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Issues: Market Definitions
Witness: Mark D. Harper
Sponsoring Party: Sprint
Type of Exhibit: Direct Testimony
Case No.: TO-2004-0207
Date Testimony Prepared: December 18, 2003

**SPRINT MISSOURI, INC.
AND
SPRINT COMMUNICATIONS COMPANY, L.P.**

DIRECT TESTIMONY

OF

MARK D. HARPER

**IN THE MATTER OF A COMMISSION INQUIRY INTO
THE POSSIBILITY OF IMPAIRMENT WITHOUT
UNBUNDLED LOCAL CIRCUIT SWITCHING WHEN
SERVING THE MASS MARKET**

CASE NO. TO-2004-0207

Jefferson City, Missouri
December 2003

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

In the Matter of a Commission Inquiry)
into the Possibility of Impairment without)
Unbundled Local Circuit Switching When)
Serving the Mass Market)

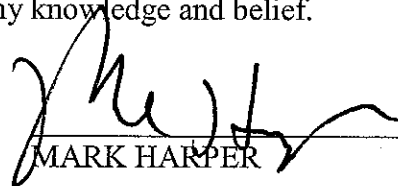
Case No. TO-2004-0207

AFFIDAVIT OF MARK HARPER

STATE OF KANSAS)
) ss:
COUNTY OF JOHNSON)

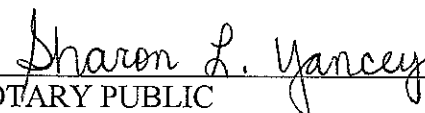
I, Mark Harper, being of lawful age and duly sworn, dispose and state on my oath the following:

1. I am presently Director, State Regulatory Affairs External Affairs for Sprint Missouri, Inc.
2. I have participated in the preparation of the attached Direct Testimony in question and answer form to be presented in the above entitled case;
3. The answers in the attached Direct Testimony were given by me; and,
4. I have knowledge of the matters set forth in such answers and that such matters are true and correct to the best of my knowledge and belief.



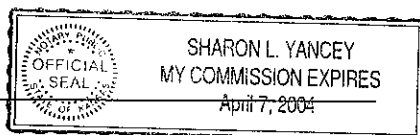
MARK HARPER

Subscribed and sworn to before me on this 18th day of December, 2003.



NOTARY PUBLIC

My Appointment Expires:



1 **BEFORE THE MISSOURI PUBLIC SERVICE COMMISSION**

2 **DIRECT TESTIMONY**

3 **OF**

4 **MARK D. HARPER**

5

6 **BACKGROUND/PURPOSE**

7

8 **Q. Please state your name, title, business address and current duties.**

9 A. My name is Mark D. Harper. I am employed by Sprint Corporation as Director –
10 State Regulatory in the Department of Law and External Affairs. My business
11 address is 6450 Sprint Parkway, Overland Park, Kansas 66251. In this position, I
12 am responsible for the development and implementation of state regulatory policy
13 and strategy as it pertains to Sprint's operations in fourteen Midwest states
14 including Kansas.

15

16 **Q. Please briefly describe your educational background and work experience.**

17

18 A. I received a Bachelor of Science degree from Washington State University in
19 Pullman, Washington in 1983. My major was in Business Administration with an
20 emphasis in Finance.

21 From 1983 to 1987, I was employed by the accounting firm of Ernst & Whinney
22 in the Tacoma Telecommunications Group. In this job I provided consulting
23 services to telephone companies in the United States and Puerto Rico. My clients
24 ranged from independent telephone companies with fewer than 1,000 access lines
25 to regional bell operating companies. Services provided included the

1 development of separations and access charge studies, negotiation of pool
2 settlements, review of accounting systems for compliance with state and federal
3 regulations, and the filing and support of rate cases.

4 In 1987, I joined United Telecommunications, Inc. (the predecessor to
5 Sprint/United Management Company) as Manager-Cost Allocations. In this job I
6 was responsible for the conformance of costing and access charge systems with
7 Federal Communications Commission (FCC) rules and the preparation and
8 support of the tariff review plan filed with the annual interstate access charge
9 filing for all United LECs.

10 In 1988, I was promoted to the position of Director-Pricing and Tariffs. In this
11 job, I was responsible for the development of pricing strategies for existing
12 services and the introduction of new services for the United LECs. I was also
13 responsible the development and communication of policy on intrastate issues.

14 In 1992, I joined United Telephone-Midwest as Director-Revenue for its Missouri
15 operations. In this position, I was responsible for the regulatory relations,
16 exchange carrier relations, pricing, costing and tariffs in the State of Missouri. In
17 1996, my duties were expanded to include Kansas. In January 1999, I began my
18 current position.

19 **Q. Have you previously testified before this Commission?**

20 A. Yes, I testified in Case Nos. TW-97-333, TO-97-217, TR-93-181, TO-95-289, et
21 al., TC-96-112, TT-96-398, TO-97-253, T0-98-329 and TO-2001-65 before this
22 Commission and have testified in regulatory proceedings in Kansas and Texas.

1 **Q. What is the purpose of your testimony?**

2 A. The purpose of my testimony is to put forth Sprint's positions regarding the
3 relevant geographic markets for purposes of examining "non-impairment" in the
4 provision of unbundled local switching to serve mass-market customers within the
5 state of Missouri. In this proceeding Sprint is also sponsoring the testimony of
6 Mr. Mike Maples, whose testimony will address the calculation of the appropriate
7 cutoff at which it becomes economic to serve multi-line DS-0 customers over a
8 DS-1 loop.

9
10 **Q. On whose behalf are you testifying?**

11 A. I am representing Sprint Missouri, Inc. and Sprint Communications Company
12 L.P. (Sprint). Both companies are providers of basic telephone service, Sprint
13 Missouri, Inc. as an ILEC and Sprint Communications Company, L.P. as a CLEC.

14 **Q. Does Sprint bring a unique perspective to this proceeding?**

15 A. Yes it does. Sprint is one of the large incumbent local exchange carriers ("ILEC")
16 providing basic telephone service in Missouri, but Sprint is also a competitive
17 local exchange carrier ("CLEC") in Missouri and in many other states throughout
18 the country, providing basic local service to hundreds of thousands of residential
19 and business customers nationwide. Therefore, Sprint is situated to understand
20 the needs of both *providers* and *purchasers* of unbundled network elements, and
21 to understand the competitive impacts of the availability—or lack of
22 availability—of unbundled elements on both providers and purchasers. In the
23 process of arriving at the policy positions that form the basis of its testimony

1 Sprint is required to balance, internally, the same competing interests that
2 policymakers must balance in proceedings such as this one.

3 **Q. With regard to local switching, as an ILEC, is Sprint challenging the FCC's**
4 **national finding of impairment for its Missouri serving territory?**

5 A. No. With regard to mass market local switching Sprint is not challenging the
6 FCC's national finding of impairment for any market in its ILEC serving territory
7 in Missouri during this initial nine month proceeding. However, Sprint reserves
8 the right to challenge the FCC's national finding of impairment at some point in
9 the future.

10

11 **MARKET DEFINITION—MASS MARKET LOCAL SWITCHING**

12

13 **Q. What unit of geography does Sprint propose for analyzing impairment with**
14 **regard to mass market local switching?**

15 A. Based on the understanding (discussed below) of *how* the geographic unit must be
16 used in subsequent impairment analysis, Sprint recommends that the Metropolitan
17 Statistical Area ("MSA" as defined by the U.S. Census Bureau) be used as the
18 basic geographic unit for evaluating impairment. I recognize that the Commission
19 will only determine the appropriate geographic markets in this phase and not
20 evaluate the evidence of competitive triggers; however the decision of appropriate
21 geographic market must be made with an understanding of how the result will be
22 used in the next phase.

23

1 **Q. How must the market—defined as an MSA—be used when evaluating**
2 **impairment?**

3 A. When identifying the appropriate unit of geography to use as a basis for
4 evaluating impairment it is important to keep in mind that this unit represents the
5 geographic area *throughout which* the concept of impairment will be evaluated.
6 In other words, when investigating an actual or potential competitor serving "the
7 mass market" it must be acknowledged that the mass market is found throughout
8 the entire MSA, not merely in portions of the MSA. This concept is consistent
9 with the FCC's statements regarding both actual deployment and potential
10 deployment. For example, the FCC's Triennial Review Order ("TRO") states that
11 the competitive triggers are intended to provide evidence of "the technical and
12 economic feasibility of an entrant serving the mass market with its own switch."¹
13 And the TRO states that an analysis of potential deployment is intended to
14 provide evidence of how an entrant could "economically serve the market without
15 access to the incumbent's
16 switch."² Note that both references refer to evidence of serving "the market" (or
17 "the mass market") as a whole. As the Commission conducts its impairment
18 analysis it is not looking for evidence of serving *portions* or *segments* of the
19 market. Rather, it should examine whether the defined market area is being
20 served by competitors such that mass market customers *throughout* the market
21 have real competitive choices to the ILEC. Therefore the market—the MSA—
22 should be considered a unit-as-a-whole for purposes of analyzing impairment.
23 This is discussed in more detail below.

¹ TRO paragraph 501.

² TRO paragraph 517.

1 **Q. What direction does the FCC's Triennial Review Order give in terms of**
2 **defining the market?**

3 A. Paragraph 495 of the TRO provides direction for defining the geographic market
4 to be used, and Sprint's proposal for using MSAs is consistent with this direction.
5 Paragraph 495 states:

6 ...State commissions have discretion to determine the contours of each
7 market, but they may not define the market as encompassing the entire
8 state. Rather, state commissions must define each market on a granular
9 level, and in doing so they must take into consideration the locations of
10 customers actually being served (if any) by competitors, the variation in
11 factors affecting competitors' ability to serve each group of customers, and
12 competitors' ability to target and serve specific markets economically and
13 efficiently using currently available technologies. While a more granular
14 analysis is generally preferable, states should not define the market so
15 narrowly that a competitor serving that market alone would not be able to
16 take advantage of available scale and scope economies from serving a
17 wider market....

18

19 **Q. Please explain how the use of MSAs is consistent with the direction for**
20 **defining the market found in TRO paragraph 495.**

21 A. First, paragraph 495 requires that the relevant geographic area cannot include the
22 entire state. MSAs obviously represent subsets of the entire state and therefore
23 meet this requirement.

24

1 Second, the TRO states that the market definition should be considered from the
2 point of view of the entrant—either actual or potential—
3 rather than the incumbent. In paragraph 495 the TRO says that the appropriate
4 market definition must take into consideration the *competitor's* ability to serve
5 customers economically and efficiently. MSAs tend to reflect the market from an
6 entrant's point of view because they represent an economic community of interest
7 and they generally reflect the geographic reach of newspapers, radio, and
8 television advertising, thereby affecting a competitors' ability to target customers
9 in the proposed market (MSA) from a mass marketing and advertising
10 perspective.

11
12 Third, the TRO, in paragraph 495, indicates that markets should consider the
13 "variation in factors" that allow a carrier to serve groups of customers. In the past
14 the FCC has stated that MSAs are generally defined "narrowly enough so that
15 competitive conditions within each area are reasonably similar" which supports
16 the concept of an economic community of interest.³ From an economic point of
17 view this characteristic is particularly relevant because economists tend to define
18 markets (geographically) based on the region within which market forces operate.
19 Stated another way, in any market there are forces such as supply and demand
20 that affect the pricing decisions, entry and exit decisions that firms make. If the
21 pricing/entry/exit decisions of firms in one area are not affected by the forces of
22 supply and demand in another area, the two areas are not in the same market.⁴

³ Fifth Report and Order and Further Notice of Proposed Rulemaking, Access Reform Docket, CC 96-262, "Pricing Flexibility Order", released August 27, 1999, paragraph 71.

⁴ Carleton and Perloff, *Modern Industrial Organization*, Second Edition, Harper Collins, 1994.

1 This is also the approach used by the U.S. Justice Department when defining and
2 analyzing geographic markets for purposes of evaluating competitive activity.⁵
3 The factors mentioned in paragraph 495 include the market forces that define
4 MSAs as an economic community of interest.

5

6 Fourth, the MSA is large enough for the entrant to take advantage of scale
7 economies as described in paragraph 495 of the TRO, but not so large as to
8 potentially lead to diseconomies of scale.⁶ A larger market, such as some LATAs,
9 could exhibit diseconomies of scale which would clearly not reflect the *efficient*
10 market from the point of view of the entrant.

11

12 **Q. Doesn't the TRO also state that the actual locations of customers being**
13 **served should play a role in defining the market?**

14 A. Yes, paragraph 495 of the TRO indicates that state commissions must define the
15 market taking into consideration the locations of customers actually being served
16 by competitors. However the TRO also suggests that this data cannot be accepted
17 at face value when used for evaluating impairment in the mass market. For
18 example, the TRO clearly indicates that there are a *de minimus* number of mass
19 market customers currently being served with UNE-L off of CLEC enterprise
20 switches.⁷ And the TRO states that these switches do not meet the necessary
21 criteria for the "trigger" analysis that will often follow the defining of markets.⁸

22 (This is addressed in more detail below.) So in many cases it is likely that the

⁵ See U.S. Department of Justice Horizontal Merger Guidelines, available at www.usdoj.gov.

⁶ In simple terms, a firm exhibits economies of scale when the cost per unit decreases as the number of units that the firm produces increases. Diseconomies of scale exist when the firm goes on to produce even more units and this has the effect of increasing the cost per unit.

⁷ TRO paragraph 441.

⁸ TRO paragraph 508.

1 actual locations of customers being served are merely a remnant or by-product of
2 CLECs serving the enterprise market. This makes it highly questionable whether
3 the locations of such customers are particularly useful for defining the market
4 because the reason the market is being defined in the first place is to analyze
5 actual (or potential) competitors serving the *mass* market, not the enterprise
6 market.

7 Furthermore, the concept of where customers are "actually being served" is itself
8 problematic for defining a market. If a few mass market customers happen to be
9 served in a very small geographic area, those customers are *actually being served*
10 in all of the following areas: 1) a single wire center, 2) a single census block
11 group, 3) a single census tract, 4) a single MSA, 5) a single UNE zone, 6) a single
12 local calling area, 7) a single LATA and 8) a single ILEC study area. Therefore it
13 is important to choose among these possibilities—all of which represent where
14 customers are *actually being served*—a unit of geography that best represents
15 market realities from the point of view of an entrant. Sprint believes this is the
16 MSA.

17
18 **Q. Why would the appropriate geographic unit not be something smaller, such**
19 **as an individual wire center?**

20 **A.** The TRO explicitly requires that the defined market should be large enough for
21 the entrant to take advantage of scale economies. In many cases wire centers are
22 situated such that an entrant could, for example, co-locate in one wire center and
23 use extended, enhanced loops (EELs) to serve another wire center at an overall
24 lower per-unit cost than if the two were served separately. This is precisely the
25 type of scale economies that are available when the market is defined as

1 something larger than a wire center. The same can be said for many other costs of
2 entering a market aside from network costs (for example, advertising, collection
3 systems, billing, etc.). Furthermore, because wire center distinctions are
4 essentially meaningless to end-users it is doubtful that a single wire center—
5 particularly in an urban area—represents anything close to a unique economic
6 community of interest all by itself.

7 **Q. What about a geographic area that is often larger than an MSA, such as a**
8 **LATA?**

9 A. In some cases LATA boundaries track MSA boundaries rather closely, and in
10 those cases LATAs offer many of the same benefits as MSAs. But in other cases
11 LATA boundaries are simply artificial creations that emerged from a history of
12 regulation and have no relationship whatsoever to a *market* in the common sense
13 of the term. For example, the Kansas City LATA includes both Sprint's
14 Harrisonville wire center and Sprint's Maryville wire center, despite the fact that
15 Harrisonville is a part of the Kansas City MSA and Maryville is not a part of any
16 MSA, and despite the fact that these two wire centers are over one hundred miles
17 apart. There is no reason to believe that any single entrant that was planning to
18 serve "the mass market" with its own switches would consider the residential and
19 small business customers in these two wire centers to be the same market. If
20 nothing else, geographic distance tends to separate Harrisonville and Maryville
21 into two distinct communities of interest, so it is extremely unlikely that the
22 KANSAS CITY LATA represents a single community of interest. But it is
23 extremely *likely* that the diseconomies of scale that I mentioned above would exist
24 if a single entrant attempted to serve the entire LATA, particularly using UNE-L.
25 For these reasons, the MSA is preferred as a market because the MSA represents

1 a geographic unit that consistently exhibits both the community of interest
2 characteristics and the economies of scale to function as a single market.

3 **Q. Does this conclude your testimony?**

4 **A. Yes it does.**