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Before the  
Federal Communications Commission  
Washington, D.C. 20554

DISPATCHED BY

In the Matter of	)	
	)	
Telephone Number Portability	)	CC Docket No. 95-116
	)	
Petitions for Extension of the Deployment	)	
Schedule for Long-Term Database	)	
Methods for Local Number Portability,	)	
Phase II and Phase III	)	
	)	
Southwestern Bell Telephone Company	)	NSD File No. L-98-16
and Pacific Bell	)	
	)	
Sprint Local Telephone Companies	)	NSD File No. L-98-54

**ORDER**

Adopted: May 15, 1998

Released: May 15, 1998

By the Chief, Network Services Division, Common Carrier Bureau

**I. INTRODUCTION**

1. This *Order* addresses a petition, filed on February 20, 1998 by Southwestern Bell Telephone Company ("SWBT") and Pacific Bell ("Pacific") (collectively "the SBC Companies"), and petitions, filed on March 16, 1998 and April 30, 1998 by Sprint Local Telephone Companies ("Sprint"), requesting extensions of the Commission's Local Number Portability (LNP) Deployment Schedule.<sup>1</sup> The SBC Companies request an extension due to problems encountered with hardware and software upgrades needed to perform long-term number portability. Sprint requests that it not be required to provide its LNP services until SWBT is ready to do so in the Dallas, TX and Kansas City, KS Metropolitan Statistical Areas

<sup>1</sup> See 47 C.F.R. Part 52, Appendix.

(MSAs).<sup>2</sup> For the reasons discussed and to the extent provided below, the petitions are granted.

## II. BACKGROUND

2. An important provision of the Telecommunications Act of 1996<sup>3</sup> designed to foster meaningful facilities-based competition in the provision of local exchange service is section 251(b)(2)'s imposition of duty on all local exchange carriers to "provide, to the extent feasible, number portability in accordance with requirements prescribed by the Commission."<sup>4</sup> The 1996 Act defines number portability as "the ability of users of telecommunications service to retain, at the same location, existing telecommunications numbers without impairment of quality, reliability, or convenience when switching from one telecommunications carrier to another."<sup>5</sup>

3. In previous orders in this proceeding, the Commission has established rules to implement the obligations imposed by section 251(b)(2).<sup>6</sup> Among these is a schedule for phased-in implementation by local exchange carriers of number portability throughout the 100 largest MSAs in the country. In each phase, carriers must provide a long-term database method for number portability in switches located in specifically designated MSAs. The implementation deadlines are as follows: Phase I - March 31, 1998; Phase II - May 15, 1998;

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<sup>2</sup> The Common Carrier Bureau sought comment on the SBC Companies' extension petition on March 3, 1998, and again on March 25, 1998. See Public Notice, DA 98-407 (Com. Car. Bur. rel. March 3, 1998), and Public Notice, DA 98-575 (Com. Car. Bur. rel. March 25, 1998). Comments were filed by AT&T Corp., MCI Telecommunications Corporation, Time Warner Communications Holdings Inc., Illuminet, Inc., and WorldCom, Inc. Reply comments were filed by MCI Telecommunications Corporation. The Common Carrier Bureau sought comment on Sprint's Phase II LNP extension petition on April 9, 1998. See Public Notice, DA 98-674 (Com. Car. Bur. rel. April 9, 1998). Comments were filed by MCI Telecommunications Corporation. Reply comments were filed by Sprint.

<sup>3</sup> Telecommunications Act of 1996, Pub. L. No. 104-104, 110 Stat. 56 ("1996 Act"), *codified at* 47 U.S.C. §§ 151 *et seq.* All citations to the 1996 Act in this Order are to the 1996 Act as it is codified in the United States Code. The 1996 Act amended the Communications Act of 1934 ("Communications Act").

<sup>4</sup> 47 U.S.C. § 251(b)(2).

<sup>5</sup> 47 U.S.C. § 153(30).

<sup>6</sup> See *First Report and Order and Further Notice of Proposed Rulemaking*, CC Docket No. 95-116, 11 FCC Rcd 8352 (1996) (*First Report and Order*), *recon.*, *First Memorandum Opinion and Order on Reconsideration*, CC Docket No. 95-116, 12 FCC Rcd 7236 (1997) (*First Memorandum Opinion and Order*), *appeals pending sub nom. Bell Atlantic NYNEX Mobile, Inc. v. FCC et al.*, No. 97-9551 (10th Cir., filed May 30, 1997) and *US WEST, Inc. v. FCC et al.*, No. 97-9518 (10th Cir., filed April 24, 1997); *Second Report and Order*, CC Docket No. 95-116, 12 FCC Rcd 12281 (1997).

Phase III - June 30, 1998; Phase IV - September 30, 1998; Phase V - December 31, 1998.<sup>7</sup> The Commission recognized that initial implementation of number portability may be time consuming,<sup>8</sup> and sections 52.23(d) & (e) of the Commission's rules explain the circumstances and standards under which the implementation deadlines may be waived, stayed, or extended.<sup>9</sup>

4. The SBC Companies seek a waiver of the Phase II and Phase III LNP implementation deadlines until June 26, 1998 and July 27, 1998, respectively.<sup>10</sup> As outlined in detail below, the SBC Companies explain that the requested extensions are justified because of problems recently discovered in vendor-provided Signal Transfer Point (STP) hardware and software upgrades needed to perform long-term number portability. They argue that additional time is needed "to address these problems and ensure the reliability of the public

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<sup>7</sup> See *First Memorandum Opinion and Order* at Appendix E; see also 47 C.F.R. Part 52, Appendix.

<sup>8</sup> See *First Memorandum Opinion and Order* at ¶ 78 (Commission extended certain implementation deadlines, citing the need for both extensive testing of new number portability technology and time to resolve any problems that may arise during testing).

<sup>9</sup> 47 C.F.R. §§ 52.23(d), (e). These sections provide as follows:

- (d) The Chief, Common Carrier Bureau, may waive or stay any of the dates in the implementation schedule, as the Chief determines is necessary to ensure the efficient development of number portability, for a period not to exceed 9 months (i.e., no later than September 30, 1999).
- (e) In the event a LEC is unable to meet the Commission's deadlines for implementing a long-term database method for number portability, it may file with the Commission at least 60 days in advance of the deadline a petition to extend the time by which implementation in its network will be completed. A LEC seeking such relief must demonstrate through substantial, credible evidence the basis for its contention that it is unable to comply with the deployment schedule set forth in the appendix to this part 52. Such requests must set forth:
  - (1) The facts that demonstrate why the carrier is unable to meet the Commission's deployment schedule;
  - (2) A detailed explanation of the activities that the carrier has undertaken to meet the implementation schedule prior to requesting an extension of time;
  - (3) An identification of the particular switches for which the extension is requested;
  - (4) The time within which the carrier will complete deployment in the affected switches; and
  - (5) A proposed schedule with milestones for meeting the deployment date.

<sup>10</sup> The SBC Companies have also requested extension of the implementation deadline for Phase I until May 26, 1998. This *Order* addresses only the SBC Companies' request for extensions of the May 15, 1998 Phase II and June 30, 1998 Phase III implementation deadlines. The Common Carrier Bureau has released an *Order* addressing the SBC Companies' requested extension of the Phase I deadline. See *Order*, DA 98-613 (Com. Car. Bur. rel. March 31, 1998).

switched telephone network."<sup>11</sup> Sprint requests that it not be required to provide its Phase II and Phase III LNP services until SWBT is ready to do so in the Dallas, TX and Kansas City, KS MSAs.<sup>12</sup> As explained below, we find that good cause exists to grant extensions of the May 15, 1998 Phase II and June 30, 1998 Phase III LNP implementation deadlines.

### III. THE SBC COMPANIES' PETITION

5. In their petition for extension of time, the SBC Companies explain that problems encountered with the STP used in their Signaling System 7 (SS7) network make SWBT unable to meet the Phase II and Phase III local number portability (LNP) implementation deadlines for selected switches in the Dallas, TX, St. Louis, MO, Kansas City, KS, and Fort Worth, TX MSAs.<sup>13</sup> According to the petition, after a period of successful controlled laboratory testing of necessary hardware and software upgrades provided by DSC Communications ("DSC"), the SBC Companies began testing the upgrades, which are needed for all of the SBC Companies' MSAs, in their network with actual calls from other carriers' networks. A problem was encountered on January 21, 1998. When the Message Relay Service (MRS) function for Line Information Database (LIDB) queries was activated, the SBC Companies learned that the STP could not validate calling card queries from GTE's network after GTE upgraded its switches to support FCC-mandated carrier identification code expansion changes.<sup>14</sup> If calling card queries can not be validated, substantial amounts of toll fraud could result.<sup>15</sup> In addition, upon activating the same functionality in other STPs in their SS7 network on February 2, 1998, the SBC Companies discovered incompatibilities with

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<sup>11</sup> The SBC Companies' Petition for Extension of Time ("SBC Petition") at pp. 2-3.

<sup>12</sup> The Sprint Local Telephone Companies' Petition for Waiver for Phase II LNP implementation ("Sprint Phase II Petition") at p. 2, and Petition for Waiver for Phase III LNP implementation ("Sprint Phase III Petition") at p. 3.

<sup>13</sup> The Phase II and Phase III MSAs in which the SBC Companies operate local switching facilities are the Riverside, CA, San Diego, CA, Orange County, CA, Oakland, CA, and San Francisco, CA MSAs (Pacific) and the Dallas, TX, St. Louis, MO, Kansas City, KS and Fort Worth, TX MSAs (SWBT). However, Pacific has filed a separate petition (*see* NSD File No. L-98-31) requesting, among other things, extensions of the Phase II and Phase III implementation deadlines for the Riverside, CA, San Diego, CA MSAs until August 18, 1998, and the Orange County, CA, Oakland, CA, and San Francisco, CA MSAs until September 18, 1998, because of problems arising from a failure in software provided by Perot Systems, Inc., an NPAC vendor. That petition is being addressed in a separate *Order*.

<sup>14</sup> *See* SBC Petition, Exhibit A at p. 7.

<sup>15</sup> Toll fraud can occur when a caller is able to obtain interexchange services without having to pay for them.

certain advanced intelligent network (AIN) based services,<sup>16</sup> which resulted in the misrouting of approximately 20,000 calls over a three-day period.<sup>17</sup> During this same two week period, the SBC Companies were also continuing testing on an additional software upgrade needed for Phase II and Phase III MSAs. A critical problem was encountered on January 29, 1998. During testing, the Selective Code Gapping<sup>18</sup> (SCG) feature failed and the software was incorrectly handling certain SS7 parameter fields which are necessary for proper SS7 message handling. If the call management controls provided by the SCG feature are not available, network reliability would be threatened during a call overload period.<sup>19</sup> The SBC Companies argue that extensions of the Phase II and Phase III implementation deadlines are necessary to address these problems, and ensure network reliability, and note that, through *ex parte* communications, they have kept the Commission apprised of their implementation schedule and the challenges they were facing.<sup>20</sup>

6. The SBC Companies currently are testing new software which DSC delivered on February 17, 1998, and which DSC claims will cure the problems noted above. The SBC Companies note that the STP must be rigorously tested prior to LNP implementation because it is an integral part of the SS7 network, and that as part of this process they intend to repeat the full range of laboratory and network tests on DSC's new software release to ensure that the later version works properly.<sup>21</sup> The SBC Companies state that testing of the new software will require three and one-half weeks of full regression testing<sup>22</sup> followed by two weeks for network trials under loading conditions that simulate actual network conditions, or a "network soak." After lab testing has been completed, SWBT proposes to load the new software

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<sup>16</sup> An "advanced intelligent network" is defined in section 51.5 of the Commission's rules as a telecommunications network architecture in which call processing, call routing, and network management are provided by means of centralized databases located at points in an incumbent local exchange carrier's network. 47 C.F.R. § 51.5. Services available with an AIN include selective forwarding of calls, location-dependent call forwarding, and enhanced number translation services.

<sup>17</sup> SBC Petition, Exhibit A at p. 7.

<sup>18</sup> Selective Code Gapping is a technique by which incoming message traffic at the local switch is manually throttled, or choked, during periods of abnormal traffic. This ability to manage incoming traffic is critical to the reliability of the overall network.

<sup>19</sup> SBC Petition, Exhibit A at p. 7.

<sup>20</sup> SBC Petition at p. 3.

<sup>21</sup> SBC Petition at pp. 5-6.

<sup>22</sup> Regression testing, which attempts to forecast future events by analyzing past events, can identify problem areas in the implementation of LNP, thereby allowing a carrier to minimize the probability that technical problems will affect the reliability of its network.

release in its network over a three week period so as not to compromise network integrity. After further intra-company and inter-industry testing to validate the MRS and location routing number functions and to ensure that no other network problems exist, SWBT plans on a Phase II LNP implementation date of June 26, 1998, 30 days after its Phase I LNP implementation date, and a Phase III implementation date of July 27, 1998, 30 days after its Phase II implementation date. The SBC Companies state that the 30 day intervals between the Phase I, Phase II, and Phase III implementation dates are necessary for processing any "pent up" demand from competitive local exchange carriers, as well as for conversion from interim to permanent LNP. The SBC Companies contend that this interval is needed for LNP participants to become familiar with the LNP service order processes. Also, because the NPAC certification has waived certain requirements until software improvements can be made, i.e., improved NPAC throughput, the service order activation (SOA) centers' ability to handle large numbers of simultaneous requests will be limited by the NPAC. The SBC Companies contend that compression of their LNP implementation schedule could jeopardize the SOA centers' ability to handle the initial demand in each new MSA.<sup>23</sup>

7. Therefore, the SBC Companies seek an extension to June 26, 1998 for SWBT to complete Phase II LNP implementation in the Dallas, TX and St. Louis, MO MSAs, and an extension to July 27, 1998 for SWBT to complete Phase III LNP implementation in the Kansas City, KS and Fort Worth, TX MSAs.

#### IV. SPRINT'S PETITION

8. In its petitions, Sprint states that its LNP functions depend on the SBC Companies' ability to provide LNP. More specifically, Sprint states that it relies on the SBC Companies for the provision of operator and directory assistance services for its Dallas and Kansas City customers which includes LIDB validation.<sup>24</sup> According to Sprint, the SBC Companies' inability to implement Phase II and Phase III LNP in the Dallas, TX and Kansas City, KS MSAs, respectively, will result in its inability to provide LIDB validation services on ported calls into and out of Sprint's exchanges.<sup>25</sup> Sprint claims that without this ability, it could be exposed to fraudulent third-party and collect calls.<sup>26</sup>

9. Accordingly, Sprint has requested extensions of time to implement Phase II LNP for switches in its Ponder, Sanger, and Slidell offices in the Dallas, TX MSA, and Phase

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<sup>23</sup> SBC Petition, Exhibit A at pp. 8-9.

<sup>24</sup> Sprint Phase II Petition at p. 2 and Sprint Phase III Petition at p. 2.

<sup>25</sup> *Id.*

<sup>26</sup> *Id.*

III LNP for selected switches in the Kansas City, KS MSA until SBC is ready to do so. SBC has stated that it expects to implement Phase II LNP in the Dallas, TX MSA on June 26, 1998 and Phase III LNP in the Kansas City, KS MSA on July 27, 1998.<sup>27</sup> A brief discussion of number portability appears in the *SBC Waiver Order*.<sup>28</sup> In addition, Sprint seeks an extension for its Athens office switch, which is also in the Dallas, TX MSA. Sprint states that while it could technically deploy LNP out of its existing Athens office switch by the May 15, 1998 Phase II LNP implementation deadline, it previously scheduled a central office switch replacement for this office, which is to be completed on June 16, 1998. Once the switch replacement is completed, Sprint continues, it would be able to implement LNP in the Athens office switch within 30 days. In its reply comments, however, Sprint states that it is experiencing technical problems with the switch replacement, and expects that the switch replacement will be completed in early August. Consequently, for its Athens office, Sprint seeks an extension of the Phase II LNP implementation deadline until 30 days after the switch replacement is completed, but in no event later than September 30, 1998.<sup>29</sup>

## V. DISCUSSION

10. With respect to the SBC Companies' and Sprint's petitions for extensions of time of the Phase II and Phase III LNP implementation dates, we note again that in the *First Report and Order* in this proceeding the Commission specifically contemplated that waivers of the number portability implementation deadlines may be needed, delegating to the Chief of the Common Carrier Bureau the authority to waive or stay any of the dates in the implementation schedule "as the Chief determines is necessary to ensure the efficient development of number portability, for a period not to exceed 9 months."<sup>30</sup> The Commission's rules set forth the showing that must be made by a carrier seeking relief, as well as the standard ("substantial, credible evidence") that will be applied to any request for relief.<sup>31</sup>

11. We find that the SBC Companies have made the requisite showing under section 52.23(e) for their request for relief from an implementation deadline. The petition for extension of time (1) documents the reasons why they are unable to meet the May 15, 1998 and June 30, 1998 deadlines; (2) explains in detail the efforts made by the SBC Companies to

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<sup>27</sup> SBC Petition at p. 3.

<sup>28</sup> *SBC Waiver Order* at paras. 2-4.

<sup>29</sup> See Reply of Sprint Local Telephone Companies at pp. 2-3.

<sup>30</sup> *First Report and Order* at ¶ 85. See also 47 C.F.R. § 52.23(d).

<sup>31</sup> See 47 C.F.R. § 52.23(e).

meet the implementation schedule; (3) identifies the switches for which extension is requested; (4) indicates the time required to complete deployment in the affected switches; and (5) proposes a new deadline that will not require any extension of the December 31, 1998 date for completing implementation of local number portability in the top 100 MSAs.

12. Some commenters argue that the SBC Companies should have begun live testing of the DSC-provided software earlier, thereby discovering the STP software problems sooner and making the requested extension unnecessary.<sup>32</sup> As noted above, however, we find that the SBC Companies' testing process was not unreasonable. The SBC Companies state that "adequate testing and controls must be in place so that catastrophic network failures do not occur."<sup>33</sup> Commenters offer nothing concrete to refute this, and based on the record, we do not believe that the STP software problems were so foreseeable that the SBC Companies should be faulted for not anticipating them.

13. We also disagree with commenters who argue that the calling card validation, the AIN call misrouting, and the network management controls problems do not justify extending the LNP implementation deadline. These commenters claim that these problems either are not crucial to LNP implementation, can be addressed in other ways, or are the SBC Companies' fault.<sup>34</sup> In delegating authority to the Bureau to grant extensions, the Commission clearly stated that our primary concern must be ensuring "the efficient development of number portability."<sup>35</sup> In our view, this includes implementation of number portability in such a manner as to minimize the potential for disruption to network functions. Adding LNP functions to the network should not degrade or disable other functions, or threaten network reliability. We conclude that the SBC Companies have presented substantial, credible evidence as required by section 52.23(e) to support their petition for extension of time and disagree with commenters who urge denial of the petition. We find that, under the circumstances presented here, the goal of efficient development of number portability will be best served by allowing the SBC Companies additional time to implement LNP in the Dallas, St. Louis, Kansas City, and Fort Worth MSAs.<sup>36</sup>

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<sup>32</sup> See, e.g., AT&T Comments at p. 2, n. 4; MCI Comments at p. 2.

<sup>33</sup> SBC Petition at p. 8.

<sup>34</sup> See, e.g., MCI Comments at p. 2.

<sup>35</sup> *First Report and Order* at ¶ 85.

<sup>36</sup> In this *Order*, we deal only with whether the SBC Companies have satisfied the requirements for extensions of the Phase II and Phase III implementation deadlines in the Dallas, St. Louis, Kansas City, and Fort Worth MSAs. Several commenters argue against the requested extensions based on the extensions' likely effect on competition in the local exchange market. See, e.g., MCI Comments at p. 2; Illuminet Comments at p. 3;

14. Some commenters urge, if the Commission is to grant an extension, that it be shorter than that requested by the SBC Companies.<sup>37</sup> We decline to do so. While we encourage all carriers to implement long-term number portability as soon as possible in all markets, we agree with the SBC Companies that rigorous intra-company and inter-industry testing of new STP software is needed to ensure efficient and problem-free implementation, especially in light of the problems encountered with the previous software version. We find that both the procedures and the timetable proposed by the SBC Companies for LNP implementation in the Dallas, St. Louis, Kansas City, and Fort Worth MSAs are reasonable under the circumstances presented here.<sup>38</sup> We emphasize, however, that the SBC Companies should work to provide LNP in the Dallas and St. Louis MSAs sooner than June 26, 1998, and in the Kansas City and Fort Worth MSAs sooner than July 27, 1998, if possible.

15. We also find that Sprint has made the requisite showing under section 52.23(e) for its requests for relief from an implementation deadline. Sprint's petitions for extensions of time (1) document that the reason why Sprint is unable to meet the May 15, 1998 and June 30, 1998 deadlines is that it cannot implement LNP without a risk of fraudulent activity absent the SBC Companies' successful implementation of LNP; (2) explains that Sprint's systems are in place and it is fully prepared to implement Phase II LNP in Dallas and Phase III LNP in Kansas City, but for the SBC Companies' inability to do so until June 26, 1998 and July 27, 1998, respectively; (3) identifies the switches for which the extension is requested; (4) states that it will complete deployment of LNP in the affected switches once the SBC Companies' technical problems are cured; and (5) proposes new deadlines that will not require any extension of the December 31, 1998 date for completing implementation of local number portability in the top 100 MSAs.

16. MCI Telecommunications Corporation ("MCI") does not oppose Sprint's request for extension of the Phase II LNP implementation deadline for the Ponder, Sanger, and Slidell offices. MCI, however, argues that Sprint's request for extension of the Phase II LNP implementation deadline for its Athens office switch, until July 16, 1998, fails to meet the Commission's standard for waiving LNP implementation deadlines. MCI contends that Sprint has failed to demonstrate extraordinary circumstances beyond its control, and that it should not be given an extension of the Phase II LNP implementation deadline in order to

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AT&T Comments at pp. 15-16; Time Warner Comments at pp. 4-5. Issues regarding the effect of implementation of long-term number portability on interim number portability methods have been raised with the Commission on reconsideration of the *First Report and Order* and will be addressed in that context.

<sup>37</sup> See, e.g., AT&T Comments at pp. 14-15.

<sup>38</sup> For this reason, we decline to impose fines on the SBC Companies, as some commenters suggest. See Time Warner Comments at pp. 3-4; MCI Reply Comments at pp. 2-4.

accomplish the Athens office switch replacement.<sup>39</sup> Because Sprint admits in its petition that it could technically deploy LNP out of its existing Athens office switch by the May 15, 1998 Phase II LNP implementation deadline, we agree with MCI, and decline to grant Sprint's request for extension of the implementation deadline until September 30, 1998, so it can first complete the switch replacement before it implements LNP.<sup>40</sup> Instead, Sprint should implement LNP in its existing Athens office switch by June 26, 1998, the expected date of the SBC Companies' implementation of LNP in the Dallas, TX MSA.

## VI. CONCLUSION

17. Having determined that the SBC Companies and Sprint have met the section 52.23(e) standards, that the circumstances presented warrant a deviation from the timetable set forth in the Appendix to Part 52, and that the public interest will be served by granting the SBC Companies and Sprint additional time to complete Phase II and Phase III of the implementation of local number portability in the Dallas, TX, St. Louis, MO, Kansas City, KS, and Fort Worth, TX MSAs, we find that good cause exists to extend the section 52.23 timetable for the SBC Companies and Sprint.

18. IT IS THEREFORE ORDERED, pursuant to sections 1.3 and 52.23(e) of the Commission's rules, 47 C.F.R. §§ 1.3 and 52.23(e), and by authority delegated in sections 0.91 and 0.291 of the Commission's rules, 47 C.F.R. §§ 0.91 and 0.291, that the SBC Companies' and Sprint's Petitions for Extensions of Time are GRANTED to the extent provided herein, thereby extending the dates for the SBC Companies' and Sprint's Phase II implementation of LNP in the Dallas, TX and St. Louis, MO MSAs to June 26, 1998, and Phase III implementation of LNP in the Kansas City, KS and Fort Worth, TX MSAs to July 27, 1998.

FEDERAL COMMUNICATIONS COMMISSION



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<sup>39</sup> See MCI's Partial Opposition To Petitions For Waivers at pp. 6-7.

<sup>40</sup> Sprint Phase II Petition at pp. 2-4.