

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20544**

In the Matter of

Developing a Unified Intercarrier
Compensation Regime

CC Docket No. 01-92

COMMENTS OF VERIZON ON THE MISSOULA PHANTOM TRAFFIC PROPOSAL

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TABLE OF CONTENTS

	Page
INTRODUCTION AND SUMMARY	1
DISCUSSION	3
I. CARRIERS ALREADY HAVE THE TOOLS NEEDED TO BILL FOR SO-CALLED "PHANTOM TRAFFIC"	3
II. THE MISSOULA PROPOSAL TO EXPAND BILLING RECORDS IS A COSTLY AND BURDENSOME SOLUTION IN SEARCH OF A PROBLEM	10
A. The Missoula Proposal Would Require Transit Carriers To Create And Distribute Unnecessary Billing Records That Would Cause More Problems Than They Would Solve.....	11
B. The Missoula Proposal's New Billing Record Rules Would Require Carriers To Make Changes To Their Networks That Would Be Costly At Best, And Possibly Infeasible.....	13
C. The Missoula Proposal Does Not Adequately Address The Costs And Time Required To Implement The Network Changes That The Proposal Would Require	19
III. THE MISSOULA PROPOSAL'S TRAFFIC LABELING RULES WOULD IMPOSE NEW REGULATORY BURDENS AND PROCEDURES BUT FAIL TO ENSURE PROPER CALL SIGNALING	23
A. The Missoula Proposal's Signaling Rules Impose Heavy-Handed Regulatory Burdens Without Establishing Standards For One Of The Key Signaling Parameters Used For Billing.....	24
1. The Missoula Proposal's Signaling Rules Fail To Address A Key Signaling Parameter	24
2. The Missoula Proposal Errs In Its Approach To Technological Limitations And Industry Standards Affecting Signaling.....	27
B. The Missoula Proposal Imposes New, Unnecessary, And Unworkable Enforcement Provisions For Its Proposed Signaling Rules	30
IV. THE COMMISSION SHOULD REJECT THIS PLAN BECAUSE IT WOULD CAUSE THE COMMISSION TO RESOLVE VOIP ISSUES WITHOUT FULL CONSIDERATION OF THOSE ISSUES.....	33
CONCLUSION.....	34

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INTRODUCTION AND SUMMARY

The Missoula Plan proponents have put forth an interim proposal, which they claim should be adopted “immediately” in order to remedy the so-called “phantom traffic issues” that purportedly “plague the industry.”² But there is no support for these “sky-is-falling” claims and no reason for the Commission to move — “immediately” or otherwise — to adopt this profoundly flawed “interim” solution. Indeed, to date, there is no record evidence that substantiates the various assertions about the extent or causes of “phantom traffic,” despite the fact that mid-sized and rural carriers have been claiming for years that “immediate” action is needed to solve this supposed problem.

As Verizon has explained, what the Missoula Plan supporters call “phantom traffic” can, in fact, be billed using cost-effective tools that are available and widely used throughout the industry today, including the use of billing factors set out in contracts and tariffs.³ The Missoula

¹ The Verizon companies participating in this filing (“Verizon”) are the regulated, wholly owned subsidiaries of Verizon Communications Inc.

² Letter from the Supporters of the Missoula Plan to Marlene Dortch, CC Docket No. 01-92 (Nov. 6, 2006).

³ See, e.g., Comments of Verizon on the Missoula Plan, CC Docket No. 01-92, at 36-37 (filed Oct. 25, 2006); Attachment to Letter from Donna Epps to Marlene Dortch, CC Docket No.

Plan supporters nevertheless propose sweeping regulatory reform that will cost the industry hundreds of millions of dollars to implement, all in the name of “solving” a claimed billing problem for traffic that can already be billed using existing tools. That proposal should be rejected.

The centerpiece of this faulty scheme, and the primary cause of these exorbitant implementation costs, is the proposed requirement that transit providers create and distribute billing records for *all* transit traffic — including traffic that is compensated today according to long-standing industry arrangements that do not rely on billing records and for which billing records therefore are unnecessary. At the same time, the proposal purports to impose rules governing the Signaling System 7 (“SS7”) signaling parameters that are used in creating these billing records, yet those proposed rules fail to codify standards for the call signaling parameter most often used today to disguise jurisdiction in billing records. The Commission can and should address “phantom traffic” instead by enforcing existing rules to combat deliberate manipulation of signaling information and by enacting the targeted signaling rules Verizon proposes to close any loopholes in signaling standards today — not by adopting the unwarranted, heavy-handed regulatory regime proposed by the Missoula supporters.

Not only is the Missoula Plan proponents’ heavy-handed regulatory proposal unwarranted by claimed billing problems related to “phantom traffic,” but also wrapped within the proposal are substantive determinations about the intercarrier rates that should apply to VoIP traffic. *See* Missoula Phantom Traffic Proposal at App. B.⁴ To date, the Commission has not directly ruled on that question. The Commission’s first express ruling on the appropriate rate(s)

01-92 (Nov. 1, 2006); Attachment to Letter from Donna Epps to Marlene Dortch enclosing white paper, CC Docket No. 01-92 (Dec. 20, 2005) (“Verizon Phantom Traffic White Paper”).

⁴ Attachment to Letter from the Supporters of the Missoula Plan to Marlene Dortch, CC Docket No. 01-92 (Nov. 6, 2006) (“Missoula Phantom Traffic Proposal” or “Proposal”).

for VoIP-to-PSTN traffic should occur when it issues a substantive ruling in the Intercarrier Compensation docket, not in the context of an “interim” plan to address so-called “phantom traffic.” Moreover, because related issues involving VoIP and IP-enabled services are pending in other dockets, action on this interim plan would, at the very least, appear to prejudge issues in those other dockets. Nor can the Missoula supporters’ proposals about VoIP be divorced from the “comprehensive” nature of the regulations they have proposed. This is an independent reason why the Commission should reject the Missoula Phantom Traffic Proposal in its entirety.

DISCUSSION

I. CARRIERS ALREADY HAVE THE TOOLS NEEDED TO BILL FOR SO-CALLED “PHANTOM TRAFFIC”

For years now, certain carriers have sounded alarms about “phantom traffic,” claiming that it accounts for a high percentage of the traffic they receive and that they suffer significant revenue losses because of this mysterious traffic they purportedly cannot bill.⁵ As before, they urge the Commission to act immediately to resolve this “crisis.” Yet, with each passing year, proponents of “phantom traffic” reform have not provided any actual evidence to support the alleged massive scope of this problem. Instead, they have made assertions about the percentage of calls that are “phantom,” and thus supposedly “unbillable,” without providing any of the backup data that would be necessary to test and evaluate those assertions.

Proponents of “phantom traffic” regulation, moreover, have used that term indiscriminately to refer to two distinct types of traffic that are allegedly “unbillable”: (1) traffic for which the terminating carrier asserts that it cannot identify the carrier responsible for

⁵ See, e.g., Comments of the National Telecommunications Cooperative Association, CC Docket No. 01-92, at 51-54 (May 23, 2005); Comments of PrairieWave Telecommunications, Inc., CC Docket No. 01-92, at 4-5 (May 23, 2005); Comments of TDS Telecommunications Corp., CC Docket No. 01-92, at 10-12 (May 23, 2005).

payment; and (2) traffic for which the terminating carrier does not know the jurisdiction, and therefore is unsure of what rate to apply. Under this broad definition, “phantom traffic” affects *all* carriers throughout the telecommunications industry. Larger carriers that own their own tandems, as well as smaller carriers that subtend others’ tandems, receive traffic that cannot be jurisdictionalized based solely on the call origination information contained in signaling or in terminating billing records. “Phantom traffic” therefore affects all carriers’ abilities to bill for traffic that they terminate to their own end users. In addition, because many tandem providers’ transit rates vary according to the jurisdiction of the call, “phantom traffic” affects a carrier’s billing even when the carrier is performing only a transiting function. For example, Verizon estimates that approximately 20% of the traffic that either transits over or terminates on Verizon’s network either is missing calling party information entirely or contains plainly invalid calling party data, affecting Verizon’s ability to bill for both termination and transit.

That so-called “phantom traffic” exists, however, does not necessarily mean that the terminating carrier — the carrier entitled to payment — is left uncompensated and unable to bill for this traffic. There are numerous existing mechanisms already in place to deal with such traffic. For example, intraLATA traffic exchanged among rural LECs is often compensated through IntraLATA Toll Originating Responsibility Plan (“ITORP”) or IntraLATA Toll Access Compensation (“ITAC”) arrangements that long predate the Communications Act, whereby intercarrier payments are calculated by a central clearinghouse authority within each state using retail records — not either terminating billing records or signaling information.⁶ Neighboring rural LECs also often have long-standing arrangements for the exchange of local or “EAS”

⁶ See Letter from Donna Epps to Marlene Dortch, CC Docket No. 01-92, at 4 (filed Dec. 20, 2005) (responding to proposal submitted by the Mid Sized Coalition).

traffic. Carriers receive compensation or other value for terminating this traffic unaffected by “phantom traffic.”

The other traffic that carriers terminate is also billable despite being “phantom traffic.” That is because carriers already have tools and methods that, when used properly, enable them to determine both the financially responsible carrier and the applicable billing rate. In those cases where traffic transits a tandem, the tandem owner can determine the carrier responsible for payment by looking to the trunk group over which the call arrived at the tandem, because each incoming trunk is assigned to a particular interconnecting carrier.⁷ If the tandem owner is also the terminating carrier, it can use that information to identify the carrier from which to seek payment. The carrier responsible for payment cannot, however, be determined by looking to the SS7 stream. Pursuant to industry standards, the carrier responsible for payment is not included in signaling. The financially responsible carrier must instead be identified based on the incoming trunk group.

In those cases where the tandem provider serves a transit function and passes third-party traffic on to a different carrier for termination, industry practices (when properly followed) also provide the terminating carrier the tools for billing. For transit traffic not subject to one of the alternative compensation arrangements discussed above, the transit provider creates billing records for the terminating carrier.⁸ These billing records contain fields for specific billing

⁷ The same method is also used, for example, when interexchange carriers purchase direct interconnection to a carrier’s end office; the terminating carrier can determine the carrier responsible for payment merely by looking to the incoming trunk group.

⁸ For ease of reference, Verizon uses the term “billing records” to refer to Category 11 Electronic Message Interface (“EMI”) records. These records contain itemized information for each call, and are created and formatted pursuant to industry standards and provided in electronic format to the terminating carrier. The Missoula Plan refers to these billing records as “call detail records.” See Missoula Phantom Traffic Proposal at 3. Surprisingly, the Missoula Proposal would have the industry take a step backward and utilize call summary reports for a period of

information, and the content of these fields is dictated by industry standards that have been incorporated into the design of the switch recording equipment. The fields of the billing records are filled with information that is automatically gleaned and recorded at the tandem switch from a variety of sources, including but not limited to the SS7 signaling stream. Just as it would do for its own terminating traffic, the transit provider determines the carrier responsible for payment by looking to the trunk group over which the call arrived at the tandem. The transit provider then populates the billing record with a code identifying the carrier to which that trunk is assigned, using either a "carrier identification code" ("CIC") if the carrier is an IXC or an "operating company number" ("OCN") if the carrier is not an IXC.

These billing records also provide terminating carriers the necessary information to determine which billing rate to apply. Standardized industry billing records contain a single field for each telephone call for the "from number," which many carriers use (along with the "to number") to determine the jurisdiction of many types of calls for billing purposes. Pursuant to industry standards, which have been incorporated into the design of most switch recording equipment in the industry, the "from number" field in the billing record is populated by recording information that appears in the SS7 signaling stream, in either the calling party telephone number ("CPN") field or the charge number field.⁹

time, rather than the Category 11 EMI records that are standard in the industry and documented by the Ordering and Billing Forum ("OBF").

⁹ The charge number is the calling party's billing number, which may or may not be the same as the CPN. In the case of ordinary residential users, the charge number is often the same as the CPN. On the other hand, a business customer may have a single charge number associated with several different end user telephone numbers. In the case of a call originating from such a business customer, the SS7 signaling stream should contain the specific telephone number originating the call in the CPN field, as well as the charge number in the CN field. If the CPN and CN are the same, however, the originating carrier need not populate the CN field.

Because the CPN or charge number in billing records is recorded from information in the SS7 stream, the jurisdictional information in those records is only as good as the signaling information that the transit provider receives from the previous carrier in the call path. For example, in some cases, the call arrives at the tandem with no CPN or charge number in the SS7 signaling stream at all. Other times, the call may arrive at the tandem with a patently invalid CPN and charge number in the SS7 stream, such as 999-999-9999. Verizon estimates that approximately 20% of the traffic that either transits over or terminates on Verizon's network either is the missing CPN and charge number entirely or contains plainly invalid data in the SS7 stream. When a transit provider receives a call with missing or invalid CPN and charge number information in the SS7 signaling stream, the billing record it provides to the terminating carrier will have missing or invalid information as well.

A missing or invalid "from number" in the billing record — whether or not a result of deliberate misconduct — does not mean that traffic is unbillable. The billing record still identifies the carrier responsible for payment, and therefore provides the terminating carrier the information needed to determine the applicable rate to bill. As long as the identity of the responsible carrier is known, carriers can bill for terminating traffic using a long-standing industry method known as "factoring" to approximate the jurisdiction of the traffic received and to determine the rate to apply, both for traffic that terminates on the carrier's own network as well as traffic that merely transits the carrier's network.

Typically, in factoring arrangements, the carrier responsible for payment (as identified on the billing record) uses traffic studies to develop estimates about what percentage of its traffic to the terminating carrier is local, intrastate toll, and interstate toll (or in the case of wireless traffic,

intra- or interMTA).¹⁰ These percentages, or “factors,” are then used to approximate the jurisdiction of the traffic in question and to calculate the appropriate intercarrier compensation that the financially responsible carrier must pay. For example, Verizon and other carriers often include factoring provisions in contracts and access tariffs to determine the jurisdiction and applicable billing rates for calls that lack a valid CPN or charge number.¹¹ Verizon and other carriers also often agree to use factoring to determine the jurisdiction of *all* wireless-originated calls, because for such calls the CPN will not necessarily reflect the geographic location of the calling party.

Factoring arrangements thus complement billing records to enable carriers to bill for terminating traffic today. Billing records identify the carrier responsible for payment and, in most cases, provide a “from number” that many carriers use to determine jurisdiction and the applicable billing rate. Factoring arrangements provide a simple, cost-effective mechanism for estimating the jurisdictional mix of any traffic for which the “from number” in the billing record does not indicate jurisdiction, so that carriers can determine the applicable billing rate. These long-standing and widely used tools, along with alternative billing arrangements such as ITORP or ITAC, provide carriers all the information needed to bill, or otherwise to receive compensation for, the traffic that they terminate.

¹⁰ These percentages, or factors, are commonly referred to in tariffs as “percent local usage (PLU) factors” and “percent interstate usage (PIU) factors.” *See, e.g.*, Verizon FCC Tariff No. 1 § 2.3.10 (discussing the use of percent interstate usage factors, or PIU factors, to determine the jurisdiction of switched access traffic); National Exchange Carrier Association, Inc. (“NECA”), FCC Tariff No. 5 §§ 2.3.11, 6.3.1(A) (same).

¹¹ *See, e.g.*, Verizon FCC Tariff No. 1 § 2.3.10 (discussing the use of percent interstate usage factors, or PIU factors, to determine the jurisdiction of switched access traffic); NECA FCC Tariff No. 5 §§ 2.3.11, 6.3.1(A) (same); Letter from Donna Epps to Marlene Dortch, CC Docket No. 01-92 (Aug. 9, 2005) (discussing and providing examples of Verizon’s contractual provisions regarding factoring).

There are, however, issues with deliberate carrier misconduct to disguise jurisdictional information in an attempt to pay a lower rate or to get paid a higher rate than should actually apply to the traffic. Carriers do so by removing, or failing to insert the CPN or charge number in the SS7 stream; inserting an invalid CPN or charge number into the SS7 stream; or altering the CPN or charge number to suggest a different calling party location. Although factoring and other industry methods, when properly applied, still enable carriers to bill a rate for this traffic, the first step to combat such misconduct and to ensure that the *correct* rate is charged is for the Commission to enforce its existing rules. For example, the Commission has held that a carrier “act[s] unreasonably, in violation of section 201(b) of the Act” when it fails “to prevent toll fraud.”¹² By extension, the willful manipulation of SS7 data to avoid paying applicable charges also constitutes an unjust and unreasonable practice under § 201(b). Similarly, 47 C.F.R. § 64.1600(f) requires carriers “to transmit the [CPN] associated with an interstate call to interconnecting carriers.” A carrier that alters the CPN as part of a scheme to avoid paying applicable charges violates that provision by “thwart[ing] and imped[ing] federal goals for interstate CPN-based services.”¹³ As discussed further below, Verizon believes that the one, limited appropriate regulatory response to “phantom traffic” is for the Commission to clarify its signaling rules with respect to *both* CPN and the charge number — something that the Missoula supporters’ Plan fails to do — so that such willful manipulation is even more clearly unlawful.

¹² Letter from Gregory A. Weiss, Acting Chief, Enforcement Bureau, FCC, to Greg Casey, Oncor Communications, 10 FCC Rcd 2754, 2754 (1995); *General Plumbing Corp. v. New York Tel. Co.*, 11 FCC Rcd 11799, 11809, ¶ 20 (1996).

¹³ Second Report and Order, 10 FCC Rcd at 11731, ¶ 86.

II. THE MISSOULA PROPOSAL TO EXPAND BILLING RECORDS IS A COSTLY AND BURDENSOME SOLUTION IN SEARCH OF A PROBLEM

The Missoula Plan supporters would have the Commission ignore the tools and compensation arrangements that the industry has used successfully for decades to bill for the exchange of traffic. They effectively ask the Commission to do away with arrangements such as ITORP and ITAC, and instead to impose a new, omnibus regulatory regime requiring massive network upgrades and reconfigurations to create unnecessary, duplicative billing records, which Verizon estimates would cost Verizon *alone* as much as \$250 million to implement. The magnitude of those implementation costs suggests that the Missoula Plan supporters have not made it a priority to find cost-effective solutions to their perceived billing problems.

This failure is made particularly clear by the separate amendment proposed by the supporters of the Missoula Plan in their comments, which would enable rate-of-return carriers — and only rate-of-return carriers — to recover from the Restructure Mechanism “[a]dditional costs caused by the Plan . . . resulting from implementation of the Phantom Traffic proposal.”¹⁴ Therefore, Track 1 carriers like Verizon would be doubly penalized under the Missoula Phantom Traffic Proposal. They would bear the lion’s share of implementation costs and other burdens of upgrading and re-engineering the public switched telephone network to solve rural and mid-sized carriers’ billing “problems” — problems that the Track 1 carriers do not share because they use the cost-effective remedies that already exist. And these same carriers would be required to absorb these substantial costs while also almost certainly subsidizing the costs of rural and mid-sized carriers, which can recover “phantom traffic” implementation costs from the Restructure Mechanism. For each of these reasons as well, the Proposal must be rejected.

¹⁴ Comments of the Supporters of the Missoula Plan, CC Docket No. 01-92, Attach. A, at 4 (filed Oct. 25, 2006) (amending Missoula Plan § VI.A.1.e.i).

A. The Missoula Proposal Would Require Transit Carriers To Create And Distribute Unnecessary Billing Records That Would Cause More Problems Than They Would Solve

The unwarranted costs and other burdens of implementing the Missoula Phantom Traffic Proposal turn primarily on its provisions regarding the creation and distribution of new billing records. The Proposal would impose, for the first time, a uniform regulatory requirement that transit providers create “call detail records” or “call summary information” reports for *all* transit traffic that traverses their networks. See Missoula Phantom Traffic Proposal at 2. Call detail records, as defined in the proposal, are the same itemized billing records that transit providers currently create for transit traffic not subject to alternative compensation arrangements such as ITORP or ITAC. Call summary reports, on the other hand, summarize aggregated data for all the traffic exchanged between two carriers. The Proposal would also impose, for the first time, a requirement that the transit provider distribute those billing records or summary records to parties *other* than the terminating carrier: namely, to any other carrier to which the transit provider is directly connected that stands between it and the terminating carrier in the call path.

Creating new billing records and distributing billing records to additional parties as proposed is simply unnecessary in light of the methods and arrangements already in place throughout the industry. Under industry standards today, transit providers do not create billing records for *all* of the traffic that they pass on to other carriers for termination, and with good reason. This is because the industry has developed other methods for ensuring that terminating carriers are compensated for certain categories of traffic, such as traffic exchanged under intraLATA toll traffic compensated through ITORP or ITAC clearinghouse arrangements. For those categories of traffic, no billing records are necessary. Indeed, even the Missoula supporters’ original submission at least gave lip service to the fact that billing records are not

necessary for some categories of traffic. *See* July 18 Missoula Plan at 61.¹⁵ Yet the latest Proposal ignores this fact and would require transit providers to create and distribute billing records for *all* transit traffic — whether needed or not.¹⁶ Verizon estimates that such a rule would require a typical tandem office to generate or process approximately 250% more billing records than are created and distributed today. The Missoula supporters have yet to explain why these additional records are necessary or what carriers would even do with them.

More importantly, the additional billing records that would be required by Missoula would not be merely superfluous — they would cause harm. The additional billing records that would be generated under the Proposal would substantially *increase* — rather than reduce — carriers’ burdens and costs in billing for intercarrier compensation, and would almost certainly lead to additional confusion, double billing, and additional billing disputes. As Verizon has discussed in prior *ex parte* meetings, proper billing using billing records is a multi-step process in which terminating carriers must compare and reconcile billing records received from the

¹⁵ The Missoula Plan submitted on July 18, 2006, contains the call signaling rules for the Missoula Phantom Traffic Proposal, as well as the preliminary outlines of the proposal regarding billing records. To distinguish the two submissions, the original Missoula Plan submission is cited as “July 18 Missoula Plan.”

¹⁶ The Missoula Proposal’s provision that carriers may agree to alternative arrangements does not provide a meaningful exception from its proposed billing record regime, for two reasons. *See* Missoula Phantom Traffic Proposal at 1, n.1. First, because the burden of creating a billing record for a particular call falls not on the terminating carrier receiving the billing record, but rather on other carriers in the call path, terminating carriers have little incentive to affirmatively opt out of receiving them. Second, and more importantly, all of the upgrades and reconfigurations that tandem providers and originating carriers will need to make in order to create billing records will be required even if only *one* carrier that terminates their traffic insists on receiving the terminating billing records required by Missoula. Thus, transit providers and originating carriers that must implement changes to their facilities will not be relieved of the exorbitant costs of those upgrades unless every carrier terminating their traffic waives the billing records under Missoula. Missoula’s allowance for alternative arrangements therefore does not provide meaningful relief from the burdens of implementing its billing record regime. *See infra* § II.B.

transit provider with the carrier's own switch recordings in order to eliminate duplication.¹⁷

Such reconciliation can be a time consuming and often complex process even today. Generating more billing records will do nothing to solve the problem of traffic that arrives at a tandem without proper billing information. In such cases, the Missoula Proposal would require the tandem owner to generate a billing record that does not contain proper billing information. In addition, even when terminating carriers do receive proper billing records, their failure to reconcile those records properly can lead to double billing, as the terminating carrier fails to match up duplicate records for a single call and therefore bills *both* the transit provider *and* the financially responsible carrier. Carriers invest substantial resources today investigating and attempting to resolve intercarrier billing disputes that stem from terminating carriers' failure properly to reconcile billing records. Increasing the likelihood that the terminating carrier has two or more billing records for the same call will only multiply the costs, burdens, and difficulties associated with processing these records, leading to more double billing, more billing disputes, and more resources devoted to resolving those disputes.

B. The Missoula Proposal's New Billing Record Rules Would Require Carriers To Make Changes To Their Networks That Would Be Costly At Best, And Possibly Infeasible

Ironically, under the Missoula Proposal, carriers — particularly large ILECs such as Verizon — would be required to expend substantial sums in network upgrades in order to produce the additional billing records that would cause these additional billing problems. The Missoula supporters refer to their Proposal as an “interim” solution, suggesting that their solution is a temporary measure that would be easy to implement in the short term. That is far from the case. Because carriers have not needed billing records for certain categories of traffic (and still

¹⁷ See Attachment to Letter from Donna Epps to Marlene Dortch, CC Docket No. 01-92, at Slides 9-10 (filed Oct. 21, 2005).

do not), many tandem switches and end office switches, as well as the trunk groups connecting those switches to other carriers, are not currently configured to record the call information needed to produce billing records for that traffic. That the Missoula Proposal would give transit providers the option of producing “call summary” information instead of itemized billing records does not eliminate the problem. A switch or trunk group that is not set up to record traffic cannot record traffic, regardless of whether the information is ultimately to be presented in itemized EMI or summary format. The Missoula Proposal would therefore require costly and time consuming upgrades at both tandems and end offices — all to produce billing records that are not needed, will not solve the problem, and will only further complicate billing.

For example, Verizon’s network is not currently equipped to record some carriers’ local, EAS, and intraLATA toll traffic that transits Verizon tandems, because those carriers have longstanding arrangements to receive compensation or value for that traffic through other means, such as bill-and-keep agreements or ITORP or ITAC arrangements. If Verizon were required to begin recording transit traffic from these carriers at the tandem, it would have to invest in capital upgrades to its equipment at each of more than 200 tandem offices.

Upgrades at the tandem are only part of the story, however. Additional upgrades would be needed as well, because tandem providers are not able to sort traffic within a single trunk group to record only part of that traffic — the tandem must record either all of the traffic on a trunk group, or none. This limitation becomes an issue because rural and mid-sized ILECs subtending another carrier’s tandem often send all of their traffic — access, local, and intraLATA toll — to the tandem commingled on a single, non-recording trunk group. These subtending ILECs generally chose to establish their connections to the tandem in this manner for two reasons. First, their local and intraLATA toll traffic is compensated through arrangements

that do not require terminating billing records, such as ITORP or ITAC. Second, pursuant to industry standards, the intercarrier billing records for originating access are created at the originating end office — not at the tandem — enabling these ILECs to choose to send their traffic to the tandem commingled on a single, non-recording trunk group.¹⁸

Under the Missoula Proposal, however, the tandem provider would have the obligation to provide billing records to terminating carriers for each subtending ILEC's local, EAS, and intraLATA toll traffic. Yet, the tandem provider still would not be required to (and should not) record the subtending ILEC's originating access traffic, because the originating ILEC would continue to create its own originating access records at the end office with which to bill interexchange carriers.¹⁹ And, because the tandem provider cannot selectively record only part of the traffic on a single trunk group, the tandem provider cannot create billing records for just the ILEC's non-access traffic as long as the ILEC uses a single, non-recording trunk to connect to the tandem.

To address this problem, the Missoula supporters propose two options for recording this ILEC traffic, either of which would require additional upgrades and expenditures for every ILEC end office that subtends a foreign carrier's tandem. One option is for the subtending ILEC to create the billing records for its outgoing traffic at its own end office and to forward those records to the tandem, and for the tandem then to distribute those billing records on to downstream carriers. The other option is for the subtending ILEC to replace its single, non-recording trunk to the tandem with separate trunk groups — one dedicated to access traffic (which would be recorded at the end office) and another dedicated to non-access traffic (which

¹⁸ By contrast, most CLECs subtending Verizon tandems already have separate trunks for access and non-access traffic.

¹⁹ See Missoula Phantom Traffic Proposal at 1-2 (access traffic would continue to be governed by MECAB standards).

would be recorded at the tandem). The Missoula Proposal erroneously grants the subtending ILEC the sole responsibility for deciding which of these two options to choose, regardless of the burdens that those choices would place on the tandem provider. For example, if the subtending ILEC chose to establish separate trunks to the tandem, the tandem provider may be put at risk of tandem exhaust. Similarly, if the subtending ILEC chose to create its own records, the tandem provider may have even greater difficulty determining to which downstream carrier or carriers the records must be distributed. Regardless of how the election between the two options is made, both options would require substantial capital expenditures to upgrade either the end office switch or the trunk groups connecting the end office and the tandem.²⁰

Moreover, carriers would face the full cost and other burdens of adding these capabilities to create these new billing records, even if some carriers agreed that they did not need or want the new terminating billing records that the Missoula Proposal would require.²¹ This is because the functionalities needed to record traffic and produce billing records are not implemented by the terminating carrier desiring billing records, but by upstream carriers originating or transiting the traffic. Regardless of whether the recordings are actually made at the originating ILEC end office or at the tandem, the recordings needed to create billing records cannot be made selectively only for the traffic terminating to a particular carrier. Thus, even if some carriers are willing to enter into alternative arrangements other than what is provided in the Proposal, thereby reducing the number of new billing records, tandem providers and ILECs subtending foreign tandems would be faced with making the same upgrades (and incurring the same implementation costs) as if every carrier insisted on receiving those records.

²⁰ See also Letter from Donna Epps to Marlene Dortch, CC Docket No. 01-92 (filed Mar. 30, 2006) (discussing the technological upgrades necessary to create new billing records).

²¹ See Missoula Phantom Traffic Proposal at 1 n.1 (carriers may negotiate different agreements regarding billing records for terminating traffic).

All told, the Missoula Proposal's requirement to create additional, unnecessary billing records would require the industry to make substantial capital investments to implement these new capabilities. Verizon alone would have to upgrade to all of its approximately 200 tandem offices, as well as approximately 220 of its end offices that subtend other carriers' tandems. Verizon estimates that these capital investments would cost Verizon *alone* as much as \$250 million — all spent to produce billing records that will cause more harm than good, and to address a purported “phantom traffic” problem that has been highly exaggerated. Moreover, this figure is for Verizon only, and does not include the amount that other ILECs subtending Verizon tandems would have to spend either to upgrade their own end offices to create new billing records or to establish separate trunks into Verizon's tandems. The massive costs to the industry inherent in the Missoula Proposal cannot be justified when carriers already have the tools and arrangements available to bill for so-called “phantom traffic.” This reason alone is sufficient for the Commission to reject the Missoula Phantom Traffic Proposal out of hand.

But there is more. The proposed requirement to create additional, unnecessary billing records is not the only part of the Missoula Proposal's billing record regime that would impose additional burdens and costs on the industry. Requiring transit providers to distribute these records to a downstream transit provider, rather than just to the terminating carrier, would require network upgrades — and new capital investments — as well. Today, Verizon's tandems record traffic only as it is coming *into* the tandem, and Verizon creates its billing records based on those recordings. Verizon delivers billing records to the terminating carrier, using the called party number or Location Routing Number (“LRN”)²² in the billing record itself to identify that carrier. There is nothing in the billing record, however, that identifies downstream carriers other

²² The Location Routing Number or “LRN” is used to identify the terminating end office for ported or pooled numbers.

than the terminating carrier, and Verizon does not make a record of which trunk a call travels when *leaving* the tandem office. In some cases, there is only one route between Verizon's tandem and the terminating carrier's end office, in which case Verizon will know the path that the call traveled to the terminating carrier, including any intermediate carriers in that path. But in many cases, there are two or more possible routes between a Verizon tandem and the terminating end office, and one or more of those paths may travel through an intermediate carrier. In such cases, Verizon would have no way of knowing which calls were delivered directly to the terminating carrier and which calls were instead transited by intermediate carriers on their way to the terminating end office. Verizon therefore would not know which billing records should be delivered only to the terminating carrier, and which billing records should be delivered both to the terminating carrier and intermediate transit providers.²³

Adding the capability to record both the outgoing trunk group and the incoming trunk group to Verizon's tandem offices in order to comply with the Missoula Proposal would again require upgrades that would come at great cost — and may not even be technically feasible. Although Verizon has learned that there are switch upgrades that could add this capability to a tandem switch, Verizon's preliminary investigation indicates that those upgrades are not compatible with all tandem switches — including many of Verizon's. The Commission should not adopt phantom traffic reform that is simply not feasible for carriers to implement.

²³ The same problem would also arise where subtending ILECs choose to create their own billing records at their end offices, rather than upgrading their trunks into Verizon's tandem. Verizon would not be able to determine from the billing record what path each call took when leaving the Verizon tandem, and therefore would not know which of the subtending ILEC's records should be distributed only to the terminating carrier and which of the records should be distributed both to the terminating carrier and an intermediate transit provider.

C. The Missoula Proposal Does Not Adequately Address The Costs And Time Required To Implement The Network Changes That The Proposal Would Require

Even if the so-called “phantom traffic” problem could justify overhauling the network to add the new capabilities proposed by the Missoula supporters — and it cannot — the Missoula Proposal should still be rejected. The Missoula supporters refer to their Proposal as an “interim” solution, apparently assuming that the network upgrades and reconfigurations that would be required are merely small changes that would be easy and inexpensive to implement in the short term. But as shown above, *see supra* § II.B., that is simply not the case. The Missoula supporters ignore the undertakings necessary to implement their proposal in at least two ways: (1) they fail to provide carriers adequate opportunities to recover those implementation costs, and (2) they fail to provide the industry adequate time to implement the changes that would be required. The Commission should not adopt any new regulatory regime, including the Missoula Proposal, that will require carriers to make substantial upgrades and reconfigurations to their networks without ensuring that carriers have both the opportunity to recover their costs and adequate time to implement the necessary changes. For these reasons as well, the Commission should reject the Missoula Phantom Traffic Proposal.

With regard to cost recovery, the Missoula Proposal contains two provisions that supporters claim will cover the costs of the billing records that would be required: a per-billing record charge and recovery from the Restructure Mechanism. Neither of these provisions will allow carriers, particularly large ILECs like Verizon, any meaningful opportunities to recover the enormous costs of implementing the billing record regime proposed. First, the \$0.0025 charge that transit carriers would be permitted to levy for each billing record does not begin to address the massive costs that the industry will incur. Under the Proposal, transit providers could assess this charge only if the transit provider “does not currently provide call detail records” for free.

Missoula Phantom Traffic Proposal at 10-11. It is not clear whether the Missoula supporters mean to bar a carrier from assessing billing record charges if the carrier provides *any* records free of charge today, or whether the exclusion means only that a carrier cannot impose the charge to provide records for the same categories of traffic that are already being recorded today. For example, Verizon, along with some of the other large ILECs providing tandem transit services, does not charge terminating carriers for the billing records that they create today. Whether Verizon would be able to assess the \$0.0025 charge for these new billing records is far from clear under the Proposal as drafted, despite the fact that it is entirely clear that the Proposal would require Verizon to implement new functionalities to produce billing records on traffic that is not being recorded today.

Even assuming that transit providers could assess the billing record charge on any new billing records created under the Proposal, the per-record charge still would be insufficient to reimburse carriers for the substantial capital expenditures required. The per-record charge appears to be intended to address the incremental costs of providing additional records — not the capital expenditures necessary to make such records possible. Indeed, the Proposal offers no basis for the \$0.0025 charge, and there is certainly no indication that the proponents intended for it to bear any relation to carriers' anticipated implementation costs. This is consistent with the fact that the Proposal neither acknowledges the specific network upgrades that will be required, nor provides any estimates of the total costs that carriers will incur.

Second, the Missoula supporters have also indicated that carriers — or at least, some carriers — would be able to recover their implementation costs through the Restructure Mechanism that accompanies the supporters' overall intercarrier compensation reform proposal. The Missoula supporters' citation to the Restructure Mechanism is insufficient as well, for at

least two reasons. According to the Missoula proponents' comments, rate-of-return carriers — *and only rate-of-return carriers* — would be permitted to recover from the Restructure Mechanism “[a]dditional costs caused by the Plan . . . resulting from implementation of the Phantom Traffic proposal.”²⁴ It is not the rate-of-return carriers, however, that will bear the brunt of the network upgrades and reconfigurations that would be required to implement the Missoula Proposal. Rather, Track 1 carriers like Verizon would bear the lion’s share of implementation costs and other burdens of upgrading and re-engineering the network — notably, to solve phantom traffic billing “problems” that these Track 1 carriers have solved using existing tools and methods such as factoring arrangements. Yet, the Missoula supporters would deny these carriers the ability to recover their implementation costs.

But even assuming that the Missoula supporters had not excluded Track 1 carriers’ implementation costs from the Restructure Mechanism, the Restructure Mechanism still would not provide an adequate answer to the need for cost recovery. The Missoula proponents cast their Phantom Traffic Proposal as an “interim” measure, to be put into place now, *before* the Commission reaches any decision on the broader Missoula Plan. The Restructure Mechanism itself is part of the broader Missoula Plan, and the Missoula supporters have yet to explain how the Restructure Mechanism would be funded, who would fund it, or what carriers would have to demonstrate in order to receive funds from it. The “interim” Missoula Phantom Traffic Proposal would therefore require carriers to incur substantial capital expenditures, with carriers’ ability to recover those costs hanging in the balance, depending on a *second* proposal for additional

²⁴ Attach. A to Comments of the Supporters of the Missoula Plan, at 4 (amending Missoula Plan § VI.A.1.e.i).

regulatory reform, which may not (and should not) ever come to pass.²⁵ The Commission should not implement any proposal that would require carriers to incur such substantial implementation costs without a clear plan for carriers' cost recovery. The Missoula Proposal should be rejected for this reason as well.

Finally, even putting aside the enormous costs involved, the Missoula Proposal does not allow adequate time for the industry to implement the massive network changes it would require. Under the Missoula Proposal, carriers would have only 270 days — approximately 9 months — to complete a laundry list of upgrades and reconfigurations to comply with Missoula's billing record requirements. *See* Missoula Phantom Traffic Proposal at 7. For Verizon alone, the Proposal would require upgrades at approximately 200 tandems to enable those offices (1) to create new billing records, and (2) to record *outgoing* traffic so that billing records can be distributed to carriers other than the terminating carrier — assuming that this second upgrade is even technically feasible. And, in approximately 220 Verizon end offices that subtend another ILEC's tandems, either Verizon's end office facilities would have to be upgraded to record traffic or dedicated access and non-access trunks would have to be established to the tandem, so that the tandem can record the traffic. These end office upgrades would not be limited to large ILECs like Verizon. *Every* ILEC that subtends another ILEC tandem would have to make similar upgrades at *every* end office, either to the end office itself or to the trunks connecting it to the tandem. These are not changes that can occur overnight. The massive capital upgrades that

²⁵ *See generally* Comments of Verizon on the Missoula Plan, CC Docket No. 01-92 (filed Oct. 25, 2006); *see also* Comments of Time Warner Cable at 27, CC Docket No. 01-92 (filed Oct. 25, 2006); Comments of Broadview Networks at ii, CC Docket No. 01-92 (filed Oct. 25, 2006); Comments of Alltel Communications Inc. at 4, CC Docket No. 01-92 (filed Oct. 25, 2006); Comments of CenturyTel, Inc. at 6, CC Docket No. 01-92 (filed Oct. 25, 2006); Comments of Massachusetts Department of Telecommunications and Energy at 14, CC Docket No. 01-92 (filed Oct. 25, 2006).

would be required would put a strain on carriers large and small throughout the industry, as well as on the equipment manufacturers whose products would be needed to make these upgrades.

Verizon estimates that these upgrades would require between 18 and 36 months to implement. Yet, the Missoula Proposal blithely assumes that all of these upgrades could be planned, financed, supplied, and completed within nine months. The Missoula Proposal contains no explanation as to how the apparently arbitrary nine month time frame was chosen. The Proposal neither acknowledges the specific network upgrades that will be required nor explains how carriers could complete those upgrades within such a short time frame. The Commission should not adopt any new regulatory regime that would require the industry to add new capabilities to the network absent a detailed analysis of the capital improvements that would be required and a realistic implementation schedule. For this reason as well, the Commission should reject the Missoula Proposal.

III. THE MISSOULA PROPOSAL'S TRAFFIC LABELING RULES WOULD IMPOSE NEW REGULATORY BURDENS AND PROCEDURES BUT FAIL TO ENSURE PROPER CALL SIGNALING

Despite all its flaws, the Missoula Proposal contains one concept that would assist carriers in their billing for terminating traffic: establishing more detailed standards for the CPN and charge number information in the SS7 signaling stream, which forms the basis for the "from number" field in billing records. Although factoring arrangements already provide carriers with cost-effective methods to bill for traffic when neither the signaling stream nor billing records reveal the jurisdiction of the call, clearer rules governing the information that carriers can and cannot include in signaling the CPN and charge number would improve the information available to terminating carriers, both in the signaling stream itself and in billing records. Accordingly, Verizon has proposed a set of straightforward signaling rules that the Commission can and should adopt to assist carriers in addressing "phantom traffic." Because no signaling

rules can prevent all unlabeled traffic, however, Verizon has also proposed that the Commission encourage carriers to use factors in order to bill any remaining unlabeled traffic. By adopting clarifications to the existing signaling rules and encouraging carriers to employ factoring as needed, the Commission can assist carriers in effectively addressing “phantom traffic” concerns without imposing undue regulatory burdens on the industry or the Commission.²⁶

The Missoula Proposal, by contrast, takes a highly regulatory, and highly flawed, approach to imposing signaling standards. The Proposal’s signaling regime suffers a number of shortcomings, including that the Proposal fails to establish sufficient standards to prevent signaling practices frequently used today to disguise the jurisdiction of a call. The Proposal also fails to acknowledge that even under its rules, carriers will continue to receive traffic with missing or invalid “from number” information. At the same time, the Proposal imposes unnecessary new regulatory burdens and introduces a separate enforcement regime for its signaling rules. The Commission should reject the Missoula Proposal’s signaling rule regime and should instead adopt the signaling rules proposed by Verizon.

A. The Missoula Proposal’s Signaling Rules Impose Heavy-Handed Regulatory Burdens Without Establishing Standards For One Of The Key Signaling Parameters Used For Billing

1. The Missoula Proposal’s Signaling Rules Fail To Address A Key Signaling Parameter

That existing billing records, factoring arrangements, and compensation arrangements such as ITORP or ITAC already provide carriers the necessary tools to receive compensation for traffic terminating on their networks does not mean that there is nothing the Commission can do to improve intercarrier billing records. Pursuant to industry standards, billing records are based in part on information, including jurisdictional indicators, that is recorded directly from the SS7

²⁶ See Verizon Phantom Traffic White Paper at 8-10 & Appendix A.

stream. The jurisdictional information in billing records is therefore only as good as the signaling information that the transit provider receives from the previous carrier in the call path. For this reason, the Commission can and should improve the quality of industry billing information and minimize “phantom traffic” by enacting rules to clarify what information carriers must signal in the SS7 signaling stream.²⁷ The Missoula Proposal’s signaling rules, however, err in attempting to accomplish this goal.

The Missoula Proposal’s signaling rules fail to address the proper signaling of one of the key parameters ultimately used by many carriers in billing: the “charge number” field in SS7 signaling. The “charge number” is the calling party’s billing number, which may or may not be the same as the CPN. In the case of ordinary residential users, the charge number is often the same as the CPN. On the other hand, a business customer, for example, may have a single charge number associated with several different end user telephone numbers. In the case of a call originating from such a business customer, the SS7 signaling stream will contain the CPN for the specific telephone number originating the call, as well as the charge number for the business.

As the Commission recently recognized in the *Prepaid Calling Card Order*,²⁸ the charge number often plays a key role in billing because standardized billing records include a single field for the “from number,” which many terminating carriers use to determine the jurisdiction of the call for billing purposes. Pursuant to industry standards, as well as the design of most switching equipment in the industry, the “from number” field in the billing record is populated

²⁷ Verizon Phantom Traffic White Paper at 5-7.

²⁸ Regulation of Prepaid Calling Card Services, WC Docket No. 05-68, FCC 06-79 (rel. June 30, 2006) at ¶¶ 33-34 (“Prepaid Calling Card Order”).

with the *charge number* that is transmitted through the SS7 signaling stream — *not the CPN*.²⁹ CPN is recorded in the billing record only if the SS7 stream contains no charge number or if the charge number and the CPN are the same. Thus, to prevent carriers from using signaling information to manipulate the jurisdictional information that appears on call detail records, any new signaling rules must address *both* the CPN *and* the charge number fields. Indeed, the Commission recognized as much in its *Prepaid Calling Card Order*, in which the Commission barred prepaid calling card providers from inserting the platform's phone number into *either* the CPN *or* "charge number" field in SS7.³⁰

The signaling rules in the Missoula Proposal, however, would not prevent carriers from using the charge number field to manipulate the "from number" that will appear in billing records. Although the Missoula Proposal would, with limited exceptions, bar intermediate carriers from changing any information that is signaled to them, the Proposal does not establish sufficient standards for what originating providers must and must not signal in the charge number field in the first place. The Missoula Proposal provides only that:

[a]n originating provider using SS7 signaling protocol must transmit the telephone number assigned to the calling party in *either* the Calling Party Number (CPN) *or* Charge Number (CN) parameters.

²⁹ Prepaid Calling Card Order at ¶¶ 33-34. *See also, e.g.*, Letter from Donna Epps to Marlene Dortch, WC Docket No. 05-68 & CC Docket No. 01-92 (Oct. 7, 2005) (regarding AT&T's prepaid calling card proposal); Letter from Donna Epps to Marlene Dortch, WC Docket No. 05-68 & CC Docket No. 01-92 (Sept. 9, 2005) (same); Telcordia Tech., *Generic Requirements for Exchange Access Automatic Message Accounting (AMA) (FSD 20-25-0000) (GR-1083 CORE)* at Table 5-2 (Issue 5, Sept. 2005).

³⁰ Prepaid Calling Card Order at ¶¶ 33-34.

July 18 Missoula Plan at 56 (emphases added).³¹ In other words, an originating provider may faithfully signal CPN in the CPN field to satisfy its obligations under the Missoula Proposal, but may insert a false or misleading telephone number into the charge number field — knowing that the charge number will be the only number that will appear on billing records.³² The Missoula Proposal therefore leaves a substantial loophole for originating carriers to disguise jurisdiction on billing records by manipulating the charge number. The Commission should not adopt signaling rules that, like the Missoula Proposal, fail to impose standards for the proper signaling of *both* CPN *and* charge number.

2. The Missoula Proposal Errs In Its Approach To Technological Limitations And Industry Standards Affecting Signaling

The Missoula Proposal rightly recognizes that, due to the technological limitations of some network equipment, there will be cases in which a provider cannot signal call detail information. *See* July 18 Missoula Plan at 57-58. The Missoula Proposal, however, errs in at least three ways in its attempt to address exceptions to its proposed signaling rules. First, the Missoula Proposal erroneously attempts to create an exhaustive list of every possible technological limitation that would affect a carrier's signaling. The Missoula Proposal therefore contains exceptions from its call signaling rules for specifically enumerated technological limitations, most of which are related to multi-frequency signaling. Any attempt to foresee every technological limitation that may affect a provider's signaling is almost certain to fall short.

³¹ The Missoula Phantom Traffic Proposal incorporates by reference the signaling and enforcement provisions discussed in the broader Missoula Plan submission on July 18, 2006. *See* Missoula Phantom Traffic Proposal at 2 (cross-referencing and incorporating portions of July 18, 2006 submission).

³² *See* Letter from Donna Epps to Marlene Dortch, WC Docket No. 05-68 & CC Docket No. 01-92 (Oct. 7, 2005); Letter from Donna Epps to Marlene Dortch, WC Docket No. 05-68 & CC Docket No. 01-92 (Sept. 9, 2005).

To be sure, the Missoula Proposal purports to allow for additional technological limitations not foreseen by its rules, but its approach to those additional limitations is to impose additional and undue regulatory burdens. Under the Missoula Proposal, a provider may seek additional exceptions to the signaling rules by posting notice on its website explaining its limitations with “specific evidence.” July 18 Missoula Plan at 58. The Missoula Proposal would therefore require each provider to itemize and describe in detail each of the technological limitations affecting its ability to transmit signaling information. Although the Missoula Proposal does not provide insight as to what is meant by “specific evidence,” such evidence might include information as to the type of equipment deployed, the location where that equipment is deployed, and an explanation as to the limitations of the equipment. Compiling such an inventory of every technical limitation in a network would be a burdensome task, and publicly posting such detailed information about a carrier’s network raises concerns about the public release of proprietary information and compromising security. Yet, under the Missoula Proposal, a carrier would be required to undertake these burdens and post all of this information on its website, even if no downstream carrier had requested such an explanation or even questioned the carrier’s traffic.

Second, the Missoula Proposal also fails to acknowledge the role of industry standards in carriers’ adherence to any new signaling regime. As Verizon has explained in other submissions in this docket, any new signaling rules “should recognize that there are limited circumstances in which existing industry standards permit — even require — intermediate carriers to make some alterations to the CPN and [charge number] data in signaling.”³³ Call forwarding features provide just one example. Pursuant to well-established industry standards, when a call is made

³³ See Verizon Phantom Traffic White Paper at 9.

to a person (“Customer A”) who has forwarded his phone to another person’s number (“Customer B”), Customer A’s carrier will replace the caller’s charge number in the signaling stream with Customer A’s charge number before sending the call on to Customer B’s carrier. The Missoula Proposal, however, provides that an intermediate provider, such as Customer A’s carrier in the illustration above, must transmit the information in the charge number field, without alteration. And, although the Missoula Proposal recognizes that some intermediate carriers may have *technical* limitations affecting their ability to transmit this signaled charge number information, it does not even mention — much less account for — industry standards that may affect signaling, such as these standards applicable for Call Forwarding.³⁴ The Commission should not adopt any signaling rules that, like the Missoula Proposal, would require carriers to change these long-standing practices.

Third, the Missoula Proposal fails to address a number of questions raised by its treatment of exceptions from its signaling rules. Some of these questions arise from the exceptions themselves. For example, the Proposal would require carriers to use SS7 signaling protocol whenever the carrier’s switch is “equipped with SS7 signaling protocol capability.”³⁵ The Proposal does not explain, however, what it means for a switch to be “equipped” for SS7. For a carrier to provide SS7, its switches must contain SS7 capability in the switches themselves *and* the carrier must have established SS7 links to an SS7 Signal Transfer Point (“STP”). It is not clear whether carriers with SS7 capable switches, but no links to an STP, would be deemed “equipped” for SS7 and thus required to establish STP links to come into compliance with the Proposal.

³⁴ See July 18 Missoula Plan at 58 (listing exceptions to the signaling rules for intermediate providers).

³⁵ See July 18 Missoula Plan at 57.

Other questions concern the consequences of the signaling regime the Proposal puts forth. For example, the Proposal does not explain the consequences of its requirement that providers post notice on their websites of any technological limitation that affects signaling and that is not explicitly listed in the proposed rule. It is unclear, therefore, whether a provider that inadvertently fails to identify a particular technological limitation would later be able to rely on that limitation in a billing dispute. The Proposal also requires carriers claiming technological exceptions to “assist” with the identification of traffic upon request, with no explanation as to what type of “assistance” would be required.³⁶

Similarly, although the Proposal sets forth exceptions from the signaling rules, the Proposal does not acknowledge that these exceptions necessarily mean that terminating carriers will continue to receive traffic for which neither billing records nor the SS7 signaling stream itself provide CPN or charge number data. Rather than recognizing that factoring will therefore continue to be a necessary tool for carriers to bill terminating traffic and endorsing factoring as a cost-effective solution, the Missoula Proposal pretends that its signaling rules alone are all that is needed for carriers to determine the jurisdiction of traffic. The Missoula Proposal’s signaling regime therefore raises numerous questions that it leaves unanswered, and the Commission should reject it for that reason as well.

B. The Missoula Proposal Imposes New, Unnecessary, And Unworkable Enforcement Provisions For Its Proposed Signaling Rules

The Missoula Proposal also inexplicably imposes an additional set of new rules to enforce its proposed signaling regime. The Commission already has an array of tools available with which to investigate allegations that a carrier may have violated *any* Commission rule, ranging from formal and informal complaints filed by other carriers to investigations initiated on

³⁶ See July 18 Missoula Plan at 58.

the Commission's own motion.³⁷ The Commission also already has a variety of means of penalizing that carrier if a violation is found.³⁸ The Commission has all of these tools at its disposal, and it can use any and all of these tools to enforce signaling rules.³⁹ The Missoula supporters have offered no explanation as to why they believe the Commission's existing enforcement authority is inadequate, and therefore have provided no basis for their proposed new rules. This reason alone is sufficient to reject the Missoula Proposal's enforcement regime.

In addition, the specific new enforcement provisions set forth in the Missoula Proposal are flawed, and they should be rejected for this reason as well. Under the Proposal, complaints alleging violations of call signaling rules would be placed on the Commission's Accelerated Docket for decision within 60 days. Such a proposal ignores the complexity that would be involved in investigating such a complaint. Calls may pass through multiple carriers' networks between the originating carrier and the terminating carrier. The information in the signaling stream can potentially be altered — whether fraudulently or because of technical limitations or industry standards — by any carrier in that call path. Therefore, in order to determine which carrier in the call path is responsible for any missing, invalid, or changed signaling information, the Commission would have to evaluate the signaling records of each and every carrier in the call path. Such a multi-faceted inquiry simply is not appropriate for accelerated treatment.

³⁷ See, e.g., 47 U.S.C. §§ 208, 403-404.

³⁸ See, e.g., 47 U.S.C. §§ 501-504.

³⁹ In addition to being a violation of any Commission signaling rules, willful manipulation of SS7 information to avoid paying applicable charges may also be sanctionable under additional rules and laws. For example, willful manipulation of SS7 information may satisfy the elements of wire fraud under 18 U.S.C. § 1343, see *United States v. Zagari*, 111 F.3d 307, 327 (2d Cir. 1997), and likely violates any federal interstate access tariffs that contain jurisdictional reporting requirements that specify how a carrier is to determine the percent interstate usage, assuming that the carrier's obligation to pay charges is calculated using this billing factor rather than actual call information.

The new penalty provisions proposed by the Missoula supporters fare no better. The Missoula supporters propose that the Commission order injunctive relief in the form of mandatory direct interconnection for “chronic violators” of any new signaling rules. As an initial matter, the Missoula Proposal provides no insight into what constitutes “chronic” violations, and does not address the Commission’s authority to impose direct connection as injunctive relief in an enforcement proceeding, absent a hearing pursuant to 47 U.S.C. § 201. But even putting aside these legal questions, the Proposal to mandate direct interconnection as a penalty for “chronic” signaling rule violations makes no sense. The Proposal apparently ignores the fact that, particularly in the case of access calls, the “chronic violator” that is responsible for missing or invalid signaling data could be a LEC or IXC located near the originating leg of the call, many states away from the terminating carrier. Direct interconnection in such a scenario is impractical, if not entirely infeasible.

In addition, if a carrier is unable or unwilling to signal or to forward onward correct CPN and/or charge number information in an outgoing SS7 signaling stream, requiring that carrier to connect directly to a terminating carrier will not change that fact or provide a remedy. Unless the offending carrier at the same time changes its SS7 signaling practices, the terminating carrier will continue to receive the same volume of unlabeled traffic from the offending carrier. The only change that will occur is that the unlabeled traffic will arrive on a direct trunk rather than on a trunk from a tandem provider. The terminating carrier will still need to use factors in order to bill the offending carrier for the unlabeled traffic — something that the terminating carrier could already do without direct interconnection, by using existing billing records to identify the traffic attributable to the offending carrier and using factors to jurisdictionalize unlabeled traffic. For

all of these reasons, the special enforcement rules proposed by the Missoula supporters should not be adopted.

IV. THE COMMISSION SHOULD REJECT THIS PLAN BECAUSE IT WOULD CAUSE THE COMMISSION TO RESOLVE VOIP ISSUES WITHOUT FULL CONSIDERATION OF THOSE ISSUES

The Missoula Phantom Traffic Proposal goes beyond simply proposing an unnecessary solution to an already-manageable problem. Wrapped within that proposal are substantive determinations about the intercarrier compensation rates that should apply to VoIP traffic. *See* Missoula Phantom Traffic Proposal at App. B. For example, the Missoula Plan itself purports to resolve whether access charges apply to VoIP-originated traffic and, if so, whether inter- or intrastate access charges. *Id.* (“Whether to apply interstate access charges or reciprocal compensation charges for VoIP-originated traffic terminated on the PSTN will be determined based upon the calling and called telephone numbers beginning at Step 1. Under the Plan, intrastate access charges will not apply to the termination of VoIP-originated traffic.”) (citation omitted). Yet, even though the Missoula Phantom Traffic Proposal is held out as an “interim” measure, to be adopted in advance of the Commission’s evaluation of the overall Missoula Plan, the Phantom Traffic Proposal sets forth billing procedures to determine the applicable rates for VoIP traffic — all of which necessarily assume that the Commission adopts the broader Missoula Plan’s approach to VoIP traffic. Whatever the merits of the Missoula Plan supporters’ views of the correct compensation rates for VoIP-originated traffic, the *Commission* has not yet ruled directly on those substantive questions, which are pending in this docket.

The Commission’s first express ruling on the appropriate rate to apply to VoIP traffic should occur when the Commission completes its work in this docket, and not in the context of an “interim” plan to address the overstated problem of “phantom traffic.” This is particularly true in light of numerous other dockets in which substantive questions regarding the proper

regulation of VoIP and IP-based traffic are pending. To resolve the rates applicable to VoIP-originated traffic in an “interim” proposal at the very least may be seen as prejudging the issues relating to VoIP and IP-enabled services pending in other dockets. It is more appropriate to address such concerns in the existing rulemaking proceedings so that the Commission may develop a comprehensive approach based on a full record.

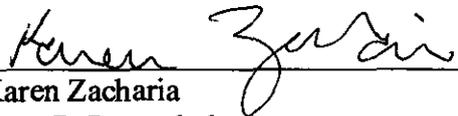
Nor can the flawed VoIP proposal simply be severed from the “phantom traffic” plan proposed by the Missoula supporters. To do so would destroy the “comprehensive” nature of their plan. Much VoIP-originated traffic falls within the broad scope of the interim process, which applies to “wireline and CMRS traffic involving more than two carriers in a call path . . . where such traffic originates, terminates, transits, or is otherwise carried on the public switched telephone network . . . for some portion of the call and the traffic is not subject to the Commission’s requirements for jointly provided tariffed switched access services.” Missoula Phantom Traffic Proposal at 7. If the separate VoIP provisions are removed, the Interim Process will require carriers to identify VoIP-originated traffic in the call signaling or call detail information they exchange. But as the Missoula supporters recognize, “[c]urrent technology does not allow all carriers to” do so. Missoula Phantom Traffic Proposal at App. B. The Commission therefore should reject the Missoula Proposal in its entirety.

CONCLUSION

For all of the reasons discussed above, the Commission should not adopt the Missoula Phantom Traffic Proposal. The Commission should instead adopt the signaling rules proposed by Verizon and should encourage carriers to use factoring arrangements as a cost-effective and non-regulatory means of addressing intercarrier billing for traffic where jurisdiction cannot be determined from the CPN or charge number information in billing records and the SS7 signaling stream.

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