

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

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| In the Matters of |) | |
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| Amendments to Part 4 of the Commission's Rules Concerning Disruptions to Communications |) | PS Docket No. 15-80 |
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| New Part 4 of the Commission's Rules Concerning Disruptions to Communications |) | ET Docket No. 04-35 |
| |) | |
| The Proposed Extension of Part 4 of the Commission's Rules Regarding Outage Reporting to Interconnected Voice Over Internet Protocol Service Providers and Broadband Internet Service Providers |) | PS Docket No. 11-82 |
| |) | |

**COMMENTS OF
ITTA – THE VOICE OF MID-SIZE COMMUNICATIONS COMPANIES**

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**COMMENTS OF
ITTA – THE VOICE OF MID-SIZE COMMUNICATIONS COMPANIES**

ITTA – The Voice of Mid-Size Communications Companies (ITTA) hereby submits its comments in response to the Federal Communications Commission’s Further Notice of Proposed Rulemaking seeking comment on proposals to update further its Part 4¹ outage reporting requirements.²

¹ 47 CFR pt.4.

² *Amendments to Part 4 of the Commission’s Rules Concerning Disruptions to Communications; New Part 4 of the Commission’s Rules Concerning Disruptions to Communications; The Proposed Extension of Part 4 of the Commission’s Rules Regarding Outage Reporting to Interconnected Voice Over Internet Protocol Service Providers and Broadband Internet Service Providers, Report and Order, Further Notice of Proposed Rulemaking, and Order on Reconsideration, 31 FCC Rcd 5817 (2016) (FNPRM).*

I. INTRODUCTION AND SUMMARY

ITTA fully recognizes that promoting “the safety of life and property through the use of wire and radio communication”³ is one of the Commission’s foundational functions, and ITTA appreciates the Commission’s efforts in this proceeding to improve the quality and usefulness of the outage data the Commission receives pursuant to Part 4.⁴ However, the *FNPRM*’s proposals to update these outage reporting requirements to address broadband more comprehensively are a bridge too far. They are unnecessary and excessively burdensome, and would do little to nothing to further the reliability or resiliency of the nation’s communications networks.

The Commission should refrain from adopting unnecessary proposals that would exponentially increase the burdens on providers without producing any tangible public safety benefits. ITTA does not believe the Commission should move forward with its proposal to extend outage reporting requirements to broadband Internet access services (BIAS), nor should it expand those requirements for “dedicated services.” In the event the Commission does misguidedly move forward with this rulemaking, it must limit the undue burdens by adopting a reasonable reporting threshold for hard down outages, moving away from performance degradation reporting requirements, and implementing a two-step outage reporting process with the same reporting timeframes that are currently in place for interconnected VoIP providers. Furthermore, there is no justification for the Commission to require BIAS or dedicated services providers to shoulder the entire responsibility for reporting all broadband outage information. Finally, should the Commission ultimately require broadband outage reporting, it must subject

³ 47 U.S.C. § 151.

⁴ See Reply Comments of ITTA – the Voice of Mid-Size Communications Companies at 1 (filed July 31, 2015) (ITTA 2015 Reply).

the information to strict confidentiality provisions and safeguards against the information's sharing.

II. THE COMMISSION SHOULD NOT EXTEND OUTAGE REPORTING REQUIREMENTS TO BIAS NOR EXPAND THOSE REQUIREMENTS FOR DEDICATED SERVICES

The *FNPRM* portrays an Orwellian specter of Commission "visibility into TDM-based networks while simultaneously ensuring similar visibility into commercial IP and hybrid networks",⁵ and endeavors to pass it off as a mere natural extension of its current Part 4 rules as they apply to voice networks. Putting aside the troublesome details of the Commission's proposals, such an extension is unwarranted as an initial matter. At most, any extension should only apply to broadband outages that *directly* impact 911 special facilities.

A. The *FNPRM*'s Proposals Do Not Sufficiently Account for the Burdens on Smaller Service Providers

As discussed in numerous places below, the Commission fails to realistically account for the burdens that its proposals would wrought. While the Commission goes through the motions of performing cost-benefit analyses, these exercises are devoid of rigor, and especially fail to account for the real-world impacts on smaller providers. ITTA concurs with the critique by Commissioner Pai, who decries the effective lack of cost-benefit analysis. As Commissioner Pai observes, "there is virtually no consideration given to the thousands of small and mid-size providers who are critical to competition in these markets. . . . Many of them have told the FCC that this top-heavy approach to outage reporting will siphon resources away from broadband deployment, slow genuine outage repair, and provide no benefit to consumers."⁶ In the face of

⁵ *FNPRM*, 31 FCC Rcd at 5856, para. 93.

⁶ *FNPRM*, 31 FCC Rcd at 5945, Statement of Commissioner Ajit Pai, Concurring in Part and Dissenting in Part (Pai Statement) (quoting, *inter alia*, ITTA 2015 Reply at 12). *See also id.* at (continued...)

such criticisms, with the stakes so high for smaller service providers, the Commission should not adopt its proposals to extend outage reporting requirements to BIAS or expand those requirements for dedicated services.

B. The Commission Should Not Expand Outage Reporting Requirements for Dedicated Services

In the *FNPRM*, the Commission proposes to “update and clarify” outage reporting requirements for “dedicated services,” which is the term it uses in this proceeding for “special access” services, themselves now subject to the new moniker of “business data services.”⁷ Conceding that such services “are already addressed in part 4 to some extent,” the Commission now seeks to “receive broadband-specific outage information for those services.”⁸ ITTA finds this proposal problematic both as a matter of policy and pragmatically.

As the Commission itself describes in the *FNPRM*, dedicated services “typically provide dedicated symmetrical transmission speeds with performance guarantees,” such as “guarantees on . . . resolving outages.”⁹ Distinguishing dedicated services from BIAS, the Commission elaborates that “BIAS does not include enterprise service offerings, which are typically offered to larger organizations through customized or individually-negotiated arrangements, or special access (‘dedicated’) services.”¹⁰ And as the Commission explained in the *Business Data*

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5948, Statement of Commissioner Michael O’Rielly Concurring in Part, Dissenting in Part (criticizing the *FNPRM*’s cost-benefit analysis).

⁷ *FNPRM*, 31 FCC Rcd at 5864, para. 109. See also, e.g., *id.* at 5856, 5864, para. 93 n.281, para. 109 (equating “dedicated services” with “special access”); *Business Data Services in an Internet Protocol Environment et al.*, Tariff Investigation Order and Further Notice of Proposed Rulemaking, 31 FCC Rcd 4723, 4725, para. 1 n.1 (2016) (*Business Data Services FNPRM*) (hereinafter using the term “business data services” in lieu of “special access”).

⁸ *FNPRM*, 31 FCC Rcd at 5864, para. 109.

⁹ *Id.* at 5867, para. 116 (citing *Business Data Services FNPRM*, 31 FCC Rcd at 4728, para. 13).

¹⁰ *Id.* at 5865, para. 111 n.329.

Services FNPRM, dedicated services refer “to the dedicated point-to-point transmission of data” that are “an important building block for creating private or virtual private networks,” and are purchased by businesses, governmental institutions, mobile wireless providers, and other larger end users for “dedicated access.”¹¹

Given these characteristics of dedicated services – in particular, their *dedicated* use by enterprise purchasers for *point-to-point* data transmissions, typically subject to service-level agreements with provisions governing service outages – it is unclear why the Commission needs “visibility” into any ostensibly reportable outages, especially given the onerous costs of reporting, when their resolution is typically governed by negotiated agreements between the provider and purchaser. In addition, while most forms of dedicated services -- including legacy, lower-bandwidth, TDM-based dedicated services -- are subject to service-level agreements, this is especially true of the non-TDM, higher-bandwidth dedicated services that the *FNPRM*'s proposals are now targeting.¹² In light of these factors, ITTA submits that such offerings subject to service-level agreements that include provisions governing service outages should be exempt from outage reporting requirements.¹³ Thus, the Commission should refrain from expanding the scope of its outage reporting rules with respect to dedicated services and, in fact, should exempt their applicability to *any* dedicated services (including TDM-based) subject to service-level

¹¹ *Business Data Services FNPRM*, 31 FCC Rcd at 4728, para. 12.

¹² See *FNPRM*, 31 FCC Rcd at 5866, para. 114 n.333 (“Although DS3s and DS1s, both of which are longstanding dedicated services “warhorses”, have always been subject to outage reporting . . . our reporting rules may provide insufficient clarity as to *non-TDM* dedicated services such as “Ethernet.” We seek to provide both broadband-specific reporting emphasis and scope of covered services clarity in this Further Notice.

¹³ See *id.* at 5867, para. 119 (“We recognize that variation between and among dedicated services providers, the services they provide, their customers’ service needs and profiles, and other factors may indicate differences that we should consider with respect to the benefits and burdens of dedicated services outage reporting.”).

agreements that include provisions governing service outages.¹⁴ Broadening the exemption in this manner would be consistent with the Commission’s goal that its outage reporting requirements pertaining to dedicated services “apply equally and neutrally regardless of technology or provider type.”¹⁵

Furthermore, if the Commission nonetheless does expand the outage reporting requirements with respect to dedicated services, it is unclear how it would treat commingled services over dedicated connections. For instance, the Commission depicts DS3 functionality as including voice circuits.¹⁶ It is difficult to determine, therefore, how providers would be expected to report “broadband-specific outage information” for dedicated services.¹⁷ ITTA asserts that any associated requirements should be limited to instances where an outage affects a 911 special facility under Section 4.5(e)(1) of the Commission’s rules.¹⁸

III. IF THE COMMISSION DOES EXTEND AND EXPAND OUTAGE REPORTING REQUIREMENTS, IT MUST LIMIT THE UNDUE BURDENS ASSOCIATED WITH ITS PROPOSALS

A. The Proposed Reporting Threshold for Hard Down Outages is Far Too Low and Based on Faulty Calculations

In the *FNPRM*, the Commission proposes “to introduce a broadband metric calibrated with the current 900,000 user minute threshold,” and tentatively concludes that the threshold

¹⁴ The Commission certainly should not expand the outage reporting requirements with respect to dedicated services, and instead should narrow their application, if it adopts mandatory detariffing in the Business Data Services proceeding. *See, e.g., Business Data Services FNPRM*, 31 FCC Rcd at 4904-06, paras. 504-06. Mandatory detariffing would force dedicated services to be sold via commercial negotiations, which would “increase customers’ ability to obtain service arrangements that are specifically tailored to their individualized needs.” *Id.* at 4885, para. 434.

¹⁵ *Id.* at 5864, para. 109.

¹⁶ *See id.* at n.328.

¹⁷ *Id.* at para. 109.

¹⁸ *See* 47 CFR § 4.5(e)(1).

reporting criterion for “hard down” outages “should be based on the number of Gbps [gigabits per second] minutes affected by the outage because Gb is a common denominator used throughout the communications industry as a measure of throughput for high bandwidth services.”¹⁹ Dividing 1 Gbps by the number of users receiving advanced telecommunications capability download speeds of 25 Mbps, the Commission derives 40 individual users per 1 Gbps, and then divides the 900,000 user minute threshold by 40 users impacted by the outage to get 22,500 Gbps user minutes. According to the Commission, “[t]his means that an outage event would become reportable when it resulted in 1 Gbps of throughput affected in which the event exceeds 22,500 Gbps user minutes,” and “[t]o determine whether an outage event is reportable using this threshold, we multiply the size of the facility measured in Gbps, by the duration of the event measured in minutes, and this total generates a Gbps user minute number.”²⁰ Somehow, the Commission then seems to conclude that its formula establishes a reporting threshold of 1 Gbps lasting for 30 minutes or more.²¹

While, as discussed above, ITTA does not support the Commission adopting outage reporting requirements for broadband providers, if the Commission nevertheless does so, ITTA appreciates the congruency of the Commission devising a method to square broadband throughput metrics with the current user minute framework. Using the Commission’s own formula for determining whether an outage event is reportable under the 22,500 Gbps user

¹⁹ *Id.* at 5871, para. 130; see 47 CFR § 4.9 (900,000 user minute reporting threshold applicable to wireline, wireless, interconnected, and cable and satellite telephony outages).

²⁰ *FNPRM*, 31 FCC Rcd at 5871-72, para. 130. To illustrate, “if a 1 Tbps (terabits per second) facility experienced a disruption for 45 minutes, we would multiply 1000 by 45 minutes to get 45,000 Gbps user minutes, and since this figure exceeds 22,500 Gbps user minutes, the outage event would be reportable.” *Id.* at 5872, para. 130.

²¹ *See id.*

minutes standard, however, the Commission's discussed reporting threshold of 1 Gbps lasting for 30 minutes would only equate to 30 Gbps user minutes, *750 times less* than the 22,500 Gbps user minutes standard.²²

Regardless of how the Commission arrived at a proposed outage reporting threshold of 1 Gbps lasting for 30 minutes or more, ITTA opposes it. It will lead to a massive over reporting regime as compared to current standards, potentially leading to *750 times as much* reporting. It is simply impossible to conceive how such a dramatic increase in reporting would meet the Commission's goals of "effective outage reporting" in a "cost-effective manner,"²³ nor what the public safety benefit would be in inundating the Commission with such reports. Furthermore, this renders the Commission's estimate of the filing of 1,083 reports per year, if its proposals are adopted, completely lacking in credibility.²⁴

Instead, if the Commission must apply outage reporting requirements to broadband providers, it should do so in accord with both its general view, as expressed in the *FNPRM*, that extending the scope of its outage reporting rules to BIAS be done in a manner that "ensure[s] the Commission's] requirements apply equally and neutrally regardless of technology,"²⁵ as well as with its specific proposal to calibrate a broadband metric with the current 900,000 user minute threshold.²⁶ Following these maxims means that the Commission should apply its own enunciated formula for determining whether an outage event is reportable under the 22,500 Gbps

²² 30 Gbps user minutes is derived as follows, per the Commission's formula of multiplying the size of the facility measured in Gbps, by the duration of the event measured in minutes, with this total generating a Gbps user minute number: (1 [Gbps]) (30 [minutes]) = 30 Gbps user minutes.

²³ *Id.* at 5866, 5870, paras. 113, 126.

²⁴ *See id.* at 5880, para. 157.

²⁵ *Id.* at 5864, para. 109.

²⁶ *See id.* at 5871, para. 130.

user minutes threshold.²⁷ Moreover, the Commission should apply this formula both to BIAS and to dedicated services.

B. The Commission Must Not Require Reporting of Performance Degradation Events

In the *FNPRM*, the Commission tentatively concludes that outage events involving “significant degradation” of communication are reportable when there is a loss of “general useful availability and connectivity,” and it proposes to identify such outage events based on a combination of packet loss and latency metrics and thresholds, and a throughput-based metric and threshold.²⁸ These tentative conclusions and proposals are insufficiently developed, and fraught with confusion. The Commission must refrain from adopting them.

As an initial matter, it is unclear why the Commission differentiates between outage reporting and degradation reporting. In its attempts to delineate the loss of “generally useful availability and connectivity,” it repeatedly circles back to any reasonable concept of outage, such as “tantamount to a complete loss of service,” “customers are effectively unable to use their broadband service,” and “incidents in which service is effectively unusable for a large number of users.”²⁹ In fact, the definition of “outage” in Part 4 *already* incorporates the concept of significant degradation: “*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.”³⁰

²⁷ *See id.* at 5871-72, para. 130.

²⁸ *Id.* at 5873, para. 133.

²⁹ *Id.* at 5873, 5879, paras. 135, 152.

³⁰ 47 CFR § 4.5(a).

In addition, the Commission proposes using for reportable degradation the *exact* same throughput metric threshold – “1 Gbps for a network outage or service disruption event lasting 30 minutes or more -- as it proposes for reportable hard down outages.³¹ As discussed above with respect to hard down outages, such a threshold would lead to an exponential increase in reporting of outages. Moreover, using it to establish a reporting threshold for degradation underscores the lack of any difference between the Commission’s concepts of reportable outages and reportable degradation. Putting aside this head-scratching aspect of the Commission’s degradation reporting proposal, this proposal should be rejected for the same reasons of undue burdensomeness as the proposal relative to hard down outage reporting.

The flaws of the Commission’s proposed throughput metric threshold would only be magnified, however, by its alternative proposal for reporting where a carrier’s average throughput drops merely 25 percent below normal levels.³² Not only does the Commission make no attempt to explain how such reporting would assist it in “carry[ing] out its fundamental public safety mission,”³³ it would impose measurement burdens on providers that do not align with their current practices, and would extravagantly increase their costs with no discernible benefit to the Commission’s functions or public safety. This proposal would require carriers to measure throughput in real time, rather than on a sample basis (as many currently do), which is challenging and costly in its own right. Nor does the Commission propose what duration of such degradation would trigger reporting. In the final analysis, the ill-defined proposal resembles a proposed quality-of-service metric rather than one that could lead to any useful outage reporting

³¹ *FNPRM*, 31 FCC Rcd at 5874, para. 138.

³² *See id.*

³³ *Id.* at 5856, para. 93.

information. Notwithstanding the Commission's apparent conflating of the purposes of performance and assurance measurements with the goals of outage reporting,³⁴ quality-of-service metrics are outside the scope of *this* proceeding. The Commission must decline to adopt any degradation reporting requirement, and especially its alternative proposal, in light of the costs involved with no countervailing benefits.³⁵

No less troubling is the Commission's proposals to measure performance degradation using packet loss metrics. The Commission resurrects its 2011 proposals to utilize packet loss metrics to trigger outage reporting.³⁶ There are numerous problems with the *FNPRM*'s

³⁴ See, e.g., *id.* at 5874, para. 140 (“Are there existing measurement efforts regarding network performance and assurance conducted by the Commission that would provide better guidance in determining reporting thresholds for broadband network outage reporting?”).

³⁵ In its sparing cost-benefit analysis of these proposals, the Commission contends that the costs associated with collecting data to assess the loss of “generally useful availability and connectivity” are minimal insofar as, in 2011, broadband providers were already monitoring metrics like packet loss “for certain customers,” and the Commission believes that by “building on existing provider practices and harnessing technological developments in network monitoring . . . the proposals for broadband reporting requirements described herein would not be unduly costly.” *Id.* at 5879, para. 152. The example the Commission provides of the “certain customers” on whom broadband providers were purportedly collecting such data as far back as 2011 involves AT&T premium customers, on whom AT&T was collecting such data pursuant to the terms of a service-level agreement. See *id.* at n.393. This assessment of the costs ignores that if the proposed reporting requirements were applied to BIAS, it would fold in tens of millions of additional customers on whom such data would need to be collected.

³⁶ See *id.* at 5875, para. 141 (citing *The Proposed Extension of Part 4 of the Commission's Rules Regarding Outage Reporting to Interconnected Voice Over Internet Protocol Service Providers and Broadband Internet Service Providers*, Notice of Proposed Rulemaking, 26 FCC Rcd 7166, 7184-86, paras. 42, 48-49 (2011) (*2011 Part 4 NPRM*)). In the *2011 Part 4 NPRM*, the Commission acknowledged that “significant degradation” is emphasized in the Part 4 definition of “outage,” See *2011 Part 4 NPRM*, 26 FCC Rcd at 7183, para. 40, which again begs the question of why the Commission now seeks to carve out a whole separate set of reporting requirements for degradation. In fact, it was in that *NPRM* that the Commission first concocted the “generally useful availability and connectivity” would-be axiom, see *id.*, but in the context of outage reporting, not some separate trigger for reporting of degradation.

proposals,³⁷ not the least of which is the bootstrapping of the 2011 proposal that a packet loss of one percent or more be part of the outage reporting trigger.

In its recent *2016 Technology Transitions Order*, the Commission adopted network performance standards for when a service may be deemed an adequate replacement for a legacy voice service.³⁸ In that context, the Commission chose a packet loss threshold of less than or equal to one percent as acceptable.³⁹ In so doing, the Commission explained that “[c]onsecutive packet loss is of particular concern for certain time-sensitive applications, such as voice and video,” this threshold “will allow for successful quality voice calls and other highly interactive applications,” and that “this data loss benchmark is appropriate to ensure successful transmission of voice and video communications.”⁴⁰ Notably, the Commission did not make the same assertion relative to broadband services. And neither in 2011 nor in the *FNPRM* does the Commission explain why a one percent packet loss in the context of broadband services would

³⁷ The Commission now also invokes the 2011 proposal that packet loss measurements be taken in each of at least six consecutive five-minute intervals from source to destination host. *See FNPRM*, 31 FCC Rcd at 5875, para. 141. Doing so, however, is misplaced. This 2011 proposal applied to broadband backbone Internet service providers, not BIAS (nor dedicated services), *see 2011 Part 4 NPRM*, 26 FCC Rcd at 7186, para. 49, and the *FNPRM* specifically states that it is not contemplating that the proposed rules would apply to Internet backbone providers. *See FNPRM*, 31 FCC Rcd at 5864, para. 110. Such an onerous measurement scheme should not be applied to BIAS or dedicated services even in the misguided event the Commission were to adopt degradation reporting requirements in response to the *FNPRM*.

³⁸ *See Technology Transitions; USTelecom Petition for Declaratory Ruling that Incumbent Local Exchange Carriers are Non-Dominant in the Provision of Switched Access Services; Policies and Rules Governing Retirement of Copper Loops by Incumbent Local Exchange Carriers, Declaratory Ruling, Second Report and Order, and Order on Reconsideration*, FCC 16-90, Sec. III.C.1.a. (2016) (*2016 Technology Transitions Order*).

³⁹ *See id.* at paras. 95, 100-04.

⁴⁰ *Id.* at paras. 100, 101.

be of such significance to the Commission's public safety mission that it should trigger a reporting requirement.⁴¹

As ITTA has maintained analogously in the *Technology Transitions* proceeding,⁴² measuring packet loss and then (over)reporting on it is a costly and painstaking process. As with the Commission's other proposals in the *FNPRM*, it would be an endeavor laden with exorbitant costs with little to no benefit to the Commission's public safety mission. In the *2015 Open Internet Order*, the Commission explained in the Final Regulatory Flexibility Analysis why it declined to adopt reporting requirements with respect to the source of packet loss in the context of proposed enhanced transparency requirements related to network performance: "To ensure we have crafted rules that strike a balance between utility for consumers and compliance burdens for industry including smaller providers, we took certain additional important measures. For example . . . we have declined to require certain disclosures . . . such as the source of . . . packet corruption . . . in recognition of commenter concerns with the benefits and difficulty of making these particular disclosures."⁴³ The same calculus applies here, where would-be reporting on

⁴¹ In fact, in the *2011 Part 4 NPRM*, contrary to its own proposal therein of a one-percent packet loss threshold for reportable BIAS outages, the Commission later stated that

"loss of a transmission" includes . . . a high packet loss rate on a link experiencing degraded operation. Because IP-based communication does not provide a totally reliable communications function, some level of packet loss is regarded as acceptable. However, it seems generally accepted that high levels of packet loss render IP-based communications unusable (*e.g.*, packet loss in the range of five to 25 percent, depending on the requirements of the application).

2011 Part 4 NPRM, 26 FCC Rcd at 7187, para. 52 n.113.

⁴² See *2016 Technology Transitions Order* at para. 104 (citing ITTA Comments at 12).

⁴³ *Protecting and Promoting the Open Internet*, Report and Order on Remand, Declaratory Ruling, and Order, 30 FCC Rcd 5601, 5913, Appx. B, Final Regulatory Flexibility Analysis at para. 67 (2015) (*2015 Open Internet Order*), *aff'd sub nom* USTA v. FCC, No. 15-1063 (D.C. Cir. June 14, 2016), *pets. for rehearing en banc filed* (D.C. Cir. July 29, 2016).

degradation due to packet loss entails root cause analysis⁴⁴ that itself would necessitate reporting on the source of the packet loss, and where there is even less of a nexus between the Commission's proposal and the goals of the proceeding.

In sum, implementation of the Commission's tentative conclusion that it should adopt a separate standard for reporting of events involving significant degradation of communication will lead to a level of reporting whose associated burdens on providers far outstrip any counterbalancing benefits, and will lead to such a volume of reporting so as to degrade the Commission's ability to do anything meaningful with it.⁴⁵

C. Any Outage Reporting Should Be a Two-Step Process with the Same Timelines as Currently Apply to Interconnected VoIP Reporting

The Commission proposes to apply to broadband providers the three-part submission process to which wireline providers are currently subject,⁴⁶ and also to apply it to interconnected VoIP providers, who currently are subject to a two-part process.⁴⁷ In the alternative, the Commission seeks comment on whether all reporting – legacy, broadband, and interconnected VoIP – should be subject to a two-step process.⁴⁸ ITTA urges the latter (if the Commission adopts its proposals to extend outage reporting requirements to broadband providers), also adjusting the timelines for such a process to comport with those to which interconnected VoIP providers are currently subject.⁴⁹

⁴⁴ See *FNPRM*, 31 FCC Rcd at 5868, para. 121.

⁴⁵ See *id.* at 5945, Pai Statement (focusing on outages that result in a “complete loss of service or connectivity” are “far more likely to give [the Commission] useful, targeted information”).

⁴⁶ See 47 CFR §§ 4.9(f), 4.11.

⁴⁷ See *FNPRM*, 31 FCC Rcd at 5868, 5870, paras. 121, 127.

⁴⁸ See *id.* at 5870, para. 127.

⁴⁹ See 47 CFR § 4.9(g).

Under ITTA's proposal, the deadline for notifications, other than those for outages to 911 special facilities, would be extended from 120 minutes to 24 hours, and the deadline for notifications relating to 911 special facilities would be extended from 120 minutes to 240 minutes. Likewise, there would be no obligation for providers to file initial reports within 72 hours of discovering an outage.⁵⁰ The other required report would be a final outage report, to be filed no later than 30 days after discovering the outage. Adopting a consistent approach for all affected providers would ensure that the Commission's rules do not distinguish among different types of providers based on technology. Moreover, taking this approach would simplify the reporting process, eliminate unnecessary reporting obligations, and lead to more accurate and meaningful reporting because it would give providers additional time to determine whether a reportable outage actually has occurred, and to evaluate its impact and cause.

ITTA appreciates how the reporting of root cause analysis of major disruptions may assist the Commission in fulfilling its goal of understanding and promoting network resiliency. However, whereas heretofore, the Commission has only required root cause analysis as part of the final report,⁵¹ in the *FNPRM* the Commission proposes that it also be required as part of the notification report (as well as the initial report).⁵² Even if the Commission were to extend the timeline for the filing of notifications, expecting providers to be able to triage the situation,

⁵⁰ If a provider sought to file an initial report, it would not be precluded from doing so.

⁵¹ See, e.g., *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, 16875, para. 80 (2004) (*2004 Part 4 Order*); see also *id.* at 16868, para. 69 n.213 (outage reporting rules that preceded Part 4 required root cause analysis in the final service disruption reports, but not in the initial service disruption reports). While it is true that there currently is an open field in NORS where root cause analysis information could also be entered on the initial report, most companies reserve providing that level of detail until the final report.

⁵² See *FNPRM*, 31 FCC Rcd at 5868, para. 121.

investigate and reach conclusions on its root cause, marshal the necessary reporting data, and have personnel actually report it, all within 24 hours, is unrealistic and simply will not lead to any useful root cause analysis being provided to the Commission in that timeframe. The Commission therefore should continue its longstanding practice of only requiring root cause analysis as part of a final report.

The Commission further inquires whether there are other steps it should consider that would ensure “adequate reporting in reasonable, appropriate time intervals across the various technologies at issue for reporting,” and seeks comment on other steps the Commission can take “to make providers’ reporting obligations consistent across services or otherwise streamline the process.”⁵³ ITTA submits that the Commission should continue to permit the combining of outage reports that have the same root cause and/or address the same outage event. For example, a local exchange carrier (LEC) could also be an interconnected VoIP provider and BIAS provider over the same facility. If that facility experiences a reportable outage, there is no reason the provider should incur the expense of providing separate reports for each type of service.

IV. THE COMMISSION SHOULD NOT SADDLE BIAS AND DEDICATED SERVICES PROVIDERS WITH THE RESPONSIBILITY FOR BEING CLEARINGHOUSES FOR ALL BROADBAND OUTAGE INFORMATION

The Commission seeks specific comment on whether BIAS providers could be used as “a central reporting point for all broadband network outages, i.e., whether our part 4 assurance goals for broadband outage reporting can be effectuated through, or should be limited to, an approach in which only BIAS providers (as opposed to other entities providing networks or services) would be required to report.”⁵⁴ ITTA responds in the negative.

⁵³ *Id.* at 5870, paras. 127-28.

⁵⁴ *Id.* at 5865, para. 112.

The Commission's proposal would unreasonably saddle individual BIAS providers with responsibility for the reporting of some events that are outside of their control and knowledge. While BIAS providers generally share information with other entities providing networks or services (and vice-versa) in the event of network outages, the information shared is dependent on the nature of the event, whether there is a service-level or similar agreement in place, and, if so, specifically what the agreement provides. Such information sharing may not occur on a real-time basis, and in some instances, is on a monthly or even quarterly basis. Some providers are more willing than others to share information, and it has taken considerable work to convince more reticent providers to supply root cause and mitigation information.

It is precisely for these reasons that the Commission, in 2004, adopted its proposal to require that third-party entities that maintain or provide communications networks or services for communications providers directly providing the voice or data communications comply with the reporting requirements to the same extent as the communications providers themselves. The Commission particularly sought to avoid "delay that could result from . . . coordination efforts or from any emerging contractual disputes among the parties with respect to their service agreements," and elaborated that the outage reporting requirements it was adopting in establishing Part 4 serve "the overarching need to obtain rapidly and accurately outage data that could serve the vital interests of homeland security."⁵⁵

This is not to say that BIAS providers should completely be absolved from reporting in the (unfortunate) event the Commission does extend outage reporting requirements to BIAS.⁵⁶

⁵⁵ *2004 Part 4 Order*, 19 FCC Rcd at 16875-76, para. 81.

⁵⁶ *See FNPRM*, 31 FCC Rcd at 5865, para. 112 ("We ask commenters to address BIAS providers' services relationships with other providers (i.e., entities that provide IP transport underlying the BIAS offering)").

For instance, a LEC providing transport to a BIAS provider may experience difficulty differentiating the traffic on its transport facility, or the LEC may not have visibility into all of it.⁵⁷ As discussed above, ITTA appreciates the role that root cause analysis may play in furthering the Commission’s understanding and promoting of network resiliency. Therefore, if the Commission does extend outage reporting requirements to BIAS, it should place the outage reporting responsibility on the entity to which the root cause of the outage is attributable.

For the same reasons, the Commission should not impose the outage reporting equivalent of strict liability on dedicated services providers.⁵⁸ While it is true, as discussed above, that dedicated services providers are much more likely than BIAS providers to be subject to service-level agreements, such agreements may have varying provisions related to inter-company outage reporting, especially with respect to frequency and timing. Thus, dedicated services may not be in a position to report outage information within whatever timelines the Commission’s rules prescribe.

V. ANY BROADBAND OUTAGE REPORTING REQUIREMENTS MUST SAFEGUARD THE CONFIDENTIALITY AND SHARING OF INFORMATION

The *FNPRM* seeks further comment on how Network Outage Reporting System (NORS) data from broadband providers could be properly shared with state and federal entities.⁵⁹ ITTA does not object to the Commission granting state entities read-only access to portions of the NORS database pertaining to communications outages (including “significant degradations,” in

⁵⁷ *Cf. id.* at 5878, para. 151 (“We believe that any provider with ‘significant visibility’ into its network . . . has the ability to detect network failures or degradations that result in a total loss of service for a large number of customers.”).

⁵⁸ *See id.* at 5867, para. 117 (seeking comment on the extent to which dedicated services providers are in a position to inform the Commission of the source and cause of reportable outages).

⁵⁹ *See id.* at 5876-77, Sec. V.B.5.; *see also id.* at 5854, para. 89.

the event the Commission misguidedly adopts separate reporting requirements applicable to such events) in their respective states, so long as stringent confidentiality protections and other measures are put in place.

First, as a fundamental underlying principle, to the extent state agencies have their own standards of confidentiality, the Commission's confidentiality protections must be a floor, regardless of the substance of these state-specific provisions. Second, the Commission must ensure that access is strictly limited to state public utility commission officials, not third parties,⁶⁰ and any state use of the data must fall within the state's traditional role of protecting public health and safety. To implement this safeguard, the Commission should subject any state commission official seeking access to a protective order appropriate for Highly Confidential Information. Not only is NORS data proprietary and competitively sensitive, but its disclosure also presents significant security risks. Therefore, the protective order should contain provisions requiring states to immediately notify providers and the Commission of any confidentiality breach or unauthorized release. And to begin with, state officials should be required to affirmatively request access to NORS data via filing of acknowledgments of confidentiality pursuant to the protective order, so providers are aware of who may be reviewing it and are afforded the opportunity to object if necessary. Similarly, state officials should be required to provide advance notice of, and a meaningful opportunity to comment on, any plan to use NORS data.

⁶⁰ In this regard, ITTA strenuously objects to the Commission's entertainment of "increased transparency" with respect to broadband outage reporting information or select elements of NORS reports, which the Commission suggests might be warranted as networks "and consumer expectations about transparency" evolve. *See id.* at 5876, para. 145.

The Commission may also want to consider implementing other protections, given the extremely sensitive nature of NORS data. Such protections include requiring personnel who obtain access to NORS data to undergo security training; terminating access and/or penalizing parties for breaches of confidentiality; creating an audit log to maintain records on what data was accessed, when, and by which parties; and invalidating inactive user accounts after a certain period of time to reduce security risks.

The Commission should also require that states opting to receive NORS data eliminate any independent state outage reporting requirements, in order to minimize the burden on providers of filing multiple reports due to overlapping federal and state obligations.

VI. CONCLUSION

In sum, the Commission should not extend its outage reporting requirements to BIAS, nor expand them with respect to dedicated services, especially given the overwhelming disparity between the costs involved and whatever benefits may result for the Commission's fulfillment of its public safety mission. If the Commission nevertheless does take these actions, it must do so in a manner that mitigates these costs – which the *FNPRM*'s proposals do not do – and affords the reported information strict confidentiality protections. Adopting its proposals to make BIAS and dedicated services providers in effect strictly liable for all broadband outage information

would only compound the problems with the *FNPRM*'s proposals, and the Commission must refrain from doing so.

Respectfully submitted,

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