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Sponsoring Party: Socket Telecom, LLC

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Case No.: TC-2007-0341

DIRECT TESTIMONY OF ELIZABETH KISTNER ON BEHALF OF SOCKET TELECOM, LLC

TC-2007-0341

May 1, 2007

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Case No(s). 172007-0341

Date 7/1-07

Case No. TC-2007-0341 Direct Testimony: Elizabeth Kistner On Behalf of Socket Telecom, LLC May 1, 2007

STATE OF MISSOULL)
COUNTY OF 51. Louis) SS.)
BEFORE THE MISSOURI PUBLIC SERVICE COMMISSION	
Socket Telecom, LLC,)
Complainant,)
v.) Case No. TC-2007-0341
CenturyTel of Missouri, LLC dba CenturyTel and Spectra Communications Group, LLC dba CenturyTel)))
Respondents.	ý
AFFIDAVIT OF ELIZABETH KISTNER	
COMES NOW ELIZABETH KISTI sworn, deposes and states:	NER, of lawful age, sound of mind and being first duly
1. My name is ELIZABETH K	ISTNER.
2. Attached hereto and made a pabove-referenced case.	part hereof for all purposes is my Direct Testimony in the
3. I hereby swear and affirm that true and correct to the best of my knowledge	at my statements contained in the attached testimony are ge, information and belief.
	ELIZABETH KISTNER
SUBSCRIBED AND SWORN to 12007.	before me, a Notary Public, this 35 day of Notary Public
My Commission Expires: (SEAL)	

DEBORAH A. NEUMANN Notary Public - Notary Seel State of Missouri Jefferson County My Commission Expires Oct. 28, 2008 Commission # 04474385

DIRECT TESTIMONY OF ELIZABETH KISTNER ON BEHALF OF SOCKET TELECOM, LLC CASE NO. TC-2007-0341 May 1, 2007

I. <u>INTRODUCTION</u>

2 Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

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- A. My name is Elizabeth Kistner. My business address is 3 Spoede Ridge, St. Louis,
 MO 63141.
- 5 Q. PLEASE STATE YOUR EDUCATIONAL AND PROFESSIONAL 6 EXPERIENCE.
 - A. I am a consultant in private practice, specializing in analysis of telecommunications public policy issues. During the past ten years, I have focused on the advancement of local telephone service competition through the introduction of non-discriminatory access to telephone numbering resources. Beginning in the mid-1990's, I represented MCI Telecommunications in numerous state regulatory proceedings as an advocate for local number portability ("LNP"), and participated on their behalf in state, regional and national industry groups formed for the purpose of exploring the technical feasibility of LNP. I was a regular attendee and participant at the North American Numbering Council ("NANC")¹, and participated in efforts of the NANC's sub-groups principally the Local Number Portability Administration Working Group (LNPA-WG) to

¹ The NANC is a Federal Advisory Committee that was created in 1996 to advise the FCC on numbering issues and to make recommendations that foster efficient and impartial number administration. Working groups and task forces made up of industry experts have been established by the NANC to assist it in its efforts.

develop the first framework for national LNP. I have been an invited speaker at
numerous industry conferences on LNP and other numbering issues, and I was a
presenter at the inaugural NANC meeting on the subject of state and regional
LNP implementation status.

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- From 1999 to 2001, I was a member of the NANC as the designated representative of the Association for Local Telecommunications Services ("ALTS"). In that capacity, I continued to work within industry groups on LNP implementation and related issues, including the introduction of wireless LNP and number pooling.
- Before becoming a consultant, I was employed for eight years by MCI
 Telecommunications in a variety of positions involving regulatory analysis and
 litigation support.
- I am a graduate of Tufts University, Medford, Massachusetts, with a Bachelor of
 Arts degree in International Relations.

15 Q. HAVE YOU PREVIOUSLY TESTIFIED TO THE COMMISSION?

16 A. Yes, I have testified before this Commission as well as other state public service17 commissions.

II. PURPOSE OF TESTIMONY

2 Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

- 3 A. The purpose of my testimony is to discuss distinctions between service provider
- and location portability, provide background on the evolution of the meaning of
- location portability, and explain why the porting requests at issue in this
- 6 proceeding are not requests for location portability.

7 Q, DO YOU HOLD THE OPINIONS YOU EXPRESS IN THIS TESTIMONY

- TO A REASONABLE DEGREE OF CERTAINTY AS AN EXPERT
- 9 **REGARDING LNP?**
- 10 A. Yes.

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11 Q. WHAT IS SERVICE PROVIDER PORTABILITY?

- 12 A. Service Provider Portability is defined by FCC rules as "the ability of users of
- telecommunications services to retain, at the same location, existing
- 14 telecommunications numbers without impairment of quality, reliability, or
- convenience when switching from one telecommunications carrier to another." ²
- This is also the definition of Number Portability by statute and rule.³ The
- 17 requirement for number portability was deemed essential to meaningful
- 18 competition in the local exchange telephone market because of the predicted
- reluctance of customers to switch carriers if they had to change telephone

² 47 CFR 52.21(q)

³ 47 USC 153(46); 47 CFR 52.21(1)

- numbers. In establishing requirements for number portability, Congress and the
- FCC recognized that, as a practical matter, the benefits of competition would not
- 3 be realized if new entrant local exchange service providers were unable to win
- 4 customers from incumbent providers due to economic or operational barriers.⁴

5 Q. WHAT IS LOCATION PORTABILITY?

- 6 A. Location portability, also referred to as geographic portability, is defined as "the
- 7 ability of users of telecommunications services to retain existing
- 8 telecommunications numbers without impairment of quality, reliability, or
- 9 convenience when moving from one physical location to another."⁵
- 10 Q. HAS THE FCC DEFINED "SAME LOCATION" OR "PHYSICAL
- 11 LOCATION" AS THOSE TERMS ARE USED IN THE FOREGOING
- 12 **DEFINITIONS?**
- 13 A. Not expressly in a rule, but as discussed later in my testimony an implicit
- 14 definition has evolved.
- 15 Q. SINCE THE ENACTMENT OF THE TELECOMMUNICATIONS ACT OF
- 16 1996, HAVE CUSTOMERS BEEN ABLE TO RETAIN THEIR
- 17 TELEPHONE NUMBERS IN SOME CIRCUMSTANCES WHEN THEY

⁴ As stated in the legislative history of the Telecommunications Act of 1996, "the ability to change service providers is only meaningful if a customer can retain his or her local telephone number." House of Rep. Comm. On Commerce Report on HR 1555 at 72 (July 24, 1995)(House Report)(cited by FCC in its First Report and Order and Further Notice of Proposed Rulemaking, In the matter of Telephone Number Portability CC Docket 95-116, ¶ 2 (July 2, 1996), hereinafter First Report and Order).

⁵ 47 CFR 52.21(j)

MOVE FROM ONE HOUSE OR COMMERCIAL BUILDING TO ANOTHER?

A. Yes. A certain degree of customer physical movement with their telephone numbers has existed since well before the enactment of the Telecommunications Act and subsequent implementation of number portability. For example, customers have long been able to move within their current central office serving area without being required to change telephone numbers. Also, with foreign exchange ("FX") or Remote Call Forwarding ("RCF") services, which have been available for decades, a customer can physically move long distances away and retain the same telephone number.

Q. DID THE FCC AND THE INDUSTRY GROUPS WORKING UNDER ITS DIRECTION EXPLAIN WHY THEY DREW A DISTINCTION BETWEEN SERVICE PROVIDER AND LOCATION PORTABILITY?

Yes. The portability element essential to lowering barriers to entry and promoting competition in the local exchange market is the ability for users to keep telephone numbers when switching from one carrier to another. Implementation of this ability presented a considerable technical and operational challenge to the industry starting in 1996. Although the possibility of also enabling users to retain their numbers regardless of their location was examined by the NANC and its working groups, and addressed by the FCC in its <u>First Report and Order</u>, a number of critical problems over and above those identified for service provider portability were identified, including: (1) loss of

geographic identity of one's telephone number; (2) lack of industry consensus as to the proper geographic scope of location portability; (3) substantial modification of billing systems and the consumer confusion regarding charges for calls; (4) loss of the ability to use 7-digit dialing schemes; (5) the need to restructure directory assistance and operator services; (6) coordination of number assignments for both customer and network identification; (7) network and switching modifications to handle a two-tiered numbering system; (8) development and implementation of systems to replace 1+ as toll identification; and (9) possible adverse impact on E911 services. As the FCC summarized its concerns:

Our chief concern is that users currently associate area codes with geographic areas and assume that the charges they incur will be in accordance with the calling rates to that area. Location portability would create consumer confusion and result in consumers inadvertently making, and being billed for, toll calls. Consumers would be forced to dial ten, rather than seven, digits to place local calls to locations beyond existing rate centers. In order to avoid this customer confusion, carriers, and ultimately consumers, would incur the additional costs of modifying carriers' billing systems, replacing 1+ as a toll indicator, and increasing the burden on directory, operator, and emergency services to accommodate 10-digit dialing and the loss of geographic identity.

Thus, service provider portability was deemed critical to the initial development of competition, and technically feasible to implement without impairment of rating, routing, and other related call delivery functions; while location portability was deemed to be technically much more complex and not sufficiently necessary to the initial development of competition to justify requiring its immediate implementation.

⁶ First Report and Order, ¶184

Q. HOW DID CONCERNS ABOUT THE RATING AND ROUTING OF CALLS SHAPE THE DEVELOPMENT OF LNP ARCHITECTURE AND RULES?

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When the industry deliberated over the difficulties of developing a workable architecture for LNP implementation, a chief concern was ensuring the correct rating and routing of calls despite the change in terminating service provider. Consideration was given to the fact that new entrants would technically be able to serve a larger geographic area with a single switch, or wire center. The existing incumbent LEC architecture, on the other hand, was built around much smaller serving areas. Calls were rated and routed by the incumbent LEC to a specific wire center based on the NXX of the dialed number. If a number within that NXX were then transferred via LNP to another service provider, it was essential that other networks would still recognize the originally assigned rating location of that number (also called a "rate center designation") so that calls that were previously local to that number would remain local, calls that were previously toll calls to that number would remain toll calls, and calls would be appropriately routed to the correct hand off point (point of interconnection, or POI) of the new service provider. This fundamental concern is reflected in the NANC's LNP Architecture & Administrative Plan "LNP Assumptions" section, definition for LNP Portability Boundary:

If location portability is ordered by a state commission in the context of Phase I implementation of LRN, location portability is technically limited to rate center/rate district boundaries of the incumbent LEC due to rating/routing concerns. Additional boundary limitations, such as the wire center boundaries

of the incumbent LEC may be required due to E911 or NPA serving restrictions and/or regulatory decisions. (emphasis added)

A.

Q. HAS THIS EMPHASIS ON MAINTAINING CORRECT RATING AND ROUTING OF CALLS BEEN REFLECTED IN FURTHER DEVELOPMENT AND DECISIONS ON LNP?

Yes. Following the successful implementation of LNP between wireline service providers, the industry continued work to develop standards and procedures to provide for wireless carriers' participation in LNP. The differences in serving area between porting carriers was even greater between wireline and wireless carriers than between incumbent LECs and new entrant carriers, and thus the concerns about maintaining correct rating and routing of calls was again a major focus. In addressing these concerns, the industry concluded, and the FCC agreed, that as long as calls to a ported telephone number will be rated to the same rate center and call routing will be the same whether the number is ported or the new service provider assigns the customer a new number, the port is permissible:

We conclude that porting from a wireline to a wireless carrier that does not have a point of interconnection or numbering resources in the same rate center as the ported number does not, in and of itself, constitute location portability, because the rating of calls to the ported number stays the same. As stated above, a wireless carrier porting-in a wireline number is required to maintain the number's original rate center designation following the port. As a result, calls to the ported number will continue to be rated in the same fashion as they were prior to the port. As to the routing of calls to ported numbers, it should be no different than if

⁷ 47 CFR 52.26(a)(adopting NANC Working Group Report and appendices dated April 25, 1997), Appendix D, section 7.3.

the wireless carrier had assigned the customer a new number rated to that rate center.8 2 3 The FCC has made clear that there is no change in location under its rules so long calls to the ported number will continue to be rated according to the original rate center and calls are routed no differently than if the new service provider had 7 assigned the customer a new number rated to that rate center, even when the new service will be provided to a traveling wireless customer, much less an end user that will be served at a fixed wireline site as in the situations involved in this 10 proceeding.

11 Q. HAVE YOU REVIEWED MR. KOHLY'S DIRECT TESTIMONY IN THIS PROCEEDING?

A. Yes. 13

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Q. ARE THE PORT REQUESTS AT ISSUE IN THIS PROCEEDING 14 REQUESTS FOR LOCATION PORTABILITY? 15

Clearly not. As explained above, the working definition of "location" that has 16 17 evolved makes the assigned rate center the pertinent location. The requests by 18 Socket are valid requests for service provider portability, because the rate center will not change and routing will be the same whether the number is ported or a 19 new number is assigned. 20

⁸ In the matter of Telephone Number Portability, FCC CC Docket No. 95-116, ¶ 28 (Nov. 10, 2003)(herein Intermodal Order).

- Q. WOULD THE PORT REQUESTS AT ISSUE IN THIS PROCEEDING
 CAUSE ANY OF THE LOCATION PORTABILITY CONCERNS YOU
 DESCRIBED ABOVE?
 - A. No. When looking at the laundry list of issues identified by the industry and enumerated by the FCC in the <u>First Report and Order</u>, it is obvious that these port requests do not trigger any of the concerns identified as associated with location portability. As a result of porting these numbers to Socket, there will be no need for substantial modifications to billing systems; no consumer confusion regarding charges for calls; no loss of the ability to use 7-digit dialing schemes; no need to restructure directory assistance and operator services; no need for additional coordination of number assignments for both customer and network identification; no need for network and switching modifications to handle a two-tiered numbering system; no need to develop and implement systems to replace 1+ as a toll identifier; and no impacts on E911 services.
- 15 Q. NOTWITHSTANDING CENTURYTEL'S REFUSAL, DOES THE
 16 INDUSTRY GENERALLY PROVIDE NUMBER PORTABILITY IN
 17 CIRCUMSTANCES SUCH AS ARE PRESENTED BY SOCKET'S
 18 REQUESTS PURSUANT TO ESTABLISHED PRACTICES AND
 19 GUIDELINES?
- 20 A. Yes.

- Case No. TC-2007-0341 Direct Testimony of Elizabeth Kistner (Socket Telecom, LLC) Q. IS PROVISION OF NUMBER PORTABILITY IN CIRCUMSTANCES 1 **SUCH** AS ARE PRESENTED 2 BY SOCKET'S REQUESTS "TECHNICALLY FEASIBLE" AND "IN ACCORDANCE WITH 3 REQUIREMENTS PRESCRIBED" BY THE FCC? A. Yes. As I have explained above, customers routinely retain their telephone 5 6 numbers in connection with changes in providers or other changes, so long as 7 the assigned rate center remains the same and routing is not impacted as described above. Such number portability is technically feasible and also is in complete accord with FCC regulations. 9 IS PROVISION OF NUMBER PORTABILITY IN CIRCUMSTANCES Q. 10 SUCH AS ARE PRESENTED BY SOCKET'S REQUESTS ESSENTIAL 11
- 10 Q. IS PROVISION OF NUMBER PORTABILITY IN CIRCUMSTANCES
 11 SUCH AS ARE PRESENTED BY SOCKET'S REQUESTS ESSENTIAL
 12 TO PROMOTING COMPETITION AS ENVISIONED BY THE
 13 TELECOMMUNICATIONS ACT OF 1996 AND THE CHANGES TO
 14 CHAPTER 392 OF THE MISSOURI STATUTES THAT WERE MADE
 15 IN CONJUNCTION WITH THE 1996 ACT?
- 16 A. Yes. The customers that are involved in the requests have a right to change 17 carriers and keep their telephone numbers under the pro-competitive policies of 18 our State and Nation.
- 19 Q. IN ONE OF YOUR PREVIOUS ANSWERS YOU INCLUDED A
 20 QUOTATION FROM NANC'S LNP ASSUMPTIONS THAT
 21 REFERENCED STATE COMMISSIONS ORDERING LOCATION

PORTABILITY. HAS THE MISSOURI COMMISSION OR OTHER COMMISSIONS TAKEN SUCH ACTION?

A. No, it has not been necessary for state commissions to take such action. As indicated above, the FCC initially did not define "location", but left open the opportunity for state commissions to take action. Since the FCC's 1997 order, as I have described a definition of "location" has evolved, such that it has not been necessary for state commissions to order the industry to provide number portability when rate center assignments do not change. Instead, the industry has simply provided such portability consistent with the FCC's various orders on the subject.

11 Q. ARE NETWORK CAPACITY ISSUES PERTINENT TO THE 12 QUESTION OF WHETHER A REQUEST FOR NUMBER 13 PORTABILITY SHOULD BE FULFILLED?

14 A. No. Presumably, the interconnection agreement between the involved
15 companies would address how to resolve network capacity issues. But the FCC
16 has made it clear that such issues are not a basis for denying a number port.⁹

17 Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

18 A. Yes.

⁹ Intermodal Order, ¶ 28, n 75.