



**Before the
VERMONT ENHANCED 911 BOARD**

COMMENTS OF CTIA REGARDING PROPOSED 911 OUTAGE RULES

CTIA¹ respectfully submits its comments in response to the Vermont Enhanced 911 Board’s (“Board’s”) Proposed Rules, which were filed with the Secretary of State on December 2, 2019.

I. INTRODUCTION AND SUMMARY

CTIA appreciates the continued work by the Board to meet the Legislature’s mandate for collecting information on 911 outages while working with stakeholders to improve the Board’s Proposed Rules on outage reporting. In particular, CTIA and its members appreciate the changes made to the Proposed Rules to address some of the issues raised by stakeholders during the informal feedback process the Board held prior to formal hearing and comments. CTIA and its members recognize the importance wireless consumers place on their devices and networks in emergency situations, including their reliance on their wireless devices to reach emergency services. This is a

¹ CTIA – The Wireless Association (“CTIA”) (www.ctia.org) represents the U.S. wireless communications industry and the companies throughout the mobile ecosystem that enable Americans to lead a 21st century connected life. The association’s members include wireless carriers, device manufacturers, and suppliers as well as app and content companies. CTIA vigorously advocates at all levels of government for policies that foster continued wireless innovation and investment. The association also coordinates the industry’s voluntary best practices, hosts educational events that promote the wireless industry and co-produces the industry’s leading wireless tradeshow. CTIA was founded in 1984 and is based in Washington, D.C.



key reason why the wireless industry is strongly committed to minimizing network downtime and focuses on restoring service quickly when outages do occur.

That said, CTIA still has a number of concerns with the Proposed Rules, especially as they relate to wireless communications and the excess burden created by the breadth of the Proposed Rules. In particular, it remains unclear why the Board has chosen to establish a unique reporting regime apart from the Federal Communications Commission's ("FCC's"), which has proven effective nationwide and would meet the requirements of Act 79. The FCC's current Network Outage Reporting System ("NORS") was initially established in 2004, and since that time it has been improved on by Democratic- and Republican-led FCCs. For the Board to assume that NORS reports are inadequate for Vermont is to ignore that NORS reports *have* proven adequate for Vermont for the past 16 years. The Board should recognize that while it is seeking outage reports for the first time, NORS reports have long proven more than adequate for reporting Vermont outages.

Accordingly, CTIA continues to support the Board's adoption of a rule that would allow carriers to provide the Board, subject to necessary confidentiality safeguards, copies of their reports filed under NORS. CTIA assures the Board that these reports will be sufficient to meet the Board's needs regarding timely outage reporting.



II. THERE IS NO APPARENT REASON FOR THE BOARD TO DEVIATE FROM THE EXISTING, EFFECTIVE FCC OUTAGE REPORTING REGIME

Act 79 mandates that the Board “obtain or be apprised of, in a timely manner, system outages applicable to wireless service providers . . . for the purpose of enabling the E-911 Board to assess 911 service availability during such outages.”² As CTIA noted during the informal feedback process on the Proposed Rules, providing the Board with wireless carriers’ NORs reports will satisfy the Board’s duties under Act 79.³

The FCC imposes a robust outage reporting regime on wireless providers. Outages of wireless network switching centers lasting more than 30 minutes are reportable to the FCC within two hours of discovery, regardless of the customer impact.⁴ In the case of cell sites, outages lasting more than 30 minutes are subject to the same two-hour from discovery reporting period once they affect “900,000 user minutes” – *i.e.*, the number of potentially affected users multiplied by the duration of the outage.⁵

Because wireless numbers are not tied to a specific household or geographic area, the number of users potentially affected by an outage is necessarily a fluid, variable figure. To address this challenge, the FCC estimates affected users via a proxy number

² Act 79, Sec. 25, 2019 Leg. (Vt. 2019).

³ *See generally* 47 C.F.R Part 4.

⁴ *See* 47 C.F.R. §4.9(e).

⁵ *Id.*



based on the total number of users on a provider’s network and its total number of macro (or “coverage”) cell sites.⁶

For example:

- If Wireless Carrier X has 100 million users on its network nationwide and 100,000 macro cell sites, it would allocate 1,000 potential users to every site for purposes of NORS reporting, regardless of the site’s location or how many actual customers it generally serves.
- Thus, if Carrier X experiences an outage affecting 10 sites, that outage would be considered to potentially affect 10,000 users for NORS reporting purposes, even if the actual number of customers being served at that time by those sites is far less. Accordingly, Carrier X would be required to report the outage once it lasts 90 minutes: 10,000 users multiplied by 90 minutes meets the 900,000 user minutes threshold.

To the extent the Board is concerned that the NORS regime would not adequately serve rural areas in Vermont, those concerns are misplaced. Because the NORS system averages affected users on a provider’s network, cell sites in rural areas of Vermont are assumed to have the same population served as sites in urban areas such as Burlington and Montpelier—or, for that matter, as in Boston. This means that, if anything, the NORS system *over*-accounts for rural areas when reporting is required, treating them as if they had the same amount of wireless traffic as sites in congested urban areas. For this reason, the FCC has determined that 30 minutes duration *and* 900,000 user minutes is an appropriate threshold for outage reporting nationwide – and to date has found that its

⁶ See 47 C.F.R. §4.7(e)(2).



current NORS requirements meet the needs of rural areas.⁷ In recent years, CTIA members have filed several FCC reports of outages affecting Vermont specifically, including some affecting just one or a few cell sites. For instance, from July 31, 2014 through July 31, 2019, the facilities-based carriers doing business in Vermont (AT&T, Sprint, T-Mobile, U.S. Cellular, and Verizon) reported 39 national/regional outages that affected E-911 service in Vermont, and 12 Vermont-specific outages. This demonstrates that a NORS-based approach to informing of the Board of outages that impact 911 service will meet Vermont’s needs.

Given the facts stated above, there does not seem to be any reason why the NORS regime would not meet the Board’s need to comply with Act 79. Nor has the Board yet explained why the current NORS regime in place in Vermont is ineffective, or cited to any deficiency the Proposed Rules are intended to solve.

⁷ See, e.g., FCC 04-188 at para 56 (“In sum, our proposed 900,000 user-minute threshold could result in the reporting of *more* outages in rural areas . . . In this regard, we do not agree . . . that it is necessary to lower the reporting threshold to 150,000 user-minutes in order to capture rural outage data . . . In other words, use of the common metric will result in a more accurate and realistic assessment of outages on a national basis.”) (emphasis added). For areas with low site density, the FCC has proposed a threshold of one-third of sites in a rural county, but such a standard has not yet been adopted. See FCC 16-63 at para 186.



III. AMONG OTHER SIGNIFICANT ISSUES, THE PROPOSED RULES ARE INEFFICIENT AND WOULD HAVE A SIGNIFICANT ECONOMIC IMPACT ON VERMONT’S WIRELESS CARRIERS THAT COULD RESULT IN INCREASED COSTS TO CUSTOMERS AND DECREASED INVESTMENT IN VERMONT

Apart from the inherent inefficiency in “reinventing the wheel” for a system that already works, the Proposed Rules would create a number of other issues.

As noted by CTIA and acknowledged by the Board, the Proposed Rules would have a significant economic impact on Vermont’s wireless providers, which could result in increased costs to consumers.⁸ To comply with the Proposed Rules, service providers would have to undertake substantial network and information technology changes, on short notice (a July 1st deadline), in a single state out of their national service territory. Further, the massive gap between the FCC’s 30 minutes and 900,000 user minutes reporting threshold and the “any site, 30 minutes” reporting threshold contemplated by the Proposed Rules means compliance with the Proposed Rules would place an unnecessary economic burden on providers, with limited actual benefit to customers or to Board data-gathering efforts. Creating a Vermont-specific outage reporting standard also runs the risk of creating a “patchwork quilt” of state-by-state reporting obligations on top of the comprehensive federal reporting obligations already imposed by the FCC, which

⁸ See Proposed Rules, Cover Sheet, Page 4.



could significantly complicate outage reporting efforts, potentially increasing consumer costs and discouraging investment.

Perhaps most significantly, the Proposed Rules would divert wireless providers' time and personnel resources away from service restoration efforts, not only in Vermont but in other states, given that national providers uniformly coordinate their network monitoring and recovery efforts at a national or wide multi-state level. At a minimum, though, unique reporting obligations in Vermont could discourage investment that could otherwise be used to provide greater and more robust wireless coverage throughout the state. Utilizing the FCC's reporting thresholds and reporting format likely would have no such effect.

As CTIA noted during the informal feedback process, network outages, and the precise scope and location of an outage, may take some time to discover, and when discovered, resources are marshalled towards restoring service. While CTIA appreciates the Board's inclusion of "as soon as reasonably possible" language in Proposed Rules section 4.2 (governing reporting of outages and restoration), the accompanying language calling for notifications within two hours of an occurrence sets a standard that may be impossible to meet and would impose yet more customized IT and system changes that will affect the implementation costs. Instead, the standard should be within two hours of *discovering* an outage – the FCC standard.



Additionally, despite the protections added in Section 6 during the informal feedback process, the Proposed Rules do not go far enough with regard to confidentiality of the information provided. NORs reports (and the reports contemplated by the Proposed Rules) provide meaningful information about an outage, including: its time and duration; the affected services; known blocked calls; the affected geographic area, including the city or county (if known); a description of the incident and its cause; and contact information. Because this information could be helpful to terrorists or other bad actors seeking to create or exacerbate service disruptions, the U.S. Department of Homeland Security (“DHS”), communications carriers, state public utility commissions and the FCC all agree these reports must remain confidential.⁹ In addition, the wireless market is highly competitive, and disclosure of outage information would provide competitors with valuable data concerning the health of the service provider’s network that the competitor could use in its marketing and network investment decisions.

Despite the inherently sensitive nature of outage reporting, Section 6 of the Proposed Rules puts the responsibility on carriers to designate their reports confidential under the Vermont Public Records Act, which does not specifically articulate an

⁹ *See, e.g.*, Report and Order, Further Notice of Proposed Rulemaking, and Order on Reconsideration, 31 FCC Rcd 5817 (May 26, 2016) at paras. 84-85.



exemption for outage reports.¹⁰ Instead, the Board’s rules should explicitly provide that any outage reports submitted to it are confidential and exempt from public disclosure.¹¹

Finally, as noted above, the Proposed Rules would require compliance by July 1st, 2020. As noted above, this is a very brief timeline in light of the significant changes carriers would need to make to their reporting regimes, and may not be possible to comply with from a technical and logistical perspective. Yet carriers currently, and will continue to, comply with NORS obligations nationwide, and could begin delivering NORS reports to the Board immediately upon passage of a rule.

The concerns listed here illustrate the significant issues that the Board would face in deviating from the FCC’s existing reporting regime – which, as noted in the previous section, would meet the Board’s and Vermont’s needs. The Board should therefore not implement a separate outage reporting regime, such as that found in the Proposed Rules.

IV. CONCLUSION

The FCC’s existing outage reporting regime for wireless carriers has proven effective, even in rural states, and the Proposed Rules would not improve upon it. Rather, they would impose a host of new issues, both for wireless carriers and the Board. CTIA

¹⁰ See Proposed Rules, at Section 6.2: “All report submitters shall mark information they believe to be exempt from public disclosure and provide for each the subsection of 1 V.S.A. §§ 315-320 upon which they rely.”

¹¹ See 1 V.S.A. §317 (c)(1) (which exempts from disclosure “records which by law are designated confidential or by a similar term”), *see also* 3 V.S.A. §845 (a) (“Rules shall be valid and binding on persons they affect and shall have the force of law unless amended or revised or unless a court of competent jurisdiction determines otherwise.”)



urges the Board to amend the Proposed Rules to instead require carriers, subject to appropriate confidentiality protections, to submit to the Board copies of their NORS reports when filed with the FCC for outages in Vermont.¹²

Respectfully submitted,

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¹² While CTIA assures the Board that these reports would be sufficient to meet the Board's needs regarding timely outage reporting, if the Board has any further concerns, it could assess the efficacy of the rules at a later date to address any outstanding issues.