

**Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, DC 20554**

In the Matter of	)	
	)	
New Part 4 of the Commission's Rules	)	ET Docket No. 04-35
Concerning Disruptions to Communications	)	
	)	
	)	

**AT&T, BELLSOUTH, MCI, SBC, AND VERIZON<sup>1</sup>  
PETITION FOR RECONSIDERATION OF  
DS3 SIMPLEX REPORTING REQUIREMENT**

**Introduction**

Petitioners AT&T, BellSouth, MCI, SBC, and Verizon (collectively, "Industry Coalition" or "Petitioners") request that the Commission reconsider that portion of the *Outage Order* requiring that carriers report as "outages" situations in which DS3s that operate as part of a protection scheme temporarily switch to a back-up protect path when the primary path is not working ("DS3 simplex events").<sup>2</sup> Specifically, the Petitioners urge the Commission to eliminate this new reporting requirement.

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<sup>1</sup> This petition is filed on behalf of AT&T Corp. ("AT&T"); BellSouth Telecommunications, Inc. ("BellSouth"); MCI, Inc. ("MCI"); SBC Communications Inc. ("SBC"); and Verizon. In this petition, "Verizon" refers to Verizon Global Networks Inc.; Bell Atlantic Communications, Inc.; Verizon Select Services Inc.; NYNEX Long Distance Company d/b/a Verizon Enterprise Solutions; and the local exchange carriers affiliated with Verizon Communications Inc., listed in Attachment A.

<sup>2</sup> See *New Part 4 of the Commission's Rules Concerning Disruptions to Communications*, Report and Order and Further Notice of Proposed Rulemaking, 19 FCC Rcd 16830, ¶ 134 (2004) ("*Outage Order*").

As an initial matter, DS3 simplex events do not involve any loss or degradation of service to the customer, and thus are not “outages” within the rule’s definition.<sup>3</sup> In fact, DS3 simplex events are fairly common on carriers’ networks, are almost always resolved during normal maintenance periods, and are not detectable to end user customers. Therefore, there is no reason to require carriers to spend countless hours, and millions upon millions of dollars, implementing systems and hiring additional personnel to track and report these events.<sup>4</sup> To the extent a DS3 simplex event ever does impact customer service, it would become a true “outage” that is reportable under the other DS3 reporting rules.

The Commission has authority to grant a petition for reconsideration “which relies on facts which have not previously been presented to the Commission” if it is in the public interest to do so. 47 C.F.R. § 1.429(b), (i). Here, *none* of the facts about DS3 simplex events were presented to the Commission before the *Outage Order* was decided, because parties were not on notice that the Commission was considering requiring the

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<sup>3</sup> The Commission defines an “outage” as “ a significant degradation in the ability of an end user to establish and maintain a channel of communications as a result of failure or degradation in the performance of a communication provider’s network.” *Outage Order*, Appendix B, § 4.5(a).

<sup>4</sup> See footnotes 22 and 23, *infra*, and affidavits and declarations at Attachments B-F (estimating costs between \$15 million to \$17 million or more per year to implement DS3 reporting requirement). The affidavits of BellSouth and SBC, as well as the Verizon Declaration, were previously put on the record in support of the USTA Petition for Partial Stay, ET Docket No. 04-35, at 9-13 (filed Nov. 19, 2004) (“*USTA Stay Petition*”).

reporting of such events.<sup>5</sup> Had parties known about the possibility of a DS3 simplex reporting requirement, they would have notified the Commission of the tremendous burdens it would impose on the industry. Thus, not only is reconsideration of the DS3 simplex reporting requirement required by the public interest, but it is necessary under the Administrative Procedures Act (“APA”) as well. The APA requires that parties to a rulemaking proceeding be given proper notice and opportunity for comment.<sup>6</sup> Lack of proper notice led to an insufficient evidentiary record upon which to base a Commission decision regarding DS3 simplex reporting.

**I. DS3 Simplex Events Are Not “Outages” And Are Part of Normal Redundancies That Should Not Trigger FCC Notification**

The Commission’s rules require that carriers report an “outage” of at least thirty minutes duration that “affects at least 1,350 DS3 minutes.”<sup>7</sup> In addition to requiring reporting of actual loss of DS3 service to the customers, the *Outage Order* states that carriers should report DS3 simplex events. *Outage Order*, ¶ 134. However, those events do not constitute “outages” within the plain meaning of the rules. An “outage” is defined as “a significant degradation in the ability of an end user to establish and maintain a channel of communications as a result of failure or degradation in the performance of a communications provider’s network.”<sup>8</sup> A DS3 simplex event neither creates a

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<sup>5</sup> See *New Part 4 of the Commission’s Rules Concerning Disruptions to Communications*, Notice of Proposed Rulemaking, 19 FCC Rcd 3373, ¶ 47 (2004) (“*Outage Notice*”). The *Outage Notice* asked only whether the Commission should require the “reporting of all *outages* of at least 30 minutes duration that potentially affect at least 1,350 DS3 minutes.” *Id.* (emphasis added). As explained in Section I, *infra*, DS3 simplex events are not “outages” within the Commission’s definition of that term.

<sup>6</sup> See 5 U.S.C. § 553(b).

<sup>7</sup> *Outage Order*, Appendix B, §4.9(f).

<sup>8</sup> *Id.*, §4.5(a).

degradation in the end user's service nor results from "a failure or degradation" in the provider's network. To the extent a DS3 simplex event ever does impact customer service, it would become a true "outage" that is reportable under the other DS3 reporting rules; absent an actual "outage," there is no reason to require DS3 simplex events – which occur on a fairly common basis – to be reported.

DS3 simplex events occur only in cases where DS3 switching is part of a protection scheme, such as a synchronous optical network ("SONET") ring. A SONET ring consists of a circle of fiber optic cable and network elements that are able to automatically reroute traffic around another part of the loop in order to avoid a service outage when a part of the network is cut or disabled.<sup>9</sup> Typically, the SONET will contain two paths – a working and a protect path. During normal operations, the working path carries 100% of the DS3 traffic, and the protect path operates as a failsafe or backup in the event that the working path experiences a failure. A simplex event occurs when one of the paths is not working, and the system has only one path available. However, there is no degradation in service to the end user customer in a DS3 simplex event, because 100% of the traffic can be carried over the path that is still working.<sup>10</sup> The switch from a working to a protect path takes less than 50 milliseconds.<sup>11</sup> The overwhelming majority

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<sup>9</sup> See Affidavit of Ray M. Luke on Behalf of SBC Communications, Inc. ¶ 8, attached at Attachment B ("SBC Affidavit").

<sup>10</sup> See Declaration of Robin B. Howard on Behalf of Verizon, ¶ 4, attached at Attachment C ("Verizon Declaration").

<sup>11</sup> See SBC Affidavit, ¶ 6.

of DS3 simplex events are restored to normal service before any true “outage” occurs.<sup>12</sup>

In adopting the DS3 simplex reporting requirement, the Commission reasoned that, when a DS3 simplex event occurs, “[t]he Communication services being provided over the DS3 will not be immediately affected, *but they will no longer be protected.*” *Outage Order*, ¶ 134. The Commission recognized that the customer would not lose communications unless there is a failure of *both* DS3 paths – the primary and protect path. Nevertheless, the Commission analogized the DS3 simplex event to that of a two-engine airplane that loses one engine; it can still fly, “but in an impaired state. Service is not restored to normal until both engines operate properly.” *Outage Order*, ¶ 134. It reasoned that, “In this same regard, if protection DS3s should fail while the primary DS3s are still working, services would not be immediately affected but the failed DS3 minutes are still counted toward the reportable trigger due to the loss of protection.” *Id.*

However, the Commission’s airplane analogy simply is not applicable to DS3 simplex events. Carriers’ networks are designed to contain a number of redundant protections in order to protect against outages; when those systems work as planned, there is no “outage” that requires Commission notification. The loss of one engine of an

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<sup>12</sup> See, e.g., Affidavit of Archie McCain on Behalf of BellSouth Communications, Inc., ¶ 12, attached at Attachment D (“BellSouth Affidavit”) (out of an estimated 1,011 DS3 simplex events per year, only three or four will lead to true “outages”); Letter from David Nicoll, NCTA, to Marlene H. Dortch, FCC, ET Docket No. 04-35, at 1 (filed Dec. 13, 2004) (“Cox estimates that, due to the high level of redundancy in its network, 95 percent or more of events reportable under the new requirements would not impact customer service . . .”) (“*NCTA Ex Parte*”); *USTA Stay Petition*, at ALLTEL Affidavit, ¶ 7 (of the estimated 200 annual DS3 simplex events, approximately 10 would have affected customer service, and of those 10, most would not be large enough to meet DS3 “outage” reporting thresholds) (“*USTA Stay Petition*”); *id.*, Frontier Affidavit, ¶ 8 (due to the engineering of Frontier’s SONET rings, a customer-affecting outage would occur only if there were failures in seven or eight of the rings’ fibers or associated electronics).

airplane is an exceptional and notable occurrence; if the second engine fails, there are potentially life-threatening consequences. By contrast, the sheer volume of reportable events predicted by carriers demonstrates that DS3 simplex events are fairly common in carrier networks.<sup>13</sup> Not only does a DS3 event *not* create potentially dire consequences, it usually will not result in *any* significant disruption of customer service.<sup>14</sup> In those rare instances where there is an actual impact to customer service (*e.g.*, when both the working *and* the protect path fail), such an event would be captured and reportable under the general rules requiring the reporting of a DS3 “outage.”

Indeed, the fact that most DS3 simplex events are unlikely to lead to an actual disruption of service to customers is evidenced by the fact that, in accordance with industry best practices guidelines, many carriers have a policy of waiting until a “maintenance window” – typically, a time of day when traffic over the networks is expected to be light – before restoring a DS3 simplex event to normal service.<sup>15</sup> Thus, the Commission’s DS3 simplex reporting requirement may actually have the effect of *undermining* carrier best practices, because it will create incentives for carriers to rush to address the DS3 simplex event before the scheduled maintenance window occurs, in

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<sup>13</sup> See footnote 19, *infra*.

<sup>14</sup> See footnote 12, *supra*.

<sup>15</sup> Network Reliability and Interoperability Council (NRIC) Best Practice 6-6-8087, recommends that service providers and network operators should restrict network access “to specific time periods (such as time of day, maintenance windows, outside critical times) for high risk users (vendors, contractors, etc.) for critical assets (*e.g.*, systems that cannot be accessed outside of specified maintenance windows due to the impact on the business).” Many carriers have stated they have a policy of waiting until an available “maintenance window” to restore DS3 simplex events to normal. See, *e.g.*, Declaration of William C. Leach on Behalf of AT&T, ¶ 8, attached at Attachment E (“AT&T Declaration”); BellSouth Affidavit, ¶ 10; SBC Affidavit, ¶ 8; Verizon Declaration, ¶ 6; Letter from Michael Fingerhut, Sprint, to Marlene H. Dortch, FCC, ET Docket No. 04-35, at 2 (filed Nov. 8, 2004) (“*Sprint Ex Parte*”).

order to minimize reporting. Ironically, the Commission’s DS3 simplex reporting requirement therefore could increase disruption of customer service, because restoring a DS3 simplex event to normal operation during high-traffic periods is more likely to create disruption of customer service.<sup>16</sup>

**II. Because the Commission Adopted the DS3 Simplex Reporting Requirement Without Adequate Notice, The Commission Did Not Gather Sufficient Evidence And Significantly Underestimated the Burden to Carriers**

In the Notice of Proposed Rulemaking, the Commission asked whether the Commission should require the “reporting of all *outages* of at least 30 minutes duration that potentially affect at least 1,350 DS3 minutes.” *Outage Notice* at ¶ 47. (emphasis added). Because, as explained in Section I, DS3 simplex events do not result in any “outage” as that term is defined by the Commission, commenters were not on notice that the Commission was considering adopting a DS3 simplex reporting requirement.<sup>17</sup> *No* commenter argued for requiring reporting of DS3 simplex events. Indeed, the only evidence cited in the *Outage Order* in support of the new requirement is the anecdotal statement that “we have had a number of network outages reported where there are multiple failures on a SONET ring at different points in time, in one case five months

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<sup>16</sup> See AT&T Declaration, ¶ 8; BellSouth Affidavit, ¶ 10; SBC Declaration, ¶ 8; Verizon Declaration, ¶ 6; NCTA Ex Parte, at 2.

<sup>17</sup> In an order released yesterday, the Commission dismisses the APA notice concerns by pointing to language from the *Outage Notice* that stated that the Commission proposed “to count only working DS3s in this measure, by which we mean those *actually carrying some traffic of any type at the time of a failure . . .*” *New Part 4 of the Commission’s Rules Concerning Disruptions to Communications*, Order Granting Partial Stay, FCC 04-291, ¶ 4 (rel. Dec. 22, 2004) (“*Outage Stay Order*”). However, rather than reading that language as *including* reporting of a DS3 simplex event, parties reasonably could have believed it was *excluding* reporting obligations for DS3 that were not “carrying some traffic at the time of the failure.” In addition, the Notice said the proposed rule would only apply to “outages” and, as stated above, there is no “outage” if a protect path picks up when a working path fails.

after the initial failure.” *Outage Order*, ¶ 134. This falls far short of what the APA requires. Parties to a rulemaking proceeding must be given proper notice and opportunity for comment, which did not occur here.<sup>18</sup> In addition, it was arbitrary and capricious for the Commission to adopt a DS3 simplex reporting requirement on such a scant evidentiary record, given the fact that the overwhelming majority of DS3 simplex events are unlikely to lead to a disruption of customer service and, as explained below, the reporting requirement is extremely burdensome.<sup>19</sup>

Due to the fact that the Notice did not adequately inform commenters that the Commission was considering requiring reporting of DS3 simplex events, the Commission significantly underestimated the burden to carriers of requiring such reporting. In the *Outage Order*, the Commission estimated that for *all* of the additional reporting requirements adopted in the order, “the *total* number of reports from all reporting sources *combined* will be less than 1,000 annually.” *Outage Order*, ¶ 168 (emphasis added). However, Petitioners estimate that the requirement that carriers report DS3 simplex

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<sup>18</sup> See 5 U.S.C. § 553(b); *Florida Power and Light Co. v. U.S.*, 846 F.2d 765, 771 (D.C. Cir. 1988) (“The APA requires the Commission to provide notice of its proposed rulemaking adequate to afford interested parties a reasonable opportunity to participate in the rulemaking process. Such notice must ... provide sufficient factual detail and rationale for the rule to permit interested parties to comment meaningfully” (citations omitted)).

<sup>19</sup> See, e.g., *Fox TV Stations v. FCC*, 280 F.3d 1027, 1051 (D.C. Cir. 2002) (“A decision is arbitrary and capricious if the agency fails to ‘consider an important aspect of the problem’” quoting *Motor Vehicle Mfrs. Ass’n v. State Farm Mut. Auto Ins. Co.*, 463 U.S. 29, 43 (1983)); *National Black Media Coalition v. FCC* 791 F.2d 1016, 1023 (2nd Cir. 1986) (“It is clear that it is not consonant with the purpose of a rulemaking proceeding to promulgate rules on the basis of inadequate data or on data that, [in] critical degree is known only to the agency” quoting *Portland Cement Association v. Ruckelshaus*, 486 F.2d 375, 417 (D.C. Cir. 1973) cert. denied 417 U.S. 921 (1973)).

events will alone increase the number of reportable events by more than 15,000 to 18,000 per year – just for the five Petitioners here.<sup>20</sup>

The Commission also stated that “most of the administrative burden is caused by the need for the communications provider to investigate outages and to collect information on these outages for its own internal use” but theorized that, “[v]irtually every telecommunications provider, in the ordinary course of business collects this type of information for its own use in order to operate and maintain its network.” *Outage Order*, ¶ 166. For DS3 simplex events, that assumption is incorrect. Because a DS3 simplex event does not result in a degradation of service, carriers today typically do not perform the type of analysis that would be required for reporting such an event to the Commission.<sup>21</sup>

Thus, the Commission’s prediction that “the only burden associated with the reporting requirements will be the time required to complete [the three stage] reports” and that the total annual costs for each carrier would be only \$41,600,<sup>22</sup> was woefully off the mark. Petitioners estimate that the true cost for implementing DS3 simplex reporting

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<sup>20</sup> See AT&T Declaration, ¶ 4 (predicting 3,000 to 5,000 DS3 simplex events per year will meet reporting criteria); BellSouth Affidavit, ¶ 12 (estimating 1,011 reportable DS3 simplex events per year); Declaration of Perry Taylor on Behalf of MCI, ¶ 3, attached at Attachment F (predicting between 7,000 and 8,000 reportable DS3 simplex events) (“MCI Declaration”); SBC Affidavit, ¶ 19 (approximately 3,500 DS3 simplex events annually); Verizon Declaration ¶¶ 1, 3 (close to 1,000 final outage reports). In the Verizon Declaration, Verizon did not estimate the impact to the long distance companies that would result from the DS3 simplex reporting requirement; however, it is expected to be hundreds of additional reportable events.

<sup>21</sup> See, e.g., BellSouth Declaration, ¶¶ 11, 13; MCI Declaration, ¶ 5; SBC Affidavit, ¶¶ 13-21; Verizon Declaration, ¶¶ 4-5.

<sup>22</sup> *Outage Order*, Appendix D ¶¶ 28, 24.

is millions of dollars per carrier.<sup>23</sup> Other commenters have estimated similar burdens.<sup>24</sup>

There is evidence that the cost to smaller carriers would often be even greater, as some of them would have to spend more than fifteen million dollars *each* to create sophisticated monitoring systems to detect DS3 simplex events in a manner designed to satisfy reporting requirements.<sup>25</sup> The fact that wireline providers of all sizes and industry segments have identified the same requirement as overly burdensome and unnecessary should, in itself, cause the Commission to reconsider the wisdom of requiring reporting of DS3 simplex events.<sup>26</sup>

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<sup>23</sup> See AT&T Declaration, ¶ 5 (estimating additional costs for DS3 simplex reporting would be between \$3 to \$5 million per year); BellSouth Affidavit, ¶ 13 (\$5.82 million per year); MCI Declaration, ¶ 6 (\$1 million per year); SBC Affidavit, ¶ 19 (while not providing a specific dollar estimate, stating that it would estimate the need for 315,000 man hours (more than 150 employees) per year would be needed to handle the new volume of DS3 simplex reporting); Verizon Declaration, ¶ 5 (\$5.5 million per year).

<sup>24</sup> See, e.g., *USTA Stay Petition* at 9-13 (in addition to burdens identified by BellSouth, SBC, and Verizon, ALLTEL predicted it would have to spend \$2 million to report 200 DS3 simplex events per year (compared to four total reportable outages last year); Frontier and Iowa Telecom *each* predict they would have to spend \$16 million in initial implementation costs to comply with the new requirement); Qwest Corporation and Qwest Communications Corporation Petition for Partial Stay, ET Docket No. 04-35, at 5 (filed Dec. 13, 2004) (predicting that each year, Qwest would have to report 804 DS3 simplex events on behalf of the LEC, and 1,606 on behalf of the IXC); *Sprint Ex Parte*, at 2 (estimating that DS3 simplex events “could number in the several hundreds if not thousands each month”); see also *NCTA Ex Parte* at 1-2 (Cox Communications estimates having to use approximately 4% of its engineering personnel resources every year, at an annual cost of more than \$650,000, just to report DS3 simplex events).

<sup>25</sup> See *USTA Stay Petition*, Affidavit of Cassandra K. Guinness on Behalf of Frontier and Citizens ILECs, ¶ 10 (estimating that it would cost more than \$16 million to create systems allowing the carrier to comply with DS3 simplex reporting requirements); *id.*, at Affidavit of Dennis R. Kilburg, Vice President – Engineering, Iowa Telecommunications Services, Inc. d/b/a Iowa Telecom, ¶ 9 (estimating it would “require three to five years and \$16 million dollars to be brought into compliance”).

<sup>26</sup> In the *Outage Stay Order*, the Commission theorized that most of the estimated burdens associated with reporting DS3 simplex events are based on outages corrected within the normal maintenance window, and “[n]o persuasive argument has been advanced as to why DS3 simplex events that extend beyond the maintenance

**Conclusion**

The Commission should reconsider and reverse the requirement that carriers report DS3 simplex events.

December 23, 2004

Respectfully submitted,

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window should not be counted as outages.” *Outage Stay Order*, ¶ 8. Petitioners have not separately estimated the number of reports that will result while the partial stay is in effect, and do not expect they could report such estimates before the January 3, 2005 expected implementation date of the DS3 reporting requirement. However, even if the stay alleviates the more burdensome aspects of reporting, it is still a fact that a DS3 simplex event is not an “outage” and thus there is no basis and no need for the Commission to require it to be reported. *See* Section I.

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THE VERIZON TELEPHONE COMPANIES

The Verizon telephone companies are the local exchange carriers affiliated with Verizon Communications Inc. These are:

Contel of the South, Inc. d/b/a Verizon Mid-States  
GTE Southwest Incorporated d/b/a Verizon Southwest  
The Micronesian Telecommunications Corporation  
Verizon California Inc.  
Verizon Delaware Inc.  
Verizon Florida Inc.  
Verizon Hawaii Inc.  
Verizon Maryland Inc.  
Verizon New England Inc.  
Verizon New Jersey Inc.  
Verizon New York Inc.  
Verizon North Inc.  
Verizon Northwest Inc.  
Verizon Pennsylvania Inc.  
Verizon South Inc.  
Verizon Virginia Inc.  
Verizon Washington, DC Inc.  
Verizon West Coast Inc.  
Verizon West Virginia Inc.

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In the Matter of )  
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New Part 4 of the Commission's Rules )  
Concerning Disruptions to Communications )  
ET Docket No. 04-35 )

**AFFIDAVIT OF RAY M. LUKE**  
**ON BEHALF OF SBC COMMUNICATIONS INC.**

**QUALIFICATION AND PURPOSE OF TESTIMONY**

1. My name is Ray M. Luke. I am Vice President – Network Central Offices for SBC Operations, Inc. My duties include the supervision of SBC process and Operational Strategy for Network Central Office Operations across SBC's 13 state ILEC territory. I have been employed by SBC for 20 years in numerous Network Operations Management positions. I have a Bachelor of Science degree in Electrical Engineering from the University of Missouri – Columbia, and a Master's degree in Business Administration from Baker University in Baldwin, Kansas.
2. The SBC companies offer voice and data services to residential and business customers. SBC local exchange companies are facilities-based telecommunications carriers that own and operate a network serving over 53 million access lines.
3. The purpose of this affidavit is to show why requiring SBC to report as "outages" those events in which a DS3, which is designed and engineered with a fully redundant protection scheme, switches to protect mode ("DS3 simplex event") would impose significant administrative and economic burdens on SBC with no countervailing benefit.<sup>1</sup> My affidavit is in support of the United States Telecom Association's Petition for Partial Stay of New Part 4 of the Commission's Rules Concerning Disruptions to Communications.

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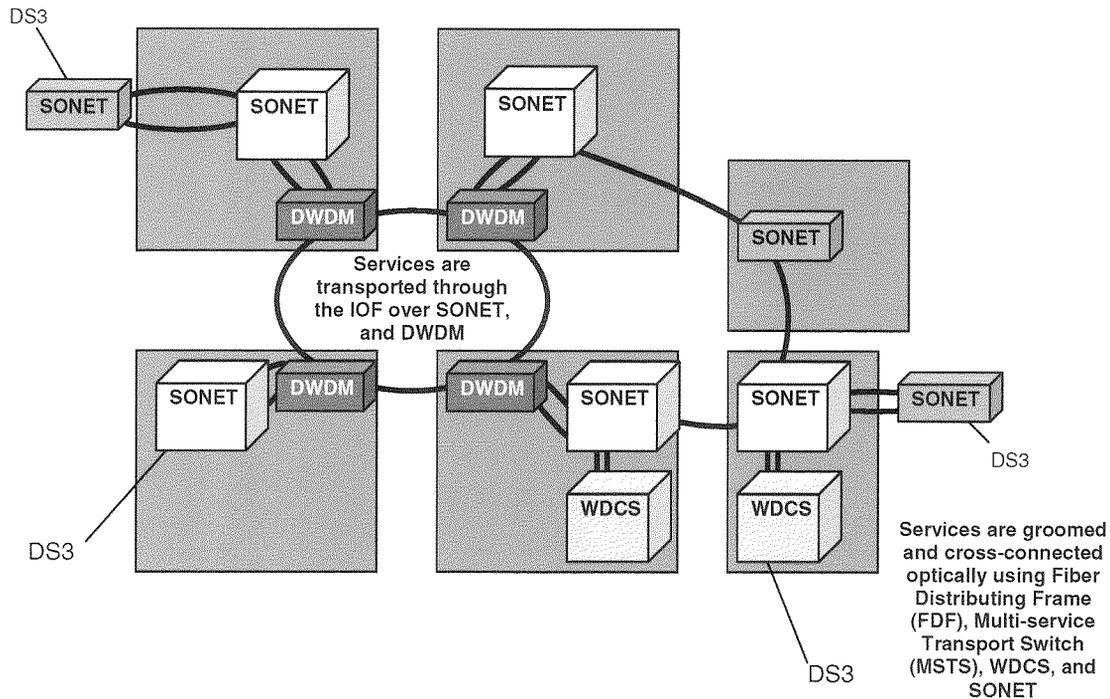
<sup>1</sup> As discussed in paragraphs 5-7 and 9, a DS3 switching to simplex mode is part of the network design to protect against customer service outages and is transparent to the customer. Any cost/benefit analysis must take into consideration the fact that, in most instances, DS3 simplex events are purposely remedied within established maintenance windows in order to minimize customer impact.

## THE BURDENS OF REPORTING OF DS3 SIMPLEX EVENTS

### Current Network Configuration

4. DS3 service is designed to meet customers' voice and data needs. The high capacity marketplace is extremely competitive and customer satisfaction is crucial to a carrier's success. Regardless of regulatory oversight, if SBC fails to meet its customers' expectations, customers will leave its network in favor of a competitor. SBC, therefore, has purposefully designed its network to minimize customer service interruptions. Regardless of the platform or product manufacturer, there are several service protection elements integrated into the overall design of DS3 service.
  
5. The Transport Network diagram, below, illustrates a basic Synchronous Optical Network ("SONET") with DS3 redundancy. DS3 signals typically traverse the network via Optical Channel OC3/OC12/OC48/OC192 Synchronous Optical Network ("SONET") Elements. DWDM (Dense Wave Length Division Multiplexing) Network Elements are used to maximize the efficiency of fiber cable by combining multiple optical signals on a single optical strand. WDCS (Wide Band Digital Cross-connect Systems) are utilized to groom and/or to provide DS3 test access. This protection is engineered in the circuit whether optical or electrical transmission facilities are used to provision service to the customer. This design provides a fully redundant path transporting duplicate information between offices. In the event of a failure in the intra-office or inter-office facilities (IOF), the network elements simply process the signal from the redundant facility.

## Transport Network



6. Any failure of the transmission facility or the transport equipment results in a DS3 simplex event, i.e. the service is provided over the protect path of the circuit. Since the design of the circuit is synchronous, the customer will experience no impact to service when a circuit is switched to simplex mode. In fact, the switch takes less than 50 milliseconds. Should a failure occur, SBC's network automatically routes the call in the opposite direction so that the flow of the call is not interrupted. SBC's network captures these failures via multiple network monitoring systems. Technicians respond to the trouble condition and determine corrective action.
7. Currently SBC's network captures all DS3 events via multiple network monitoring systems. SBC personnel immediately respond to the trouble condition and determine what corrective action is needed.
8. Since the circuit is designed to minimize the impact to the customer's service, when a simplex situation occurs corrective action is usually deferred to a low traffic, off-hours maintenance window. It is important to note that delaying corrective action allows time to effectively analyze the trouble condition, develop a corrective action plan, gather resources, and minimize customer impact. All of this occurs without impacting the customer's service (and in fact the customer is not even aware the circuit has gone into simplex mode) since traffic is being

routed over the protect path. The risk of creating a service-affecting condition is greatest during the corrective action. Repairing non-service affecting DS3s during a maintenance window minimizes the potential of causing service-impacting outages. It would be an exceptional circumstance that would result in a DS3 simplex event lasting longer than five days. Determining the best time to resolve a DS3 simplex event depends on a combination of many factors, such as the customer's usage pattern, the availability of established maintenance windows, and the proximity of the event to weekends and holidays.

**Effect of Treating Simplex Events as "Outages"**

9. Since DS3 circuits are designed to move seamlessly to simplex mode in the event of a failure, avoiding an impact on customer service, there is no reason to report such an event as an "outage." The additional resources and expense associated with treating DS3 simplex events as outages would cause an undue burden on SBC resources and have the potential effect of increasing the likelihood of an actual customer service disruption.
10. The additional reporting requirements associated with the DS3 events will also stress SBC's network monitoring systems, adding manual steps and activities to otherwise mechanized systems.
11. In support of this Affidavit, SBC analyzed the anticipated effect of this particular aspect of the *New Part 4 of the Commission's Rules Concerning Disruptions to Communications, Report and Order* ("*Part 4 Order*"). Based upon actual August 2004 data, SBC estimates it would be required to report approximately 3,500 DS3 simplex events<sup>2</sup> according to the criteria adopted in the *Part 4 Order*. Today, DS3 simplex events are not included in our Service Disruption Reporting procedures, therefore new procedures will have to be established to generate these reports.
12. Projected DS3 simplex data was manually gathered by investigating only SONET alarm and monitoring tickets<sup>3</sup> for the month of August 2004 and extrapolated to forecast a yearly estimate.
13. To date, due to the designed redundancy of the network, SBC has not conducted formal investigations on DS3 simplex events to determine Root Cause, Steps

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<sup>2</sup> This number only covers estimated reports for SBC local exchange companies. Other SBC affiliates that may have reporting obligations under the *Part 4 Order* are currently unable to estimate the potential impact of a DS3 simplex reporting requirement at this time.

<sup>3</sup> Because SONET rings are common to ILEC networks and are a major part of the network infrastructure, SBC only gathered data on SONET DS3 simplex events. Therefore, because there are other DS3s in the SBC network that may be part of a protection scheme, the numbers in this affidavit are a conservative estimate of the total reports that could be required as a result of this one aspect of the *Part 4 Order*. Moreover, data networks, such as SBC's Frame Relay and ATM networks, were not included in these estimates since those networks fall under the "public data network" exception stated in the *Part 4 Order* at fn. 9.

Taken to Prevent Recurrence, Best Practices, etc. Compliance with these additional FCC reporting requirements will create additional administrative and operating expenses diverting resources from network reliability improvements and customer service.

14. In order to report these DS3 simplex events as outages SBC will incur a substantial increase in labor costs, including having to hire additional personnel, to track the events as reportable outages. SBC will also have to make changes to its already mechanized work flows, resulting in the addition of manual reporting steps for these DS3 events. Over time, SBC will necessarily mechanize some systems to reduce the manual observation of alarms in order to determine when an event becomes reportable.

### **Labor Costs**

15. SBC must implement new methods and procedures to comply with the 3 stage reporting requirement for DS3 simplex events that are reportable under the *Part 4 Order*.
16. Based on the amount of work SBC currently undertakes to file an outage report to the Commission, SBC estimates the total number of man hours needed to file one FCC Communications Outage Report to be approximately 90. This estimate only covers the man-hours required to (a) identify a reportable outage, (b) compile the necessary data for the 3 reports, (c) investigate the Root Cause of the outage, any contributing factors, Best Practices, Steps Taken to Prevent Recurrence, and any other information the Commission requires, and (d) complete, verify, and file the report. Steps (b) – (d) are manual steps which require the participation of several organizations within SBC.
17. The significant man-hours required for each network outage report is attributable to the multi-faceted resources involved in this process. After an outage has been identified, SBC management personnel will determine if the outage meets the criteria for filing an FCC report. This determination is done by the local field operations organization. Then the Outage Information Control Center (OICC) organization gathers the data associated with the outage and conducts an investigatory conference call with affected SBC organizations as well as affected equipment vendors to determine the cause of the outage. SBC organizations that could be involved in the data gathering and investigation process include central office, outside plant, installation/repair, special services, 911 marketing, engineering, claims, and procurement.
18. The accumulated information and data are reviewed by SBC's management team to ensure the report will be complete and accurate. All steps identified as necessary to prevent a recurrence are manually monitored through completion. After these steps are completed, a Final FCC Service Disruption Report (SDR) is drafted, which must be reviewed and agreed upon by all involved parties. Once

agreed upon, the Final FCC SDR is filed with the FCC. The SBC National Security Emergency Preparedness (NSEP) organization completes and files all FCC-mandated SDR reports. NSEP is also responsible for verifying that any corrective actions identified are implemented.

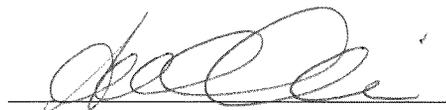
19. SBC expects to report approximately 3,500 DS3 simplex events annually. SBC estimates that a total of approximately 315,000 man-hours (over 150 employees) would be required to support the increased influx of Communication Outage Reports required for DS3 simplex events.
20. Currently, SBC spends approximately 90 man-hours to investigate and report each network outage as required by FCC rules. While the *Part 4 Order* outlines new metrics that will increase the number of networks outage reports SBC will be required to file on an annual basis, SBC will exercise diligence in mechanizing reporting processes where possible.
21. In summary, SBC finds that complying with reporting DS3 simplex events as outages is onerous and taxes labor resources that would best be allocated to address true customer network affecting outages. Our networks are purposely designed with redundancy to reduce customer impact. Thousands of SBC man-hours were spent designing and implementing a top-level redundant network with multiple communication paths in order to provide our customers with the most reliable telecommunication customer service possible.

This concludes my affidavit.

Executed this 16<sup>th</sup> day of NOVEMBER, 2004.

  
\_\_\_\_\_  
Ray M. Luke  
SBC

SUBSCRIBED AND SWORN TO BEFORE ME this 16<sup>th</sup> day of November, 2004.

  
\_\_\_\_\_  
Notary Public

My Commission Expires:

9-17-2005



**Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, D.C. 20554**

In the Matter of )  
 )  
New Part 4 of the Commission's Rules )  
Concerning Disruptions to Communications ) ET Docket No. 04-35

**DECLARATION OF ROBIN B. HOWARD OF VERIZON  
IN SUPPORT OF PETITION FOR RECONSIDERATION AND STAY**

1. My name is Robin B. Howard. My business address is 2200 West Airfield Drive, Irving, Texas 75015. I am a Manager – Intelligent Network Operations/Network Service Assurance Center, for Verizon, and have worked for Verizon, or its predecessor companies, for 26 years. In this position, I am responsible for network performance metrics, measurements, and processes for Centralized Network Operations Group at Verizon. In that capacity, I am responsible for complying with the Commission's regulations regarding the reporting of network outages for all of Verizon's domestic United States local exchange carriers ("Verizon"). These duties include administration and control of the Verizon outage reporting database and processes, root cause analysis program, and reporting of outages pursuant to 47 C.F.R. § 63.100 and ARMIS Table IV and Table VI A annual outage reporting. I have over 20 years experience in performing root cause analysis and 10 years in alarm systems, messages, and policy, and 26 years experience in switching, transport, alarm systems, outage analysis and reporting, and network management systems.

2. The purpose of this affidavit is to support the petition for reconsideration and stay of the new requirement that DS3s that switch to protect (“DS3 simplex reporting”) be counted in DS3 outage minutes. As explained in more detail below, requiring Verizon to report those events as outages would impose significant administrative and economic burdens on Verizon, and is not necessary to determine network reliability or protect against disruption of customer service.

### **THE BURDENS OF REPORTING OF DS3 SIMPLEX EVENTS**

3. In 2003, Verizon filed a total of 19 final outage reports pursuant to 47 C.F.R. § 63.100. To date, in 2004, Verizon has filed 14 such reports. Verizon estimates that if the Commission implements the DS3 simplex reporting requirement, it will be required to file close to 1000 additional outage reports per year. Thus, Verizon estimates that the DS3 simplex reporting requirement alone would increase the number of reports Verizon must file between 5000% and 7000%.

4. The Commission’s new rule requires DS3s that switch to “simplex” or “protect-path” mode – *i.e.*, that operate on a backup system when the main path fails – be counted in DS3 outage minutes. A DS3 is a transmission pipe that carries data from one location to another at a high rate of speed, with the capacity to handle 28 DS1s or 672 DS0s (64 kbps voice or data circuits). Often, the architecture of the transport network element (such as a Synchronous Optical Network (“SONET”) element) includes two paths – a working and a protect path. When it contains these two paths, the working path carries 100% of the DS3 traffic during normal operations; the protect path operates as a failsafe or backup in the event of failure of the working path. When either the working or protect path fails, that is referred to as a simplex event. However, a DS3 simplex event

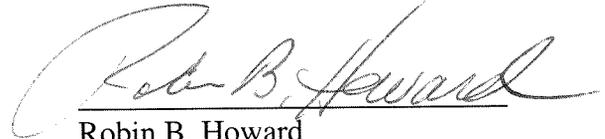
results in no loss of service to the customer, because if there is a failure in the working path, 100% of the traffic is carried over the protect path. Thus, the Commission's definition of outage – which is defined as a “significant degradation in the ability of an end user to establish and maintain a channel of communications as a result of failure or degradation in the performance of a communication provider's network” – does not apply to a DS3 simplex event. For that reason, Verizon currently does not perform the type of analysis that would be required for outage reporting of a DS3 simplex event, since there is no customer impact and no “outage” has occurred.

5. In order to comply with the new DS3 simplex reporting requirement, I estimate that it would cost the company approximately \$5.5 million dollars annually. Much of this additional cost would be due to the sheer volume of reportable events that would be required. This cost would include additional man hours necessary to provide the monitoring, analysis of root cause, and reporting required pursuant to 47 C.F.R. § 63.100. Among other things, the new DS3 simplex reporting requirement would require Verizon to direct personnel to manually search for and count the number of DS3s that are on a particular network element to determine the number of DS3 minutes required for the Commission's formula of reportable events of 1,350 DS3 minutes or more.

6. In addition, Verizon maintains a policy that unless the risk for failure of the simplex element is so significant as to warrant immediate restoration, restoration of a simplex DS3 event to a two-path (“duplex”) operation, routinely is deferred until a time of day when traffic is low. This is in adherence with NRIC Best Practices 6-5-0693 and 6-5-0697 addressing performing work on in-service equipment or high-risk operations

during low traffic periods. Thus, a company will face a choice of adhering to best practices in order to restore duplex ability at a time less likely to disrupt customer traffic, or restore it more quickly in order to avoid or reduce the periods of FCC reportable events. Therefore, the DS3 simplex reporting requirement may have the unintended consequence of creating more actual disruption of customer service.

I hereby declare under penalty of perjury under the laws of the United States of  
America that the foregoing is true and correct to the best of my knowledge,  
information, and belief.

  
Robin B. Howard

Executed this 8<sup>th</sup> day of November, 2004.

**FEDERAL COMMUNICATIONS COMMISSION  
Washington, D.C. 20554**

In the Matter of )  
 )  
New Part 4 of the Commission's Rules )  
Concerning Disruptions to Communications ) ET Docket No. 04-35

**AFFIDAVIT OF ARCHIE MCCAIN  
ON BEHALF OF BELLSOUTH TELECOMMUNICATIONS, INC.**

**QUALIFICATION AND PURPOSE OF TESTIMONY**

1. My name is Archie C. McCain.
2. I have a Degree in Computer Engineering from Southwestern College, Memphis, Tennessee. I have 22 years experience in the operations and maintenance of digital switching equipment, digital transmission equipment, and general network operations and management. I have considerable expertise in the collection and analysis of outage data, having developed the outage data collection process used by BellSouth Telecommunications, Inc. ("BST"). In addition, I have been a leader in the development of outage reporting tools and processes for the industry, including the standardized outage reporting template used by many service providers and suppliers. In 2004, the IEEE Communications Society selected me for the Communications, Quality, and Reliability Chairman's Award in recognition of my contributions to the industry in the area of outage data collection.

3. I have been employed by various affiliates of the Bell System for 22 years as both an engineer and as a technical manager. My experiences include service at Bell Laboratories during the development and introduction of the first Bell System digital switch, the 5ESS. In addition, I served as a founding member of the first digital switch Electronics Systems Assistance Center (“ESAC”) at Southern Bell; member of the Technical Staff at Bellcore with national responsibility for 5ESS digital switching; and Director of Network Operations for the international long distance affiliate, BellSouth International – Access. I am currently the Director of Network Management and Signaling for BST. In that position, I am responsible for the identification and reporting of major outages to the Federal Communications Commission (“FCC”) pursuant to its network outage reporting rules.

4. My business address is 7 Executive Park Drive, Room 480, Atlanta, GA 30329.

5. BST is a facilities-based local exchange carrier that offers telecommunications services to businesses and consumers in nine states in the southeastern United States.

6. BST owns and operates a network of 21.6 million access lines with more than 3 million miles of optical fiber.

7. The purpose of this affidavit is to demonstrate that requiring BST to report as “outages” those events in which a DS3 that is part of a Synchronous Optical Network

(SONET) ring switches to protect mode<sup>1</sup> not only would be inconsistent with the FCC's definition of an "outage,"<sup>2</sup> but also would impose significant administrative and economic burdens on BST with no countervailing benefit or relationship to the FCC's homeland security or network reliability mandates.

**DS3 SIMPLEX EVENTS DO NOT CONSTITUTE "OUTAGES" AND REQUIRING BST TO REPORT THESE EVENTS WILL IMPOSE ADDITIONAL BURDENS AND COSTS UPON BST WITH NO CORRESPONDING BENEFIT.**

8. Synchronous optical network ("SONET") is a widely used technical standard for telecommunications transport over fiber optic cables. SONET can be configured in various ways within a provider's network depending upon the application. However, the demand by customers and network designers for circuits that are available nearly 100 percent of the time has made the bi-directional line switch and uni-directional path switch SONET ring technologies extremely popular. A SONET ring is composed of a circle of fiber optic cable and network elements that, when cut or disabled, automatically reroute traffic around the fault to the unimpaired side of the loop.

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<sup>1</sup> The switching of a DS3 that is part of a protection scheme such as a SONET ring is referred to throughout this affidavit as a "DS3 simplex event."

<sup>2</sup> The FCC defines the term "outage" as "a significant degradation in the ability of an end user to establish and maintain a channel of communications as a result of failure or degradation in the performance of a communication provider's network." *New Part 4 of the Commission's Rules Concerning Disruptions to Communications*, ET Docket No. 04-35, *Report and Order and Further Notice of Proposed Rulemaking*, FCC 04-188 (rel. Aug. 19, 2004), Appendix B, 47 C.F.R. § 4.5(a)

9. When a DS3 is deployed over a SONET ring, there are alternate optical paths for every circuit. There are essentially two ways that a SONET ring can fail: (1) the electronics (circuit packs) of a SONET node can fail, or (2) the facilities (optical fiber) can be cut or damaged. When there is a single failure of the SONET ring electronics or one of the fiber facilities that make up the SONET ring, no outage occurs; instead, within milliseconds of detecting a continuous stream of errors, the SONET equipment switches over to the alternate electronics or alternate fiber facility and begins what is called a DS3 simplex event. DS3 simplex events are transparent to customers and neither cause nor result in any degradation of service.

10. When a SONET DS3 simplex event occurs, a repair is scheduled in an expeditious manner. Because service is not interrupted or degraded during a DS3 simplex event, restoration activities for electronics are typically scheduled to take place *during the next maintenance window* along with other critical activities that place service at risk. BellSouth's maintenance windows are typically late at night or early in the morning each day of the week, including weekends. Restoration activities for simplex events involving electronics are scheduled during normal maintenance periods because these activities pose a greater risk to service than the possibility that the DS3 simplex event could escalate to an "outage" caused by a second failure. In comparison, restoration activities for facility damage (typically caused by construction and farming activities involving digging equipment) that result in a DS3 simplex event are scheduled promptly on a priority basis instead of being scheduled during a normal maintenance window.

11. On the other hand, true “outage events” on the BST network that affect customer service are handled on an emergency basis. BST has established a rigorous set of processes to first restore service, then analyze the root cause of the outage, and finally to take steps to prevent future recurrence of the outage anywhere in the BST network. The amount of effort that is devoted to an outage is proportional to the seriousness of the event, and FCC reportable outages are among those events that receive a maximum effort, with a significant amount of labor and urgency devoted to each outage. If SONET DS3 simplex events are classified as “outages” subject to reporting under the FCC’s service disruption rules, it will impose a significant administrative burden on BST and dilute the efforts that are devoted to detecting, reporting, and analyzing “true” outages.

12. Based upon an analysis of six months of historical data, BST estimates that the number of simplex events that meet the FCC’s new reporting rules would be approximately 1,011 per year. Of this total number of DS3 simplex events (1,011), true “outages” occur only three to four times a year. Thus, only 0.3% to 0.4% of DS3 simplex events would escalate to an outage.

13. According to BST’s estimates, the FCC’s new DS3 simplex reporting requirement would result in the filing of 1,011 reports over a twelve-month period. In addition, classifying these events as FCC reportable outages would drive BST to handle these events as major outages with special treatment for restoration, analysis and reporting. Using the BST average times for analysis and reporting, plus the average DS3 simplex event duration for restoration, it is expected that the average DS3 simplex event would require 72 hours of labor to process. Multiplying this figure times the projected

annual number of events yields (1,011 events x 72 hours per event) 72,792 hours of labor or approximately 36 man-years of labor. Although loaded labor rates vary by region and company, using a common planning rate of \$80 per hour for the 72,792 hours of labor, would result in an estimated annual cost to BST of \$5.82 million to treat DS3 simplex events as FCC reportable disruptions to communications.

This concludes my affidavit.

Executed this 8<sup>th</sup> day of November 2004.

Archie C. McCain  
Archie C. McCain  
BellSouth Telecommunications

SUBSCRIBED AND SWORN TO BEFORE ME this 8<sup>th</sup> day of November, 2004.

Tangie Zellner  
Notary Public

My Commission Expires:

February 26, 2007



**Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, D.C. 20554**

In the Matter of )  
 )  
New Part 4 of the Commission's Rules )  
Concerning Disruptions to Communications ) ET Docket No. 04-35

**DECLARATION OF WILLIAM C. LEACH OF AT&T CORP.  
IN SUPPORT OF PETITION FOR RECONSIDERATION AND STAY**

1. My name is William C. Leach. My business address is 4 Douglas Court, Flemington, NJ. I am a Technical Consultant-Network Traffic Control employed by AT&T Corp. ("AT&T"), and have worked for AT&T, or its predecessor companies, since 1965. My work experience includes network operations, equipment engineering, equipment translations, routing, trunk servicing, network management, training, and operations management. In my current position, I am responsible for incident management/analysis, performance metrics, measurements, and process support for AT&T's Global Network Operations Center. In that capacity, I am responsible for developing the methods and procedures for compliance with network outage reporting regulations for all domestic services. These duties include the administration and control of the outage reporting database and processes, root cause analysis, and reporting of outages pursuant to 47 C.F.R. § 63.100 and ARMIS Table IV and Table VI A.

2. The purpose of this declaration is to support the Industry Coalition's petition for reconsideration of the Commission's new requirement that "DS3 simplex events" -- situations in which DS3s temporarily switch to a "simplex" or "protect-path"

mode that operates on a backup system when the main path fails (a function also known as “switch to protect”) -- must be included in DS3 outage minutes. As explained in more detail below, requiring AT&T to report “DS3 simplex events” as outages would impose unwarranted administrative and economic burdens on AT&T. Such a reporting requirement is neither necessary to determine network reliability, nor helpful in protecting the network from disruption of customer service.

2. A “DS3” is a transmission pipe that carries data from one location to another at a high rate of speed, with the capacity to handle 28 DS1s or 672 DS0s (64 kbps voice or data circuits). Typically, the architecture of a transport network element, such as a Synchronous Optical Network (“SONET”) element, provides two paths -- a working path and a protect path. When the network architecture contains these two paths, the working path carries 100% of the DS3 traffic during normal operations, while the protect path operates as a failsafe or backup in the event of a failure of the working path. When either the working path or the protect path fails, that failure is referred to as a “simplex event.” A DS3 “simplex event” results in no loss of service to the DS3 customer in such a network, because if there is a failure in the working path, 100% of the traffic is carried over the protect path.

3. The Commission’s recent outage reporting order nevertheless requires carriers to report “simplex events” in which DS3s temporarily “switch to protect.” In 2003, prior to the issuance of the Commission’s new requirement, AT&T filed a total of 12 final outage reports pursuant to 47 C.F.R. § 63.100. To date, in 2004, AT&T has filed 9 such reports. If “simplex events” involving DS3 facility switches (which do not result

in loss of service to customers) will require reporting, I estimate that the reporting burden to the company will increase exponentially, to 3,000-5,000 reportable events annually.

4. I further estimate that in order to comply with the new DS3 simplex reporting requirement, AT&T will incur incremental costs of \$3 million to \$5 million annually resulting from the exponential increase in the number of events that must be reported. These costs will also include the additional man-hours necessary to provide monitoring, the analysis of root cause, and the production of reports in accordance with 47 C.F.R. § 63.100.

5. The expenditure of additional resources and costs in order to meet the Commission's new requirements cannot be justified. In the AT&T Network, like the typical DS3 network described above, the occurrence of a "simplex event" does not result in a loss of service to the customer. The AT&T Network has been engineered to avoid loss of service by providing several layers of protection. For example, AT&T's T3 (digital transmission) lines have assigned service paths and protection paths that give customer communications alternative paths to travel. In addition to this feature, AT&T's network employs Fast Automatic Restoration ("FASTAR®") technology. Thus, if the service path and the protection path *both* fail, FASTAR® will restore service around the failure, thus providing an additional layer of protection. AT&T's FASTAR® network architecture also utilizes ring and CNI technologies that provide the same type of protection as FASTAR®. Thus, when a T3 switches to a protection path, the FASTAR® network design provides yet another layer of protection against service outage.

7. The Commission defines outage as a "significant degradation in the ability of an end user to establish and maintain a channel of communications as a result of

failure or degradation in the performance of a communication provider's network." As described above, no such service degradation occurs during a DS3 "switch to protect" in the AT&T Network. Since there is no resulting customer impact, and additional levels of protection are in place and are maintained, no "outage" has occurred. A switch to a protection path is therefore not an event to which the Commission's outage reporting requirement should apply.

8. In accordance with NRIC Best Practices 6-5-0693 and 6-6-8087 (addressing work on in-service equipment or high-risk operations during low traffic periods) carriers may defer restoration of service to the original DS3 service path from the protection path until a time of day when the volume of traffic is low in order to minimize the risk of service disruption, unless the risk of failure of the protection element is so significant as to warrant immediate restoration. The Commission's requirement confronts carriers with a choice between adhering to best practices, in order to restore the duplex characteristics of the service path to the DS3 at a time less likely to disrupt customer traffic, or restoring service more quickly in order to minimize the burden of complying with the new DS3 reporting requirement. As a result, the Commission's DS3 reporting requirement may, in practice, have the unintended consequence of creating service disruptions that would not otherwise occur.

I hereby declare under penalty of perjury under the laws of the United States of  
America that the foregoing is true and correct to the best of my knowledge,  
information, and belief.

  
William C. Leach

Executed this 21 day of December, 2004.

**Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, D.C. 20554**

In the Matter of )  
 )  
New Part 4 of the Commission's Rules )  
Concerning Disruptions to Communications ) ET Docket No. 04-35

**DECLARATION OF PERRY TAYLOR OF MCI  
IN SUPPORT OF PETITION FOR RECONSIDERATION**

1. My name is Perry Taylor. My business address is 7000 Weston Parkway, Cary, North Carolina 27513. I am a Director of Switch Network Management and have worked for MCI for 13 years. In this position, I am responsible for managing MCI's switch networks as well as network performance metrics and measurements. I have also been responsible for complying with the Commission's regulations regarding the reporting of network outages for MCI's domestic network. These duties include administration and control of the outage reporting process, and reporting of outages pursuant to the Federal Communications Commission's ("Commission" or "FCC") Rules.

2. The purpose of this affidavit is to support the petition for reconsideration of the new requirement that DS3s that switch to protect ("DS3 simplex event" or "protect-path routing") be counted in DS3 outage minutes. As explained below, requiring MCI to report simplex events as outages would impose substantial burdens on MCI, and would not further the Commission's objectives of fostering network reliability and protecting against disruption of customer service.

3. In 2003, MCI filed a total of four (4) final outage reports pursuant to 47 C.F.R. § 63.100. To date, in 2004, MCI has filed three (3) such reports. This number would increase considerably with a DS3 simplex reporting requirement. In particular, MCI estimates that if the Commission implements the DS3 simplex reporting requirement, it will be required to file close to 7,000 to 8,000 additional outage reports per year.

4. The architecture of the transport network element often includes multiple paths – a working and a protect path. The working path carries 100% of the DS3 traffic during normal operations; the protect path operates as a failsafe or backup in the event of failure of the working path. A simplex event occurs when either the working or protect path fails. However, a simplex event results in no loss of service to the end user because if there is a failure in the working path, 100% of the traffic is carried over the protect path.

5. The reporting requirement for protect-path routing is thus inconsistent with the FCC's own definition of "outage." An "outage" is defined in the new rules as "a significant degradation in the ability of an end user to establish and maintain a channel of communications as a result of failure or degradation in the performance of a communications provider's network." As highlighted above, in the case of a protect-path routing scenario, there is no degradation – let alone a "significant" degradation – in an end user's ability to establish and maintain a communications channel. By definition, upon failure of the primary path, the communications channel will switch to the protect-

path – with no degradation in quality or availability. For that reason, MCI currently does not perform the type of analysis that would be required for outage reporting of a DS3 simplex event, since there is no customer impact and no “outage” has occurred.

6. In order to comply with the new DS3 simplex reporting requirement, I estimate that it would cost the company approximately \$1.0 million dollars annually. The additional cost would be largely due to the substantial volume of reportable events that would be required. This cost would include additional man hours necessary to provide the monitoring, analysis of root cause, and reporting required pursuant to the Commission’s Rules. Among other things, the new DS3 simplex reporting requirement would require MCI to direct personnel to manually search for and count the number of DS3s that are on a particular network element to determine the number of DS3 minutes required for the Commission’s formula of reportable events of 1,350 DS3 minutes or more.

I hereby declare under penalty of perjury under the laws of the United States of America that the foregoing is true and correct to the best of my knowledge, information, and belief.

  
Perry Taylor

Executed this 21st day of December, 2004.