

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

In the Matter of)
)
Amendments to Part 4 of the Commission's Rules) PS Docket No. 15-80
Concerning Disruptions to Communications)
)

To: The Commission

REPLY COMMENTS OF T-MOBILE USA, INC.

Steve B. Sharkey
Harold Salters
Shellie Blakeney

T-MOBILE USA, INC.
601 Pennsylvania Ave., NW
North Building, Suite 800
Washington, DC 20004
(202) 654-5900

July 31, 2015

TABLE OF CONTENTS

INTRODUCTION AND SUMMARY	1
I. COMMISSION MONITORING OF WIRELESS NETWORK PERFORMANCE IS UNNECESSARY	3
A. COMPETITION ENSURES SATISFACTORY NETWORK PERFORMANCE	4
B. ADOPTION OF NETWORK PERFORMANCE REGULATIONS WOULD VIOLATE EXECUTIVE ORDERS AND SUPREME COURT CASE LAW REQUIRING MEANINGFUL COST-BENEFIT ANALYSIS	5
II. ALL PROVIDERS SUBJECT TO THE PART 4 RULES SHOULD HAVE UNIFORM REPORTING DEADLINES	7
III. OUTAGES SHOULD BE CALCULATED BASED ON REAL-TIME DATA, NOT POTENTIALLY AFFECTED USERS	8
IV. NORS DATA SHOULD BE SHARED WITH STATE COMMISSIONS ONLY IF SIGNIFICANT SAFEGUARDS ARE IN PLACE	9
CONCLUSION.....	10

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

In the Matter of)
)
Amendments to Part 4 of the Commission’s Rules) PS Docket No. 15-80
Concerning Disruptions to Communications)
)

To: The Commission

REPLY COMMENTS OF T-MOBILE USA, INC.

T-Mobile USA, Inc. (“T-Mobile”)¹ respectfully submits these comments in response to the Notice of Proposed Rulemaking (“NPRM”) issued by the Federal Communications Commission (“Commission”) in this proceeding regarding proposals intended to improve “the quality and usefulness” of outage data reported to the Commission.² T-Mobile fully agrees with the importance of ensuring the reliability and continuity of the nation’s wireless and broadband infrastructure, but cautions against adopting rules that establish *de facto* service quality standards for wireless service providers.

INTRODUCTION AND SUMMARY

T-Mobile has taken numerous steps to safeguard its own infrastructure, as well as assist other sectors of the industry in doing so. The company has invested millions of dollars to ensure

¹ T-Mobile USA, Inc. is a wholly-owned subsidiary of T-Mobile US, Inc., a publicly traded company.

² *Amendments to Part 4 of the Commission’s Rules Concerning Disruptions to Communications*, Notice of Proposed Rulemaking, Second Report and Order and Order on Reconsideration, 30 FCC Rcd 3206, 3208 (2015) (“NPRM”).

the reliability and continuity of its networks nationwide. In addition, T-Mobile has assisted in the development of best practices through its voluntary and active involvement in the Alliance for Telecommunications Industry Solutions (“ATIS”) Network Reliability Steering Committee (“NRSC”), the Network Reliability and Interoperability Council (“NRIC”), and NRIC’s successor, the Communications Security, Reliability, and Interoperability Council (“CSRIC”).³ This industry approach has resulted in highly reliable wireless network availability for consumers. Despite this realization, the NPRM proposes new regulations and rule modifications that essentially would transform the Part 4 outage regime into a network performance monitoring system.

This approach is fundamentally misguided. The record demonstrates that the Commission’s proposals would require carriers to file outage notifications when the network is fully functional, but calls are blocked due to mass calling events.⁴ The Commission has long recognized that network performance and quality of service need not be regulated in competitive wireless markets.

Moreover, the NPRM would violate Executive Orders and contravene Supreme Court precedent requiring agencies to engage in meaningful cost-benefit analyses before adopting rules. Here, the proposed rules would produce little benefit yet impose significant costs. The record compiled to date demonstrates that the NPRM greatly underestimates such costs. Thus, at a minimum, before adopting any rules, the Commission should revise its cost estimates for carrier compliance.

³ The NRIC and CSRIC are Commission-convened advisory committees that include many industry representatives and analyze issues relating to improving wireless network resiliency, among other things.

⁴ See, e.g., ATIS Comments at 6; AT&T Comments at 24-25.

Rather than adopt a new reporting regime based on vague and confusing performance metrics, the Commission should focus on the existing Part 4 rules and make two fundamental changes. First, the Commission should establish uniform deadlines for reporting outages, regardless of technology. Second, the Commission should move away from measuring outages based on “potentially affected users” to more realistic and reliable metrics based on real-time data.

Finally, to the extent the Commission moves forward with its proposal to share data from its Network Outage Reporting System (“NORS”) with state regulatory commissions, it should do so only if effective and meaningful safeguards are in place to ensure the confidentiality of the data. State access to such data also should be subject to narrow use restrictions.

I. COMMISSION MONITORING OF WIRELESS NETWORK PERFORMANCE IS UNNECESSARY

The proposed rules would effectively convert the Part 4 rules from an outage reporting regime to a network performance monitoring system. The Commission proposes new network outage rules that would require carriers to file outage notifications even when the network is fully functional. T-Mobile agrees with the substantial record demonstrating that such an approach is unwarranted.⁵ As ATIS notes:

Wireless networks, like their wired counterparts, are engineered to be reliable and resilient and to meet consumer needs. However, *it is not feasible to engineer networks to have excess capacity in all situations, nor should the Commission attempt to require carriers to do so.* During natural disasters or terrorist events, wireline and wireless usage may spike, resulting in congestion. These events are

⁵ See ATIS Comments at 6 (outage reporting should not be triggered by congestion alone); AT&T Comments at 24-25 (same); CTIA Comments at 5-8 (same); Sprint Comments at 2-4 (noting that an outage does not occur when the network is fully functional but calls are blocked due to congestion); Verizon Comments at 5-6 (same); XO Communications at 3 (same).

not a failure of communication systems and should not be treated as outages.⁶

Although the congestion concept was proposed to capture problems “in the immediate aftermath of major disasters,”⁷ the proposed metric “could catch significantly more non-disasters (e.g., increased calling on holidays, local radio contest generated calls) than disasters in its net.”⁸ Such an overly broad rule will result in needless reports being filed by carriers, distracting from the actual goal of avoiding and mitigating real outages.

Again, the Commission should not adopt rules requiring outage reporting due to capacity constraints alone. Long-standing precedent recognizes that market forces are sufficient to ensure high service quality.

A. Competition Ensures Satisfactory Network Performance

When the Commission first adopted its duopoly cellular system rules, it stated that it “favor[ed] allowing the interplay of market forces to determine the grade of service delivered.”⁹ The Commission reaffirmed this conclusion when it later developed rules to permit the

⁶ ATIS Comments at 6 (emphasis added); *accord* CTIA Comments at 6 (“wireless networks are designed with a certain amount of total capacity to carry reasonably predictable traffic loads, based on typical calling patterns. There is not nearly enough spectrum allocated to commercial wireless providers to handle every temporary surge in traffic and, even if there was, it would be inefficient to over-engineer the networks.”).

⁷ *NPRM*, 30 FCC Rcd at 3211.

⁸ AT&T Comments at 24.

⁹ *Cellular Communications Systems*, Report and Order, 86 FCC 2d 469, 509 (1981) (subsequent history omitted). This cemented the Commission’s tentative proposal to rely on market forces in lieu of mandated quality standards when it proposed its rules. *See Cellular Communications Systems*, Notice of Inquiry and Notice of Proposed Rulemaking, 78 FCC 2d 984, 1003 (1980) (“[W]e expect to rely heavily on market forces to reduce or eliminate the need for quality standards. We will, however, entertain suggestions for quality standards if there are areas in which we are persuaded that market forces will not produce systems capable of quality comparable to the landline telephone network.”).

deployment of new cellular technologies. In deciding against regulating service quality, the Commission found that “market forces compel service providers to offer the quality and quantity of products sought by consumers.”¹⁰ The Commission most recently reiterated the “practical and technical difficulties” associated with establishing a minimum service quality level in its *Open Internet Order*.¹¹

Deviating from decades of well-established and long-held policy of not regulating wireless performance quality metrics, the Commission is now considering reversing course and adopting wireless performance metrics. While this NPRM does not explicitly admit to be adopting performance quality standards, that would be the *de facto* result of establishing outage reporting rules requiring reporting based on congestion alone. The Commission should not allow its Part 4 outage rules, intended to ensure prompt identification of, and response to, outages, to be transformed into *de facto* service quality mandates.

B. Adoption of Network Performance Regulations Would Violate Executive Orders and Supreme Court Case Law Requiring Meaningful Cost-Benefit Analysis

The Commission should comply with long-standing mandates set forth in various Executive Orders requiring an assessment of the costs of potential regulations before any regulations are adopted. Pursuant to Executive Order 12866, agencies must “assess all costs and benefits of available regulatory alternatives, including the alternative of not regulating” before

¹⁰ *Liberalization of Technology and Auxiliary Service Offerings in the Domestic Public Cellular Radio Telecommunications Service*, Report and Order, 3 FCC Rcd 7033, 7038 (1988) (subsequent history omitted); *see also Allocation of the 849-851/894-896 MHz Bands*, Report and Order, 5 FCC Rcd 3861, 3872 (1990) (“We are not imposing any requirements regarding quality of service. We believe that such provisions are unnecessary in a competitive environment. . .”).

¹¹ *Protecting and Promoting the Open Internet*, Report and Order on Remand, Declaratory Ruling, and Order, 30 FCC Rcd 5601, 5649 (2015).

adopting new regulations.¹² In particular, agencies must “propose or adopt a regulation only upon a reasoned determination that the benefits of the intended regulation justify its costs.”¹³ President Obama reaffirmed these requirements through Executive Order 13563, requiring agencies to evaluate potential regulations “based on the best available science” and “identify and use the best, most innovative, and least burdensome tools for achieving regulatory ends.”¹⁴ This Executive Order was specifically extended to Independent Agencies in July 2011.¹⁵

The Supreme Court of the United States has also weighed in on this and agrees with the Executive Orders. The Court has specifically stated that a consideration of costs is necessary in determining whether to regulate and the failure to meaningfully consider costs has been held to be fatal to the validity of such regulations. The Supreme Court has made clear that agencies’ duty to engage in “reasoned decisionmaking” requires them to follow a “logical and rational” process, which takes into account the “relevant factors.”¹⁶ This process, the Court held, requires consideration of the costs, in addition to the benefits:¹⁷ an “Agency must consider cost –

¹² Exec. Order No. 12866, 29 Weekly Comp. Pres. Doc. 1925, 1925 § 1(a) (Sept. 30, 1993).

¹³ *Id.* at 1926 § 1(b)(6).

¹⁴ Exec. Order No. 13563, 76 Fed. Reg. 3821, 3821 (Jan. 21, 2011); *see also* Memorandum on Executive Order 13563, “Improving Regulation and Regulatory Review” (Feb. 2, 2011), <https://www.whitehouse.gov/sites/default/files/omb/memoranda/2011/m11-10.pdf>.

¹⁵ Exec. Order No. 13579, 76 Fed. Reg. 41587, 41587 (July 14, 2011) (stating that regulatory decisions “should be made only after consideration of their costs and benefits”).

¹⁶ *Michigan v. EPA*, ___ U.S. ___, No. 14-46, slip op. at 5 (June 29, 2015) (*quoting Allentown Mack Sales & Service, Inc. v. NLRB*, 522 U.S. 359, 374 (1998) and *Motor Vehicle Mfrs. Assn. of United States, Inc. v. State Farm Mut. Automobile Ins. Co.*, 463 U. S. 29, 43 (1983)) (internal quotation marks omitted).

¹⁷ *Id.* at 6-7.

including, most importantly, cost of compliance – before deciding whether regulation is appropriate and necessary.”¹⁸

In this regard, the record here demonstrates that the Commission has not adequately considered or correctly estimated the costs associated with its proposed rules,¹⁹ in contravention to the requirements under the Executive Orders and as set out by the Supreme Court. As ATIS correctly notes, “the Commission has historically substantially underestimated the burdens associated with outage reporting.”²⁰ The Commission estimates that outage rules impose a reporting burden of approximately two hours per report,²¹ but according to calculations by AT&T, it would take at least twelve hours per report to comply with the proposed outage reporting rules.²² In order to ensure that its cost/benefit analysis is accurate, the Commission should carefully revisit the estimated burdens associated with its proposed rules.

II. ALL PROVIDERS SUBJECT TO THE PART 4 RULES SHOULD HAVE UNIFORM REPORTING DEADLINES

The existing Part 4 rules establish deadlines for filing outage reports that vary significantly based on the type of carrier impacted by the outage. Some providers are required to notify the FCC of non-911 related outages within 120 minutes,²³ whereas other providers are required to provide such notice within 24 hours.²⁴ T-Mobile agrees with those parties that suggest that the deadlines for notifications, other than those involving outages to 911 special

¹⁸ *Id.* at 14.

¹⁹ ATIS Comments at 3; AT&T Comments at 5-9; Sprint Comments at 13-14.

²⁰ ATIS Comments at 3.

²¹ *NPRM*, 30 FCC Rcd at 3210-11.

²² AT&T Comments at 6.

²³ *See* 47 C.F.R. §§ 4.9(a) (cable), (c) (satellite), (d) (SS7), (e) (wireless), (f) (wireline).

²⁴ 47 C.F.R. § 4.9(g) (interconnected VoIP).

facilities, should be a uniform 24 hours.²⁵ We agree with the comment that such an approach “would make automation easier” and would facilitate more accurate reporting as it allows carriers sufficient time to evaluate whether an outage is reportable.²⁶

T-Mobile also agrees with those commenters supporting elimination of the requirement that certain carriers file “initial” reports within 72 hours of discovering an outage.²⁷ These reports can contain incomplete information as providers may still be engaged in determining the outage’s root cause and scope. The initial reporting requirement effectively diverts resources from outage resolution to outage reporting. Given the limited benefit associated with these reports, the requirement should be eliminated. Elimination of the initial reporting requirement also promotes regulatory parity as interconnected VoIP providers are not subject to this requirement.²⁸

III. OUTAGES SHOULD BE CALCULATED BASED ON REAL-TIME DATA, NOT POTENTIALLY AFFECTED USERS

The existing Part 4 rules contain inconsistent metrics for triggering outage reporting. Interexchange and local exchange carriers are instructed to measure outages for tandem facilities, based on “real-time blocked calls” if “technically possible.”²⁹ The outage reporting rules for SS7 providers also seek real-time data.³⁰ In contrast, wireless and other providers subject to Part

²⁵ ATIS Comments at 4; Sprint Comments at 5.

²⁶ Sprint Comments at 5.

²⁷ ATIS Comments at 4; Sprint Comments at 5-6.

²⁸ See 47 C.F.R. § 4.9(g).

²⁹ 47 C.F.R. § 4.9(b).

³⁰ 47 C.F.R. § 4.9(d).

4 must evaluate outages using potential user minutes affected (“PUMA”).³¹ This disparity should be eliminated and carriers should be authorized to measure outages using real-time data where technically available.³²

Such action is warranted not only for regulatory parity, but to address an underlying flaw in the PUMA metric. The metric, which is difficult to calculate, effectively assumes that all users are attempting to place a call at the same time, which is a misnomer. Even in mass calling events, such as the Boston Marathon bombing, a percentage of users remain off the network. Moreover, as noted above, wireless networks are not designed to handle simultaneous calling by all customers at one time.³³ The metric thus does not accurately measure the scope or impact of an outage.

IV. NORS DATA SHOULD BE SHARED WITH STATE COMMISSIONS ONLY IF SIGNIFICANT SAFEGUARDS ARE IN PLACE

T-Mobile agrees with the Commission that NORS data is confidential and that any such confidentiality must always be maintained.³⁴ Nevertheless, T-Mobile continues to support³⁵ jurisdiction-specific state access to NORS data on a read-only basis *provided* that a process is adopted to make certain that data confidentiality is safeguarded and state commissions use such

³¹ See 47 C.F.R. § 4.9(e).

³² See ATIS Comments at 5 (suggesting that rules should be based on “active monitoring capabilities”), 8-9 (noting the availability of failed call metrics). In situations where real-time data is unavailable, wireless carriers should be required to measure outages “multiplying the number of cell sites disabled as part of an outage by the average number of users it serves per site.” *NPRM*, 30 FCC Rcd at 3217; *accord* AT&T Comments at 23; CTIA Comments at 3.

³³ See ATIS Comments at 6; CTIA Comments at 6.

³⁴ See *NPRM*, 30 FCC Rcd at 3222-24.

³⁵ See T-Mobile Reply Comments, ET Docket No. 04-35 (Mar. 19, 2010).

information only in the context of “protecting public health and safety.”³⁶ At a minimum, state commissions must be required to certify that they will keep the data confidential and have the necessary confidentiality protections in place before they access the data.³⁷

State commissions also should be required to notify the FCC if they discover (or suspect) that the confidentiality of the NORS data has been compromised.³⁸ In the event the data is compromised as a result of a state commission’s access, the ability of that commission to access the data should be revoked. The Commission also should consider whether to impose additional penalties in such instances.³⁹

CONCLUSION

Significant revisions to the Part 4 outage reporting rules are unnecessary at this time. If changes are adopted, we strongly urge the Commission not to move from an outage reporting regime to a performance monitoring regime. Such a move would be contrary to the FCC’s long-recognized principle that network performance and quality of service need not be regulated in the competitive wireless market. Rather than adopt a new reporting regime based on vague and confusing performance metrics, the Commission should clarify the existing Part 4 rules and establish uniform deadlines for reporting outages, regardless of technology. At a minimum, the Commission must revise its cost estimates for carrier compliance with the proposed rules. And

³⁶ See Petition of the California Public Utilities Commission and the People of the State of California, ET Docket No. 04-35, 14 (Nov. 12, 2009); *NPRM*, 30 FCC Rcd at 3223.

³⁷ See *NPRM*, 30 FCC Rcd at 3224; *accord* Sprint Comments at 12.

³⁸ ATIS Comments at 12; AT&T Comments at 27-28; CTIA Comments at 14; Sprint Comments at 12.

³⁹ See ATIS Comments at 12 (access should be conditioned upon the existence of state laws criminalizing the misuse of NORS data).

finally, with regard to sharing NORS outage data, states should be permitted access to such data only if confidentiality and use protections are adopted.

Respectfully submitted,

By: /s/ Steve Sharkey
Steve Sharkey
Harold Salters
Shellie Blakeney

T-MOBILE USA, INC.
601 Pennsylvania Ave., NW
Washington, DC 20004
(202) 654-5900

July 31, 2015