 messages or more accurately using the connecting cell site or tower location available in the wireless Call Detail Records (CDRs). Through such studies, the amount of interMTA traffic delivered by a wireless carrier to SDTA member company LECs may be estimated. Thompson Affidavit ¶ 4.

2. It is not necessary for incumbent LECs or CMRS providers to be able to ascertain geographic locations when determining the rating for any particular call at the moment the call is connected. Neither the federal law nor state statutes require the wireless provider to determine the physical location of the caller in order to identify the MTA in which the call originates, for purposes of determining what compensation regime applies. The FCC stated in its First Report and Order, Par. 1044, "For administrative convenience, the location of the initial cell site when a call begins shall be used as the determinant of the geographic location of the mobile customer." Thus, for purposes of categorizing traffic as either intraMTA or interMTA, it is necessary to know only the originating or connecting cell site location, not the physical location of the caller. Verizon Wireless would already know the connecting cell site or tower location at the start of the call for its own networking and administration purposes. This information is needed by the wireless carrier for wireless call handling and handoff operations, as well as for call routing, roaming, and other network purposes. Thompson Affidavit ¶ 7.

3. Verizon Wireless also needs to know the calling party or tower location to determine appropriate taxes and Universal Service Fund contributions. All intrastate, interstate and international providers of telecommunications within the United States are required to file the FCC Form 499-A (Telecommunications Reporting Worksheet). The worksheet and associated instructions are included as Exhibit LDT-2. This form requires that these providers separately identify the portion of gross revenues that arise from interstate and international service. According to the instructions for this form, the FCC provides a safe harbor percentage of interstate revenues associated with mobile services of monthly and activation charges, as well as message charges including roaming, but ex-

cluding toll charges. However, these safe harbor percentages may not be applied to fixed local services revenues or toll service charges. All filers must report the actual amount of interstate and international revenues for these services. (For example, toll charges for itemized calls appearing on mobile telephone customer bills should be reported as intrastate, interstate or international based on the origination and termination points of the calls.) Thompson Affidavit ¶ 8.

4. With information Verizon Wireless already has concerning only the originating or connecting cell site location, not the physical location of the caller, Verizon Wireless could prepare “accurate and verifiable information, including percentage measurements that enables the terminating carrier to appropriately classify telecommunications traffic as being either local or nonlocal, and interstate or intrastate.” Thompson Affidavit ¶ 9.

5. There are a number of optional SS7 message fields that could be used to assist originating and terminating carrier in determining traffic types (intraMTA, interMTA and intrastate, or interMTA and interstate). This would include not only the calling party number and the Jurisdictional Information Parameter (“JIP”), but also other optional fields including, but not limited to, the Circuit Assignment Map parameter and the Generic Address parameter. The use of these optional fields has not been standardized by ATIS; however, they could potentially be used to address the traffic type separation issue with the proper software tools and post-processing techniques. Thompson Affidavit ¶ 10.

6. The South Dakota legislation is not limited by today’s signaling standards. It is recognized in the legislation that signaling standards are constantly being changed,

and furthermore, there are other provisions in the legislation that allow for originating carriers to provide separate information, regardless of actual signaling capabilities, that can assist in reasonably categorizing terminated telecommunications traffic. Thompson Affidavit ¶ 11.

7. The Ordering and Billing Forum (OBF) has been working to expand the SS7 signaling format to better identify telecommunications traffic so the terminating carrier can more accurately bill for the traffic. Many involved with the OBF would like to see the Jurisdictional Information Parameter (JIP) field in the SS7 used to identify the wireless caller's connecting tower at the start of the call. Earlier this year, the JIP was expanded to include information regarding the originating wireless switch. Furthermore, there is signaling information available to Verizon Wireless with respect to each wireless originated call that is not passed along in the SS7 message, such as the trunk group number associated with the originating cell tower or the actual cell site number. For example, the Lucent Technologies 5ESS can identify the cell site number as part of the Automatic Message Accounting ("AMA") setup internal to the switching system per Lucent Table 2003 – Radio/Channel/Cell Information. Similarly, the Nortel Network MTX identifies the originating trunk group from a specific cell location as a field in the AMA recording called the First Originating Trunk Common Language Location Identifier ("CLLI") field. Thompson Affidavit ¶ 11.

8. Because commonly accepted industry standards for signaling continue to evolve and are not yet adequate to quantify non-local traffic, SDCL 49-31-111 allows the originating carrier to separately provide the terminating carrier with accurate information, including verifiable percentage measurements that enables the terminating carrier to ap-

appropriately classify nonlocal telecommunications traffic as being either interstate or intrastate, and to assess the appropriate applicable access charges. The form and substance of the accurate information required in this statute is not defined, except that it be adequate for the terminating carrier to appropriately classify the traffic and assess the applicable charges. Thompson Affidavit ¶ 12.

9. Because commonly accepted industry standards for signaling are not yet adequate to indicate the precise location of the wireless caller, wireless carriers often establish their delivered local and toll (interstate and intrastate) traffic ratios in an agreed upon contract. Normally the contract ratios are based on historical experience or using a special study. Since wireless carriers have the ability to determine the connecting tower of their wireless customer, a special study can accurately determine the local and toll (interstate and intrastate) mix for a given test period. Thompson Affidavit ¶ 13.

10. Proper classification of wireless traffic is especially important for carriers operating in South Dakota, since South Dakota has three different MTAs (Minneapolis, Denver, and Des Moines). In addition, much of the southern part of South Dakota borders the Omaha MTA. These MTA boundaries, along with the RLEC territories, are shown in Thompson Affidavit Exhibit LDT-3. Because of this, South Dakota has a higher interMTA factor than most other states. Recent wireless studies for some SDTA member companies have shown the interMTA traffic to be between 10% and 35% of the total terminated traffic, and in some cases higher. Even Verizon Wireless, in more than one of their Reciprocal Transport and Termination Agreements with wireline LECs in South Dakota, has agreed to an interMTA traffic factor or ratio of 20% (of all Verizon traffic terminated by the LEC, 20% is agreed to be interMTA). It is important for South

Dakota carriers to be able to accurately classify the terminating traffic to be properly compensated for the use of their network. Thompson Affidavit ¶ 14.

11. Phantom traffic is commonly defined as traffic for which the terminating carrier is unable to determine either the carrier responsible for paying for the call or traffic where the terminating carrier is not able to determine the appropriate jurisdiction for properly rating the call. If the wireless traffic is not properly categorized by jurisdiction (intraMTA or interMTA and interstate, or interMTA and intrastate), then the wireless traffic would be considered phantom traffic. On a nationwide basis, it is estimated that 20% or more of telephone call minutes processed by some end office switches cannot be billed and is phantom traffic. This could represent hundreds of millions of dollars of lost revenue to local telephone companies. Thompson Affidavit ¶ 15, also Thompson Exhibit LDT-4.

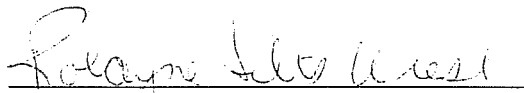
12. Like other wireless carriers, Verizon Wireless, with the proper software tools and post-processing techniques, has the ability to comply with the state statutes by generating Call Detail Records (CDRs) for wireless originated calls not handled by an Interexchange Carrier (IXC) that include the connecting tower at the start of the call, the called party number, the call date, and call duration. Using this information, Verizon Wireless or the terminating carrier could process the CDRs to determine the interMTA factor. Thompson Affidavit ¶ 16.

13. There are systems and services that can measure and bill interMTA traffic. VPS has recently worked with another wireless carrier in South Dakota to extract the required signaling information from the wireless network and has used this data to determine the actual interMTA factor for the test period. In addition to determining the in-

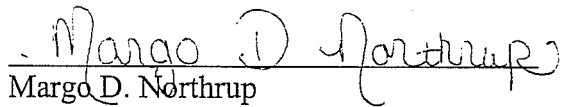
interMTA factor, the amount of interstate and intrastate traffic can also be determined.  
Thompson Affidavit ¶ 17.

14. Verizon has also publicly offered suggestions as to how the industry should work together regarding phantom traffic. These suggestions included establishing industry standards, such as an interMTA record field, and seeking “legislation requiring that certain data legally must be passed on traffic.” Thompson Affidavit ¶ 18.

DATED this twenty-second day of December, 2005.



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