

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

In the Matter of

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

REPLY COMMENTS OF AT&T INC.

For the most part, the comments filed in this proceeding fell along predictable lines. Carriers, VoIP Providers, and ISPs largely opposed extending the Part 4 rules, especially along the lines proposed in the *Notice*; state regulators and their associations, supported extension. The more compelling case, however, was clearly made by the providers.

On the whole, the providers argued that the Commission's jurisdictional claims for extending the Part 4 rules were highly questionable at best and invalid at worst; that, given the nature of the IP network and market forces, such rules are unnecessary and burdensome; that the existing Part 4 rules themselves were problematic and in need of reform, making them unsuitable for extending to VoIP Providers and ISPs; that, if any rules are ultimately adopted, the Commission should avoid service quality metrics and look instead to real outages involving actual loss of connectivity; and that any rules that are adopted should include the same level of confidentiality presently afforded reporting entities in the existing NORS process. For its part, AT&T supports these conclusions.

A. JURISDICTION

1. The Commission has failed to articulate a basis for its authority to extend the Part 4 rules to VoIP Providers and ISPs.

In the *Notice*, the Commission floated several theories under which it might assert the legal authority to extend the Part 4 rules to VoIP Providers and ISPs. Commenters generally took on each of these postulates and found them wanting. AT&T won't reiterate those

challenges here, but will note that, at the end of the day, the Commission’s best claim for authority—*i.e.*, that outage reporting by VoIP Providers is ancillary to the Commission’s obligations “to ensur[e] that interconnected VoIP providers are able to satisfy their 9-1-1 obligations under the Act as implemented in our Part 9 rules, and to enable the Commission to assist in improving the reliability of these mandated services”¹—leans on a very thin reed. The Commission’s claims of authority for wireless broadband and other ISP services were without serious legal foundation.

Looking just to the issue of VoIP Providers, among the many shortcomings in the Commission’s case for authority was the fact that the Commission cannot show any rationale nexus between the proposed reporting scheme and the stated goal; *i.e.*, ensuring that VoIP Providers meet their 911 obligations under Part 9 of the Commission’s rules. Given that market forces already compel high performance levels, the highly dynamic and robust nature of the service, and the total lack of evidence that alleged service outages are presently preventing VoIP Providers from meeting their 911 obligations, there is simply no case to be made that a reporting scheme is needed much less that it would produce demonstrable results. In short the Commission has not shown that extending the Part 4 rules to VoIP Providers is “reasonably ancillary to the Commission’s effective performance of *its statutorily mandated responsibilities*.”²

It is for the Commission to make the case that regulations are needed and that it has the authority to promulgate them. The Commission has yet to do so. In view of this, the Commission should look to other means of encouraging “best practices” among providers, such as working with existing industry forums and governmental bodies.

¹ Notice, para. 68.

² *Comcast Corp. v. FCC*, 600 F.3d 642, 646 (DC Cir. 2010) (*Comcast Order*) (emphasis added).

2. *The Commission should consider a voluntary program as a mechanism for promoting best practices among VoIP Providers and ISPs.*

In its comments, AT&T made the case that the Commission should consider a voluntary mechanism of promoting best practices among VoIP Providers and ISPs in “the short term, if not permanently.”³ While a voluntary program doesn’t cure jurisdictional defects, it has some real benefits if the case can be made that the Commission has the legal authority to seek outage reporting. These benefits include giving reporting entities time to adapt to the new regime,⁴ providing the Commission with much needed information on the extent of any alleged outage problem that might impact compliance with 911 obligations,⁵ and helping the Commission fine tune any information gathering mechanism.⁶

In its comments, the Alliance for Telecommunications Industry Solutions (ATIS) made an excellent case that, regardless of any other considerations, the Commission should opt for voluntary collaboration and avoid “rigid and stagnant frameworks . . . ill-suited to the dynamic nature of today’s communications systems.”⁷ Among the chief drawbacks to adopting a set of regulations is that they become “irrelevant and obsolete” over time yet continue to “impose unnecessary burdens” while not providing any “ongoing useful benefit.”⁸ ATIS argues that the Commission would obtain better results by collaborating with industry members in ATIS’s Network Reliability Steering Committee.⁹

Regardless of the industry forum the Commission decides to utilize, ATIS notes that the benefits of a voluntary approach include making it easier to adapt to “changing network technology”; encouraging industry-expert collaboration, which would facilitate communication

³ AT&T Comments, p. 17.

⁴ Sprint Comments, p. 3. *See also*, Comments of Telecommunications Industry Association (TIA), p. 5.

⁵ CenturyLink Comments, p. 3.

⁶ Verizon Comments, p. 8.

⁷ ATIS Comments, p. 3.

⁸ ATIS Comments, pp. 3-4.

⁹ ATIS Comments, p. 5. *See also*, Comments of The United States Telecom Association (USTelecom), p. 4.

that might otherwise be squelched by mandates backed up by forfeiture penalties; and allowing the Commission and industry both to benefit from lessons learned and maintain flexibility.¹⁰ All in all, the benefits of a voluntary program far exceed those of a strict mandate.

B. UNNECESSARY OBLIGATIONS

1. The Commission should not extend the Part 4 rules to VoIP Providers and ISPs because the existing rules are themselves in need of reform.

One reason cited by several providers for not extending the Part 4 rules to VoIP Providers and ISPs was that the Part 4 rules themselves are seriously flawed.¹¹ As Verizon so correctly stated: “Those rules need to be reformed—not replicated”¹² The complaints against the existing Part 4 rules should inform the Commission’s endeavor to extend outage reporting to VoIP Providers and ISPs.

Although providers were in general agreement that the Part 4 rules need reform, they were not in total agreement on what reforms should be adopted. Yet, two general themes are clear: (1) the reporting deadlines need adjustment because they are unrealistic and (2) there are too many reports. From these comments, the Commission can see that there is strong support for making the deadline for filing the Notification later than the present 120-minute requirement and eliminating the Initial Report altogether.¹³

If the Commission were to adopt Part 4 rules for VoIP Providers and ISPs, which AT&T does not propose, and to follow the recommendation to extend the Notification deadline and

¹⁰ ATIS Comments, p. 16. *See also*, Verizon Comments, p. 10.

¹¹ MetroPCS Comments, pp. 2-3 (“[T]he existing voice outage reporting requirements indicate[] that they fail to strike a reasonable balance between benefit and cost.”)

¹² Verizon Comments, p. 2.

¹³ Extend the deadline for the Notification: ATIS Comments, p. 13 (240 minutes); CenturyLink Comments, p. 21 (not less than four hours); NCTA Comments, pp. 8-9 (eliminate Notification); Time Warner Comments, p. 6 (eliminate Notification in favor of one single report filed within 72 hours); Verizon Comments, p. 15 (four hours). Modify/Eliminate the Initial Report: ATIS Comments, p. 13; Time Warner Comments, p. 6 (only one report); Verizon Comments, p. 16.

eliminate the Initial Report (or some variation of that reform¹⁴), then the Commission ought to consider also reforming the existing Part 4 rules to conform to those changes, especially as many providers would be filing outage reports as common carriers and as VoIP Providers and/or ISPs. Creating parity in and consistency among these rules would make operationalizing them easier.

2. *The Commission does not need to extend the Part 4 rules to VoIP Providers and ISPs, because the competitive market is sufficient incentive for providers to maintain reliable and efficient networks.*

There was broad consensus among commenting providers that the free market is sufficient to keep VoIP and ISP networks reliable and efficient—the twin goals of network outage reporting.¹⁵ Indeed, as a prerequisite to imposing burdensome regulations, the Commission has the obligation of showing that the free market is not working, that regulations are needed to address a market failure, and that proposed regulations would in fact correct that failure. The Commission has not demonstrated any of these things.

On the contrary, as Sprint points out, today’s already “highly reliable” and “secure” broadband IP networks are the “product of a competitive market and not a government mandate.”¹⁶ Hence, the suggestion implicit in the *Notice* that VoIP Providers and ISPs need government intervention to create and maintain efficient and reliable networks has been disproven by the very fact that these networks exist now and provide “reliable and quality service.”¹⁷ ATIS sums this up smartly by noting:

A communications provider’s core business depends on the provision of reliable service and no regulatory mandate could be more effective than the incentive already created by the competitive marketplace.¹⁸

¹⁴ For example, the Commission might consider eliminating the Notification and requiring an Initial Report within seven days, subject to Commission’s Computation of Time Rule, 47 C.F.R. § 1.4, that adjusts the deadline to the next business day when it falls on a weekend day (Saturday or Sunday) or a federal holiday.

¹⁵ American Cable Association (ACA) Comments, p. 2; ATIS Comments, p. 4; CTIA Comments, p. 6; MetroPCS Comments, p. 7, USTelecom Comments, p. 3; Verizon Comments, p. 6; Vonage Comments, pp. 5-6; XO Communications Comments, p. 3.

¹⁶ Sprint Comments, p. 2.

¹⁷ Vonage Comments, p. 4.

¹⁸ ATIS Comments, p. 4.

In light of the fact that market forces have already made these services and networks exceedingly reliable and efficient, the imposition of any regulations—especially regulations that cannot guarantee an improvement in reliability and efficiency—would be unnecessary and *per force* burdensome.

3. *Because the IP networks are robust and dynamic networks, there is no need for the Commission to apply circuit-switched network outage regulations to them.*

AT&T has repeatedly expressed doubts as to the efficacy of the Part 4 rules as applied to the switch-circuit network. Simply put, how much more efficient and reliable can the network get? By all estimations, the AT&T networks already meet the four nines standard; *i.e.*, they are up and running 99.99% of the time.

If such rules are unnecessary in a circuit-switched world, how much more so are they unnecessary in an IP-enabled world? The record so far does not even hint that the modern IP-enabled networks are inherently unreliable or subject to any inefficiencies. To the contrary, the record reflects an extremely robust and dynamic network that is wholly efficient and reliable. In fact, the IP-enabled networks are “newer, [employ] more advanced infrastructure,” and are “engineered for redundancy.”¹⁹ On top of that, in contrast with the legacy PSTN with “fewer types of purpose-built systems, hardwired connections, and a far smaller array of supported service,” the IP-enabled broadband networks utilize “multiple hardware and software platforms to perform connection set-up, routing, user validation, traffic management, and a host of other functions.”²⁰ In short, AT&T agrees with these other commenters, who suggest that the

¹⁹ Sprint Comments, p. 5. *See also*, Verizon Comments, p. 11 (“Broadband network operators routinely design and build in automatic redundancy at all critical points and critical paths in the networks that are shared by large numbers of customers.”)

²⁰ Verizon Comments, p. 11. In this regard, Verizon notes that “a consumer’s broadband experience could be adversely affected by a variety of technological issues that are wholly unrelated to the broadband network.” *Id.*, at 12. None of these other issues would be addressed by the rules the Commission is contemplating imposing on the industry.

Commission's proposals are a solution in search of a problem and who argue that Part 4 rules are unnecessary for such "robust, reliable, and resilient" networks.²¹

C. REPORTING METRICS

1. *The Commission should not adopt service quality metrics for any proposed extension of Part 4 rules to VoIP and ISP Providers.*

Among providers, there was almost universal consensus that the Commission should not adopt service quality or QoS metrics in any proposed Part 4 rules for VoIP Providers and ISPs.²² AT&T reiterates its belief that such metrics are inappropriate.

This repudiation of service quality metrics was wide spread and focused primarily on three points. *First*, service quality metrics are not imposed in the existing rules on common carriers—nor should they—and the Commission should not impose standards on VoIP Providers and ISPs it does not impose on common carriers.²³ *Second*, the service quality metrics for IP-enabled networks are akin to measuring static and noise in legacy systems and, therefore, would not actually relate to unsuccessful call completion.²⁴ And *third*, conditions outside the control of VoIP Providers and ISPs can cause or contribute to packet loss, latency, and jitter—this fact means that, if the Commission intends to use the outage data for network "best practices," the outage reports tendered under the QoS metrics would capture non-network conditions not within the control of the provider and, therefore, be essentially pointless.²⁵

²¹ ATIS Comments, p. 7.

²² ACA Comments, p. 7; ATIS Comments, p. 11; CenturyLink Comments, p. 4; CTIA Comments, p. 8; TIA Comments, p. 6; Time Warner Comments, p. 2; USTelecom Comments, pp. 7-8; Verizon Comments, pp. 20-23; Vonage Comments, p. 4; XO Communications Comments, p. 10.

²³ ATIS Comments, p. 12. *See also*, Verizon Comments, p. 20.

²⁴ ATIS Comments, p. 11. And *see*, Verizon Comments, p. 21 ("These [QoS] measurements only have relevance in the context of the specific end points being measured. But packet-based communications on the Internet could occur between virtually limitless points-of-interest for individual end user communications, and these measurements can vary significantly depending on each consumer's destination end point. Accordingly, collection of these metrics over the measured path may have no relevance to any particular end user's communications.")

²⁵ CenturyLink Comments, pp. 7, 10. *See also*, Time Warner Comments, p. 7.

On top of all this, as pointed out by Verizon, the service quality metrics proposed by the Commission would “impose considerable costs on providers.”²⁶ Briefly, the Commission is seeking to impose QoS metrics on “best efforts,” mass-market networks. The QoS metrics that the Commission proposes to use might be appropriate for a provider’s *enterprise* customers, where end-to-end transport is offered by the same provider. But this is not so for the *mass-market* offering, which is certainly where the Commission’s concerns for 911/E911 service availability must be focused. The mass-market, “best efforts” service is not priced to address the service level standards of certain of the enterprise offerings, nor should it be. The Commission’s proposal would involve a vast retooling of the way providers offer and monitor their “best efforts” networks and, consequently, impose unnecessary costs.

As opposed to using service quality metrics, the commenters generally propose criteria similar to that used now under the existing Part 4 rules.²⁷ To most this means a total loss of service or connectivity.²⁸ For its part, Vonage points out that “[t]he proposed [service quality] standards . . . would simply not constitute an outage on Vonage’s network.”²⁹ AT&T believes that would be equally true for other VoIP Providers as well.

2. The Commission should modify its proposed criteria for reporting outages.

In its comments, AT&T made counter-proposals to those network outage reporting criteria set out by the Commission in its *Notice*.³⁰ Other commenters also made proposals, in particular ATIS, CenturyLink, Sprint, and Verizon.³¹ These commenters propose changing the

²⁶ Verizon Comments, p. 21.

²⁷ ATIS Comments, p. 12.

²⁸ CenturyLink Comments, p. 4 (“complete loss of service or connectivity”); Sprint Comments, p. 6-7 (“require . . . reports only in the event of a complete loss of service”); Time Warner Comments, p. 5 (outages should “consist of actual losses of service . . . , not attributes that amount to measures of service quality”).

²⁹ Vonage Comments, p. 8.

³⁰ AT&T Comments, pp. 23-29.

³¹ ATIS Comments, p. 13; CenturyLink Comments, pp. 13, 17; Sprint Comments, pp. 6-11; and Verizon Comments, p. 15.

30-minute outage criteria to at least 120 minutes and, for ISP outages, recommend a criterion based on the number of subscribers actually without connectivity. Notably, they all reject using any service quality metrics.³² Based on these other proposals, AT&T can offer an amended version of its own proposals.

Subject to AT&T's previously stated objections to the extension of the Part 4 rules to VoIP Providers and ISPs, AT&T offers the following amended reporting threshold criteria:

VoIP Providers—

All interconnected VoIP providers shall submit electronically a Final Report within 30 days of discovering that they have experienced on any facilities that they own, operate, lease, or otherwise utilize, an outage of at least 120 minutes duration: (1) of a non-redundant VoIP network element; (2) that potentially isolates subscribers' service for at least 900,000 user minutes; or (3) potentially affects a 911 special facility (as defined in paragraph (e) of § 4.5).³³

Access ISPs—

All [wireline/wireless] Access ISPs shall submit electronically a Final Report within 30 days of discovering that they have experienced an outage of at least 120 minutes duration (1) of a non-redundant Internet Protocol switching element that they own, operate, lease, or otherwise utilize; or (2) that potentially isolates subscribers' Internet connectivity for at least 30,000 subscribers.³⁴

Backbone ISPs—

Backbone ISPs should submit a Final Report within 30 days of discovering that they have experienced an outage for at least 120 minutes (1) of any non-redundant major facility (*i.e.*, PoP, Exchange Point, core router, root name server, ISP-operated DNS

³² In its comments, Sprint recommends that the Commission's proposed metrics for Backbone ISPs outages set out in paragraph 49 of the *Notice* be amended to state "an average packet loss of one percent or greater of the entire bandwidth available between Points of Presence [and an] average round-trip delay of 300 ms or greater." Sprint Comments, p. 10. AT&T continues to assert that such quality service metrics are inappropriate and would be difficult and costly to operationalize; yet, this proposal is a large improvement over that proposed by the Commission. *See also*, Notice of Ex Parte Presentation, Robert G. Kirk, Attorney for T-Mobile USA, Inc., to Marlene H. Dortch, Secretary, Federal Communications Commission, PS Docket No. 11-82 (Sept. 23, 2011).

³³ *See* ATIS Comments, p. 13; CenturyLink Comments, p. 13.

³⁴ *See* CenturyLink Comments, p. 17.

server, or DHCP server) that they own, operate, lease, or otherwise utilize; or (2) that potentially isolates subscribers' Internet connectivity for at least 30,000 subscribers.³⁵

CONCLUSION

AT&T respectfully requests that the Commission consider these reply comments in its deliberations on this proposed rulemaking proceeding.

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³⁵ *Id.*