

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554**

In the Matter of)	
)	
Amendments to Part 4 of the Commission’s Rules Concerning Disruptions to Communications)	PS Docket No. 15-80
)	
Improving 911 Reliability)	PS Docket No. 13-75
)	
New Part 4 of the Commission’s Rules Concerning Disruptions to Communications)	ET Docket No. 04-35

COMMENTS OF THE VOICE ON THE NET COALITION

The Voice on the Net (“VON”) Coalition¹ hereby submits these comments in response to the Third Notice of Proposed Rulemaking (the “NPRM”),² wherein the Commission proposes harmonizing the Commission’s 911 outage notification requirements for originating and covered 911 service providers, improving the usefulness of outage notification content, and requiring originating service providers to keep the public informed during periods of 911 unavailability. VON supports the Commission’s goal of promoting safety of life and property. However, as explained by Bandwidth, Inc. (“Bandwidth”) in its opening comments filed July 19, 2021 (“Bandwidth Comments”), the Commission’s one-size-fits-all proposed rule for originating service providers presents numerous technological and logistical challenges that could lead to confusion rather than enhanced public safety. For the reasons set forth in the Bandwidth Comments and discussed in more detail below, VON does not support the Commission’s

¹ The VON Coalition works to advance regulatory policies that enable Americans to take advantage of the promise and potential of VoIP. For more information, see www.von.org.

² *Third Notice of Proposed Rulemaking*, PS Docket Nos. 15-80 and 3-75, ET Docket No. 04-35; See also, 86 FR 34679 (June 30, 2021) (establishing a comment date of July 30, 2021).

proposal to impose burdensome and likely duplicative notification requirements on interconnected voice over internet protocol (“VoIP”) providers.

I. VoIP Providers’ Have Limited Knowledge of 911 Outages and Their Root Causes.

In the *NPRM*, the Commission seeks comments on a proposal requiring that originating service providers and covered service providers notify PSAPS within the same timeframe (30 minutes after discovering the outage), by the same means (telephone and email) and with the same frequency (providing updates within two hours after the initial notification).³ These proposed rules assume that all originating service providers have knowledge of service outages that affect 911 and sufficient insight into the cause of the outage to be able to identify its geographic scope, which PSAPs may be affected, and how long the outage may last. For most VoIP providers, this is not the case.

The practical reality is that most interconnected VoIP providers are one step removed from the 911 ecosystem and many are one step removed from the source of wide-spread service outages. VoIP providers rely on third party service providers (who would be classified as covered service providers), such as Bandwidth, to manage and route 911 calls. In these cases, unless there is a complaint from an end user customer unable to complete a 911 call, or an originating service provider network outage preventing all outbound calling, in most circumstances the third party 911 provider will be aware of any 911 outage long before the originating VoIP service provider.

³ *NPRM* at para. 12. VON does not support any changes to network reporting thresholds. *See, Id.* at para. 16.

In addition, over-the-top VoIP providers require users to obtain and take responsibility for the connectivity necessary for users to be able to make or receive calls on their VoIP device. If the user loses its third-party connectivity, the user cannot make or receive calls, including 911 calls, on the user's VoIP device. In these cases, the Internet or wireless service provider notifies the user of the outage and time frame until service is restored. In these cases, the VoIP provider itself will be unaware that its user lost connectivity and thus unaware of any potential 911 outage.

Moreover, even when VoIP providers become aware of an outage, they often do not have knowledge of the cause of the outage, its geographic extent, or the amount of time it will take to fix the reason for the outage. Entities that have caused or may have suffered outages do not publicly release immediate information about what caused the outage.⁴ Additionally, other covered 911 providers cannot rely on data submitted to the Network Outage Reporting System (NORS) because it is presumed confidential.⁵

What is more, several factors contribute to outages, which complicates gathering pertinent information. Generally, infrastructure breakdowns, such as cut wires,⁶ infrastructure

⁴ NBC New York, *Nationwide Reports of Brief 911 System Outages, Cause Not Immediately Clear* (last updated Sept. 28, 2020), <https://www.nbcnewyork.com/news/local/nationwide-reports-of-911-system-outages-cause-not-immediately-clear/2640684/> (At the time of reporting, local officials failed to immediately respond to the public on the cause of the outages because of the limited information given by the provider).

⁵ Federal Communications Commission, *Network Outage Reporting System* (last updated May 11, 2021), <https://www.fcc.gov/network-outage-reporting-system-nors>

⁶ Associated Press, *Cut Wire Causes 911 Outages in 4 South Carolina Counties* (May 20, 2021), <https://www.usnews.com/news/best-states/south-carolina/articles/2021-05-20/cut-wire-causes-911-outages-in-4-south-carolina-counties> (Fiber wires that handle phone networks that include emergency communications were cut by someone unaffiliated with the provider AT&T).

overload,⁷ technical transition mistakes,⁸ or facility damage,⁹ cause 911 and Internet and wireless outages. The amount of effort and time required to resolve an outage depends on its cause.¹⁰ It follows that outage resolution estimates vary. Thus, multiple factors contributing to an outage complicate how providers resolve an outage and disseminate information regarding such an outage. In most cases, VoIP providers cannot determine on their own which of these factors caused the outage, how the outage is being addressed, and how long the outage may last.

These fundamental issues underscore that the Commission's proposal to treat all originating service providers the same is fundamentally flawed and should be modified.

II. Originating VoIP Providers' Limited Knowledge Regarding 911 Outages Makes the Proposed Notification Provisions Impracticable.

In the NPRM, the Commission proposes requiring all originating service providers to notify both affected PSAPs and affected customers within 30 and 60 minutes, respectively, after the originating provider becomes aware of the outage. Based on the nature of many VoIP services, this is impracticable.

⁷ South Sound 911, *Comcast 911 outage: Please do not "test" your 911 service* (Feb. 10, 2017), <https://southsound911.org/comcast-911-outage-please-not-test-911-service/> (Comcast reported that voice over internet protocol phone service customers called 911 to test its services and may have caused the outage).

⁸ Joan Engebretson, *FCC's CenturyLink 911 Outage Report Reveals Tech Transition Links* (Aug. 19, 2019), <https://www.telecompetitor.com/fccs-centurylink-911-outage-report-reveals-tech-transition-risk/> (A switching module that spontaneously generated four malformed management packets caused the outage) citing *December 27, 2018 CenturyLink Outage Report*, Report of FCC Public Safety and Homeland Security Bureau (rel. Aug. 19, 2019).

⁹ Mariah Timms, *AT&T outage: Internet, 911 disrupted, planes grounded after Nashville explosion. Get the latest updates* (last updated Jan. 5, 2021), <https://www.tennessean.com/story/news/local/2020/12/25/att-outage-internet-down-hours-after-nashville-explosion/4045278001/> (An AT&T spokesperson confirmed the link between the outage and the explosion near their Nashville facility).

¹⁰ See *supra* note 6 (outage caused by cut fiber wires lasted required 8.5 hours to fix); See *supra* note 8 (outage caused by the technical transition errors required 37 hours to fix); See *supra* note 9 (outage caused by the nearby explosion to an AT&T facility required 7 hours to fix).

PSAP notification. As stated, most VoIP providers do not have insight into the geographic scope of outages. Therefore, in order to comply with the 30-minute notification provision, they likely would need to notify all PSAPs nationwide of a potential outage that may or may not affect the PSAPs and of which the affected PSAPs would most likely already be aware. VON is also concerned that originating service providers in most cases will not have access to certain material information that the Commission proposed to have provided to PSAPs, including the cause of the outage, expected date and time for restoration, how the outage will affect the PSAPs, and the geographic area affected by the outage. *NPRM* at para. 19.

The expectation should be that the covered service provider will first notify affected PSAPs and then its originating VoIP service provider customers. There would be no practical reason for the originating VoIP service provider (or more likely the dozens of originating service providers) to notify affected PSAPs of an outage they are likely well aware of (and already expending limited resources to help resolve).¹¹ More frequent notifications of the same outage information will not improve public safety and may overwhelm PSAPs, particularly those with smaller staffs.¹²

Thus, the lack of readily available information regarding outages limits the amount of information interconnected originating service could provide to their own end user customers and strongly suggests that reducing timeframes for providing such information to end user customers, PSAPs or the FCC is likely unworkable at best.

¹¹ The exception is an originating service provider network outage affecting all outbound calling.

¹² In its comments, Bandwidth laid out many of the logistical issues inherent in the Commission's proposal to have all originating service providers and covered service providers notify each and every PSAP of an outage.

Customer notification. VON supports having originating service providers post information about 911 outages on their websites upon discovering the unavailability of 911 service; however, given the proposed content of those notifications -- 1) a statement that there is an outage affecting 911 availability, (2) a description of the geographic area where 911 callers may face 911 unavailability, (3) an estimated time that 911 service became unavailable, and (4) an estimate of when 911 services will be restored -- there may be circumstances when all such information might not be available to those originating service providers within the proposed 60 minute timeframe for commencing such notifications.¹³ VON suggests that a more lenient standard – such that the originating service provider must post the notification within 60-minutes of learning the geographic scope of the outage and then need only include information available at the time, as the originating service provider will likely be awaiting updates from the 911 service provider; and once received, those updates can be posted on providers’ websites.

III. VON Supports Bandwidth’s Proposal Regarding the PSAP Contact Database.

In its comments, Bandwidth suggests that the PSAP “registry should be held under the auspices of an accredited public-safety standards body” and that originating service providers should be required to use the information in the registry to notify PSAPs. *See* Bandwidth Comments, § III. VON supports Bandwidth’s suggestions, including that originating service providers should not be held liable for inability to notify a PSAP that is not included in the registry or whose information in the registry is incorrect.

¹³ *Id.* at paras. 39, 40.

IV. If the Commission Requires VoIP Providers to Comply with the Notification Rules, It Must Provide At Least One-Year for VoIP Providers to Comply.

For the reasons stated above, the Commission should not impose the proposed notification requirements on all originating service providers on a one-size-fits-all approach. As explained herein and in the Bandwidth Comments, the Commission’s proposals are not “minor changes” to the current rules but the implementation of significantly burdensome rules on VoIP providers, and such providers will require additional time to ensure compliance with the rules. Therefore, if the Commission decides to impose these or some variation of these rules, it should afford affected VoIP service providers at least one year from the effective date of any order in this proceeding (and not April 1, 2022) to comply with the adopted rules.¹⁴

CONCLUSION

VON respectfully requests that the Commission act in accordance with the discussion herein.

Respectfully submitted,

VOICE ON THE NET COALITION

/s/ Glenn S. Richards

Glenn S. Richards

Pillsbury Winthrop Shaw Pittman LLP

1200 Seventeenth Street, NW

Washington, DC 20036

(202) 663-8000

glenn.richards@pillsburylaw.com

Its Attorney

July 30, 2021

¹⁴ *Id.* para. 52.